

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV
Yes / No

WIN Station Name:	Alligator Creek @ Boots St				Sample Date:	12/20/2022	
WIN / Field ID:	G2SD0044	ORG ID:	21FLFTM	ENR:	-		
County:	Charlotte	WBID:	2074	STREAM	1		
Receiving Body of Water:	Charlotte Harbor Middle Segment1				RQ-	2022-11-28-23	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Nicole Reistad	x		x		
Monica Jaeger		x		x	x

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
x	Syringe	Pole	
	Syringe Lot# 1363442	Filter Lot# 17347262	
	Secchi Equipment ID:	3312A	
Collection Method			
	Wading	Canoe/Kayak	
x	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:	President Camacho
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	1105	0.7	0.3	6.09	66.2	19.4	7.09	0.7	399.6	0.19
								VOB (s)		

Biological Samples Collected: HA LVS RPS

SBIO Visit ID: HA ID: RPS ID: Macrophyte ID: LIMS Sample ID Entered Into The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli	Contract Lab	Sanders	ICE			
Chlorophyll	CHLSUITE-W			ICE			
Physical/Aggregate Nutrients	ALKALINITY, TURBIDITY, W-F, W-TSS			ICE			
	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			ICE			
Filtered Nutrients	W-PO4-F	Field Filtered 0.45 µm Filter		ICE	Syring Lot#:1363442; Filter Lot#:17347262		
Acid Preserved Nutrients	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	SA2229010	08/30/23
Metals							H2SO4 pH<2
Organics (LC)	W-E8321-DI	W-E8321-MS	W-CARB-AA**	ICE	MCAA***	128343	02/04/23
Macroinvertebrates							
Organics (GC)	W-CT-CI-R	W-PCL-TQ-R	W-PCB-TQ-R	Ice	*2.0 ml of H2SO4 Used Unless Noted Otherwise ***5 ml MCAA (Monochloroacetic Acid Buffer Solution)		
Molecular	W-PSNP-TQ	W-TR-SQ-R					
Periphyton							
Phytoplankton							
BOD							
DOC							
Other(s)					SyringLot#	FilterLot#	
Field Comments:							
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.						
Relinquish Date:	12/20/2022	Signature:					

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Save Field Sheets on Network: Migrate Data to WIN:

SAMPLE ID _____ ORG ID 21FLFTM LATITUDE 26.8922
 COUNTY CHARLOTTE STORET # _____ LONGITUDE -81.9875
 DATE 12/20/2022 TIME 1105 SAMPLING AGENCY FDEP-SOROC
 SITE NAME Alligator Creek at Boots St
 FIELD ID/NAME G2SD0044 RECEIVING BODY OF WATER PEACE RIVER

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>65</u> Silviculture _____ Field/Pasture _____ Agricultural _____ Residential <u>15</u> Commercial <u>20</u> Industry _____ Other (Specify) _____								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>8</u> m wide			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>2</u> Right Bank: <u>6</u>				Hydrologic Modification Score (per FT 3101) <u>5-6</u>		<u>—</u> m/s <u>0.13</u> m/s <u>—</u> m/s			
High Water Mark: <u>1.2</u> + <u>2.0</u> = <u>3.2</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No		<u>0.5</u> m deep <u>2.0</u> m deep <u>0.3</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 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> <u>19.4</u> <u>7.09</u> <u>6.09</u> <u>66.2</u> <u>399.6</u> <u>0.19</u> <u>0.7</u> Mid: _____ _____ _____ _____ _____ _____ _____ ☒ VOB Bottom: _____ _____ _____ _____ _____ _____ _____ <u>0.7</u> Meter ID: <u>PRESIDENT OAMACHO</u>			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐		
Woody Debris (Snags) <u>0.75</u> <u>—</u> <u>—</u> Undercut Banks / Roots <u>1.59</u> <u>—</u> <u>—</u> Leaf Packs or Mat <u>0</u> <u>—</u> <u>—</u> Aquatic Vegetation <u>0.025</u> <u>—</u> <u>—</u> Rock or Shell Rubble.. <u>45</u> <u>—</u> <u>—</u> Sand..... <u>52</u> <u>—</u> <u>—</u> Mud / Muck / Silt _____ <u>—</u> <u>—</u> Other _____ <u>—</u> <u>—</u> Other _____ <u>—</u> <u>—</u>			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA2229010</u> Exp: <u>08/30/23</u>			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐					
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☒ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot Number: _____ Exp: _____			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐					
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐			AMBIENT FIELD CONDITIONS / NOTES: <u>DOWNED TREES COVERING MUCH OF STREAM FROM 0-20 METERS.</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.								

SAMPLING TEAM

NICOLE REISTAD, MONICA JAEGER

SIGNATURE:

[Signature] DATE: 12/20/2022

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

SAMPLING AGENCY: <u>FDEP - SOROC</u>		STORET STATION NUMBER: <u>G2SD0044</u>	DATE (MM/DD/YY): <u>12/20/22</u>	RECEIVING BODY OF WATER: <u>PEACE RIVER</u>
REMARKS:	COUNTY: <u>Charlotte</u>	LOCATION: <u>Alligator Creek @ Boots St</u>	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 <u>6</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 <u>6</u>	5 4 3 2 1
Substrate Availability <u>2</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 <u>2</u> 1
Water Velocity <u>12</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 <u>12</u> 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>4</u> ----- Primary Score <u>24</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 <u>4</u> 3 2 1
Secondary Habitat Components Artificial Channelization <u>NR</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. <u>20</u> 19 18 17 16 <u>NR</u>	Good sinuosity within old channelized area. Evidence of dredging or straightening in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank <u>5</u> Left Bank <u>5</u> <u>NR</u>	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. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 <u>6</u> <u>NR</u>	Only meets 1 of the 3 requirements for optimal bank stability. <u>LR</u> <u>5</u> 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the woody root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>4</u> Left Bank <u>3</u>	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 <u>4</u> <u>R</u>	Less than 6 m of buffer zone due to intensive human activities <u>L</u> <u>3</u> 2 1
Riparian Zone Vegetation Quality Right Bank <u>3</u> Left Bank <u>3</u> ----- Secondary Score <u>43</u>	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). <u>L, R</u> <u>3</u> 2 1

67 **TOTAL SCORE**

Date: <u>12/20/22</u>	Analyst: <u>NICOLE REISTAD</u>	Signature: <u>[Signature]</u>
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ANigator Creek @ Boots St

Sampler: NICOLE REISTAD

Longitude ~~81.9875292~~ 81.98801

	Snags	0.73
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	Roots/undercut banks	1.59
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 Leaf Packs (or mats) 

01	Aquatic Macrophytes	0.025
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 Rocks 

P Pools total # observed = 0
range expected = 1-2

Average depth 2.0m

WQ & chemistry taken at 80 meter mark.

Bank Stability:
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
Note areas (on map) where natural vegetation
is altered or eliminated.

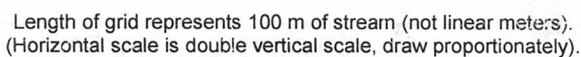
Plants observed / other notes:

 $\partial s/m$

12.7m R+

5.8m S

0.2m AM



DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Alligator @ Boots ST					County: Charlotte		Date: 12/20/22		Investigators: Monica Jaeger, Nicole Reistad	
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	X			60	1	X			
	2	X				2	X			
	3	X				3	Z	Y		
	4	X				4	Z	Y		
	5	Z	Y	0		5	Z	Y	12	
	6	X				6	Z	Y		
	7	X				7	Z	Y		
	8	X				8	Z	Y		
	9	X				9	Z	Y		
10	1	X			70	1	X			
	2	X				2	X			
	3	X				3	Z	Y		
	4	Z	Y			4	Z	Y		
	5	Z	Y	12		5	Z	Y	96	
	6	Z	Y			6	Z	Y		
	7	X				7	Z	Y		
	8	X				8	Z	Y		
	9	X				9	Z	Y		
20	1	X			80	1	X			
	2	X				2	Z	Y		
	3	Z	Y			3	Z	Y		
	4	Z	Y			4	Z	Y		
	5	Z	Y	96		5	Z	Y	0	
	6	Z	Y			6	Z	Y		
	7	Z	Y			7	Z	Y		
	8	Z	Y			8	Z	Y		
	9	Z	Y			9	Z	Y		
30	1	X			90	1	X			
	2	X				2	X			
	3	Z	Y			3	Z	Y		
	4	Z	Y			4	Z	Y		
	5	Z	Y	48		5	Z	Y	0	
	6	Z	Y			6	Z	Y		
	7	Z	Y			7	Z	Y		
	8	Z				8	Z	Y		
	9	Z				9	Z	Y		
40	1	Z			100	1	X			
	2	Z				2	X			
	3	Z	Y			3	Z	Y		
	4	Z	Y			4	Z	Y		
	5	Z	Y	56		5	Z	Y	20	
	6	Z	Y			6	Z	Y		
	7	Z	Y			7	Z	Y		
	8	Z	Y			8	X			
	9	Z				9	X			
50	1	Z			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	Z	Y							
	3	Z	Y							
	4	Z	Y							
	5	Z	Y	42						
	6	Z	Y							
	7	Z	Y							
	8	Z	Y							
	9	Z	Y							

STORET Station Number:

G2SD0044

Secchi depth	0.7
Estimated?	NO

# points ranked 4-6	0
total points assessed	70
% 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-2022-11-28-23	

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

Storet Number: 62SD0044

Signature: 

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m² 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.

Revision Date: January 2017