



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Unnamed Branch above Alligator Cr.

Date: 8/7/19

(mm/dd/yyyy)

WIN/ Field ID: G4NE0288

WBID: 2156

Latitude: 30.576507

(Decimal Degrees)

County: Nassau

ORG ID: 21 FLA

Longitude: -81.82468

(Decimal Degrees)

Receiving Body of Water: Alligator Creek

RQ-2019- 08-05-43

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
<u>Brian Davis</u> <u>J. P. Smith</u>						☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole		
											☐ Carboy	☐ Syringe			
											☐ Dipper	☐ Other			
											Depth Measured with <u>Stitch</u>				
Equipment ID <u>Outlet #3</u>						Collection Method									
						☒	☐	☐	☐	☐	☒ Wading	☐ Canoe/Kayak			
											☐ From Shore	☐ Electric Motor			
											☐ Other	☐ Gasoline Motor			
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded						Meter ID# <u>Stitch</u>			Matrix: <u>Fresh</u> / Marine / DI						
Photos: Yes / No		Flow: No Flow / Intertidal / <u>Flowing</u> / NA		Tide: Rising/ Falling/ Slack/ NA		Tide Times: High		Low							
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTH)	Sp COND (umhos/cm)	Temp. (C°)					
EST	<u>9:55</u>	<u>0.8</u>	<u>0.3</u>	<u>0.5</u>	<u>3.52</u>	<u>43.2</u>	<u>6.71</u>	<u>0.1</u>	<u>204</u>	<u>25.7</u>					
CEN															
Biological Samples Collected: None <u>HA</u> <u>SCI</u> <u>RPS</u> <u>Algae ID</u> <u>LVS</u> <u>LVI</u> Other:															
SBIO ID Numbers: SBIO-ID: <u>HA-ID:</u> <u>RPS-ID:</u> <u>Macrophyte-ID:</u> <u>LIMS#:</u>															
Parameter Suite		Parameter Methods				Preservation		Lot#	Expiration	pH Check					
Preserved Nutrients		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4		<u>SAB344070</u>	<u>12/10/19</u>	☒ <2					
Metals		☒ W-ICPMS ☐ W-ICP				☒ Ice ☒ HNO3		<u>NA9099030</u>	<u>4/9/20</u>	☒ <2					
Filtered Nutrients		☒ W-PO4-F ☐ Field Filtered 0.45 um Filter				☒ Ice		<u>R7HA29007</u>							
Chlorophyll		☒ CHLSUITE-W				☒ Ice									
Physical/Aggregate (Fresh)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice		Contains: 1:1 H2SO4 Lot No.: SAB344070 Expires: 12/10/19 See Safety Data Sheet (SDS)							
Physical/Aggregate (Marine)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice									
Macroinvertebrates		☐ MI-FW-QLDC				☐ Formalin									
Periphyton		☐ ALGAE-ID				☐ Ice									
Microbiology		☐ E Coli ☐ F Coli ☐ Enterococci				☐ Ice									
Molecular		☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD				☐ Ice									
Tracers		☒ W-E8321-DI ☒ W-E8321-MS				☒ Ice									
Pesticides		☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA				☒ Ice									
Phytoplankton		☐ DTY-QN-C ☐ PKD-QN-C				☐ Ice									

Notes:

SCI KITT
NO plants
< 2 sq. meters

WIN ID/Field ID:



G4NE0288

Unnamed Branch above Alligator cr.

Signature: Jerome Pank

Date: 8/7/19

LIMS EVENT ID:

WIN Import-ID:

Enter Field Parameters, Verify Station ID in UIMS DMT:

QC Station ID, Field Parameters in UIMS DMT:

Scan/Save Field Sheets

(Initials/Date)

Migrate Data to WIN:

(Initials/Date)

Verify Data in WIN:

(Initials/Date)

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

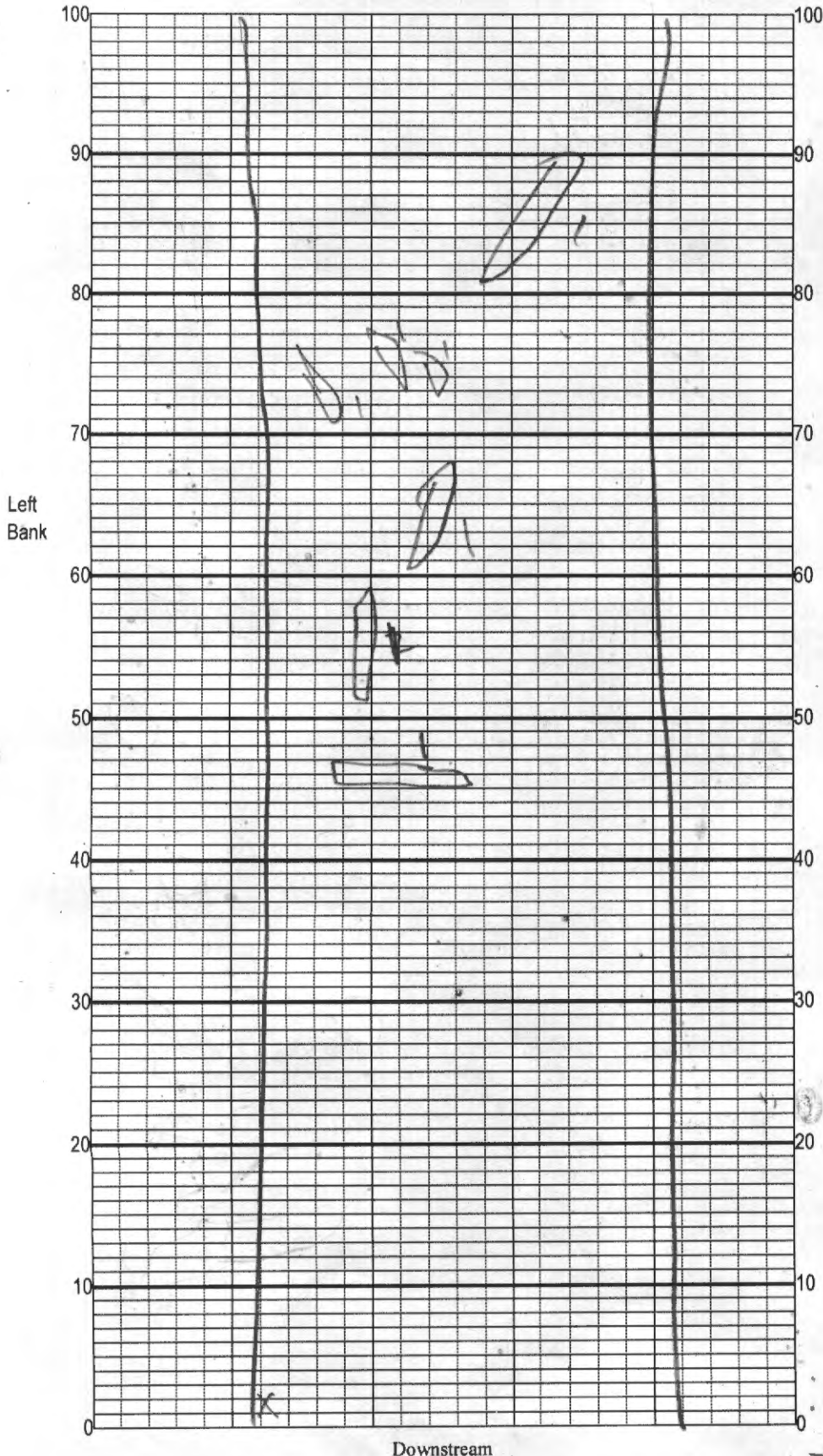
SAMPLING AGENCY: NE ROC		STORET STATION NUMBER: 64NE0288	DATE (MM/DD/YY): 8/7/19	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: Nevada	LOCATION: Unnamed above Allisville	FIELD ID/NAME:	

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>3</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 <u>3</u> 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 <u>3</u> 2 1
Water Velocity <u>4</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 <u>5</u> 4 3 2 1
Habitat Smothering <u>3</u> Primary Score <u>12</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. <u>5</u> 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>3</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 <u>3</u> 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>4</u> Left Bank <u>4</u>	10 9	8 7 6	5 <u>4</u> <u>60%</u>	<u>5</u> 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>	<u>10</u> 9	8 7 6	5 4	<u>5</u> 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>	10 9	8 7 6	5 4	3 2 1
Secondary Score <u>47</u>				

6059 TOTAL SCORE

Date: <u>8/7/19</u>	Analyst: <u>Jeremy Canale</u>	Signature: <u>Jeremy Canale</u>
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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: VA. above Masson
Date: 8/7/19
Sampler: JP/BO

100 m: Latitude _____	
Longitude _____	
0 m: Latitude _____	
Longitude _____	
Substrates: Code key, draw proportionate habitat abundance. %	
☒	Snags <u>2</u>
☐	Roots/undercut banks _____
☐	Leaf Packs (or mats) _____
☐	Aquatic Macrophytes _____
☐	_____
☐	_____
☐	Pools total # observed = _____ # range expected = _____
Average width <u>3</u> m	
Average depth <u>0.8</u> m	
Velocity measured at <u>0</u> meter mark.	
WQ & chemistry taken at <u>0</u> 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:

<2 M of Macrophytes was observed while doing the LVS? YES or NO

300-3 %

0.05m

2.5m wide
3m wide

SAMPLE ID _____ ORG ID 21FLA LATITUDE 30.5105
COUNTY NASSAU STORET# 64NC0288 LONGITUDE 81.8246S
DATE 8/7/19 TIME 935 SAMPLING AGENCY DEAR NED
SITE NAME unnamed branch abv. Alligator Cr.
FIELD ID/NAME _____ RECEIVING BODY OF WATER Alligator Creek

Meter ID: Stitch

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						Typical Width (m) Depth (m)/Velocity (m/sec) Transect 3 m wide 0.04 m/s 0.8 m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 182 Right Bank: 218				Hydrologic Modification Score (per FT 3101)					
High Water Mark: 0.9 + 0.8 = 1.7 (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 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				WATER QUALITY								
Assessment Tool: ☐ SCI ☒ RPS ☒ LVS				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	
☐ LCI ☐ BioRecon	% Coverage	INVERT # Times Sampled	PERI # Times Sampled	Top:	0.3	25.7	6.71	3.5	43	204	0.1	0.5
Woody Debris (Snags)	2	NA		Mid:							TOTAL DEPTH	
Undercut Banks / Roots				Bottom:	0.8						0.8	
Leaf Packs or Mat				System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐								
Aquatic Vegetation				Water Odors Normal ☒ Petroleum ☐				Water Surface Oils Normal ☒ Sheen ☐				
Rock or Shell Rubble..				Sewage ☐ Chemical ☐ Other ☐				Globs ☐ Slick ☐ Other ☐				
Sand.....				Water Sample Taken? ☒ Yes ☐ No				Color Tannic ☒ Green (Algae) ☐				
Mud / Muck / Silt				Sample Preserved? ☒ Yes ☐ No				Clear ☐ Other (Specify) ☐				
Other				Lot Number: SA8344070 Exp: 12/10/15								
Other				Algae Sample Taken? ☐ Yes ☒ No				Clarity Clear ☐ Slightly Turbid ☐				
				Sample Preserved? ☐ Yes ☐ No				Turbid ☒ Opaque ☐				
				Lot Number: _____ Exp: _____								

ABUNDANCE					AMBIENT FIELD CONDITIONS / NOTES:	
	Not Obs.	Rare	Common	Abundant		
Periphyton:	☒	☐	☐	☐	Hydrologic Disturbance Scoring ☐ 1-2 ☐ 3-4 ☐ 5-6 ☐ 7-8 ☐ 9-10 ☐ The antecedent hydrologic conditions have been met to my best knowledge.	
Fish:	☐	☒	☐	☐		
Aquatic Plants:	☒	☐	☐	☐		
Iron/Sulfur Bacteria:	☐	☐	☐	☒		
SAMPLING TEAM					SIGNATURE :	
[Signature: Jeremy Lane / Brian Davis]					[Signature: Jeremy Lane] 8/7/19	

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Unnamed above Alligator County: Nassau Date: 8/7/19 Investigators: Brian Pauls

STORET Station Number: 64NE0288

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	Y		60	1	N	Y		
	2					2				
	3					3				
	4					4				
	5			92		5			96	
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	X			
	2					2				
	3			96		3				
	4					4				
	5					5			96	
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2				
	3					3				
	4			94		4			96	
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	X			
	2					2				
	3					3				
	4			96		4			96	
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4			96		4			96	
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N				1	N			
	2					2				
	3					3				
	4			96		4			96	
	5					5				
	6					6				
	7					7				
	8					8				
	9					9				

Secchi depth 0.5
Estimated?

points ranked 4-6 0
total points assessed
% 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- 2019-08-05-43

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%.