

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

SAMPLING AGENCY: <u>21 FWPS</u>		STORET STATION NUMBER: <u>625008</u>	DATE (MM/DD/YY): <u>07/31/18</u>	RECEIVING BODY OF WATER: <u>N Fork</u>
REMARKS:	COUNTY: <u>St Lucie</u>	LOCATION: <u>Snake Creek @ 5870</u>	FIELD ID/NAME: <u>625008</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 product habitat. Lack of habitat is obvious, substrates unstat or smothered
Substrate Diversity <u>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	<u>5</u> 4 3 2 1
Substrate Availability <u>20</u>	Greater than 30% major productive habitat present at site <u>20</u> 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>15</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 <u>15</u> 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>10</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). <u>10</u> 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. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging 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
Artificial Channelization <u>1</u>				
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. 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 <u>1</u>
Right Bank <u>1</u> Left Bank <u>1</u>				
Riparian Buffer Zone Width	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 <u>1</u>
Right Bank <u>1</u> Left Bank <u>1</u>				
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. 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 <u>1</u>
Right Bank <u>1</u> Left Bank <u>1</u>				
Secondary Score <u>7</u>				
<u>57</u>	TOTAL SCORE			

Date: <u>7/31/18</u>	Analyst: <u>Matt Matheo Sewell</u>	Signature: <u>matheo</u>
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Visit #79166

RPS 9200

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site:

G2SE0008

County:

St. Lucie

Date:

1/3/18

Investigators:

Matt Sed

STORET Station Number:

G2SE0008

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

Secchi depth

Estimated?

0.25

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

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.

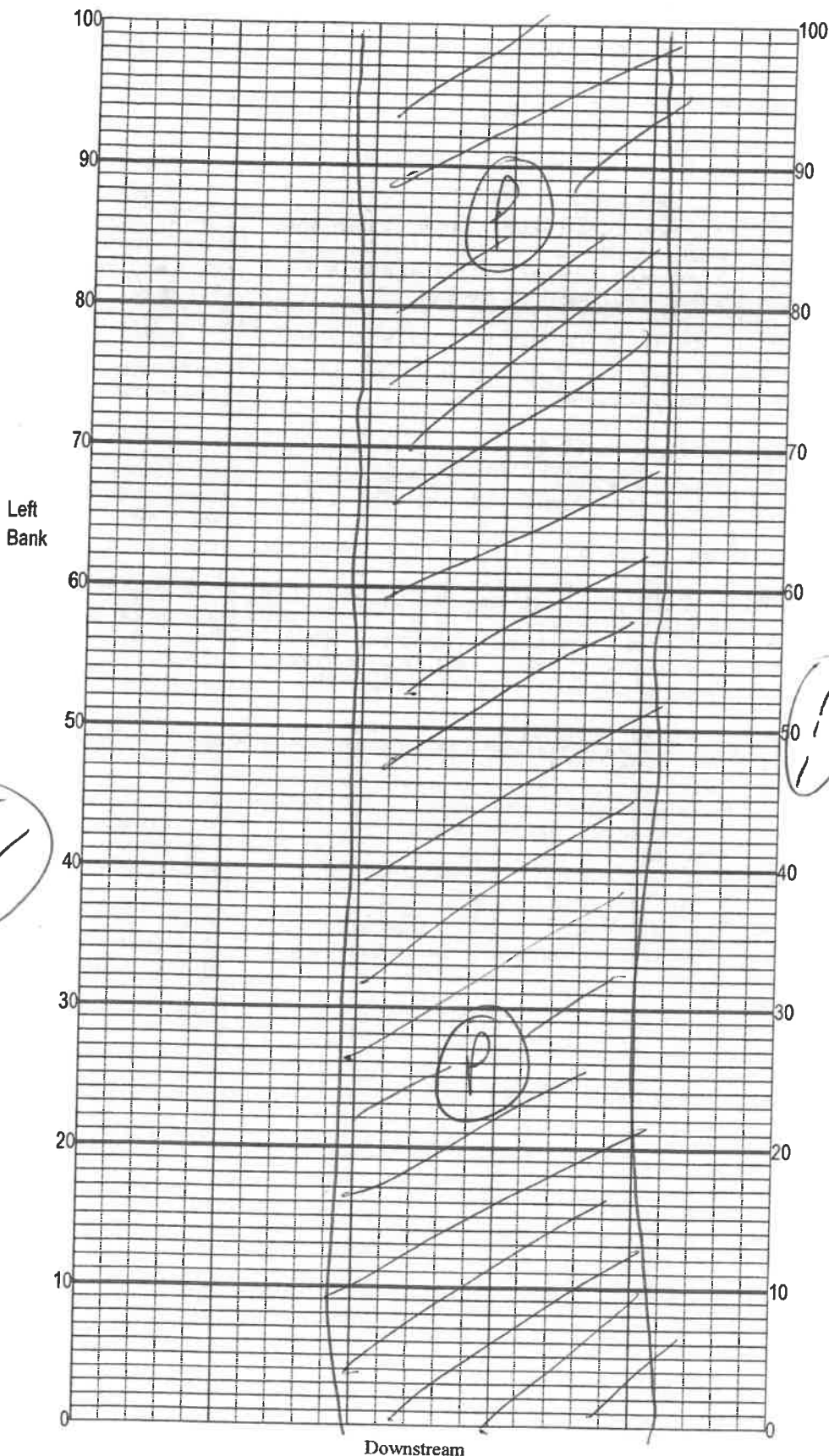
Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.

Storet Number: 625700

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² of taxa present). Note 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: March 1, 2014

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: G2SE0008
Date: 1/3/18
Sampler: Matt Ball

100 m: Latitude	_____
Longitude	_____
0 m: Latitude	_____
Longitude	_____
Substrates: Code key, draw proportionate habitat abundance. %	
☐	Snags _____
☐	Roots/undercut banks _____
☐	Leaf Packs (or mats) _____
☒	Aquatic Macrophytes _____
☐	_____
☐	_____
☒	Pools total # observed = <u>2</u> # range expected = <u>4-8</u>
Average width <u>2</u> m	
Average depth <u>0.3</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:

Parrot feather
river grass
Hydrophilic
Utricularia
Shrubs



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Five-mile Creek @ Okeechobee

Date: 01/31/2018
(mm/dd/yyyy)

WIN/ Field ID: G2SE0018 62SE0008 WBID: 3194D

Latitude: 27.4229722, -80.3715833

County: Saint Lucie

ORG ID: 21FLWPB

Longitude: (Decimal Degrees)

Receiving Body of Water: St. Lucie River (north fork)

RQ-2018-01-29-61 (Decimal Degrees)

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Drew L. Lick										
Alexander Marandor										
Matthew Howell										
Water Level: Dry/ Pooled/ Low Normal High / Flooded						Meter ID# L11 645			Matrix: Fresh / Marine / DI	
Photos: Yes / No		Flow: No Flow / Intestinal Flowing 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 (PPT)	Sp COND (umhos/cm)	Temp. (C°)
EST	1330	0.25	0.15	0.25	11.25	123.9	7.78	0.73	1447	19.96
CEN										
Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:										
SBIO ID Numbers:		SBIO-ID:		HA-ID:		RPS-ID:		Macrophyte-ID:		LIMS#:
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	SA7275010	10/22/18	☒ <2	
Metals	☒ W-ICPMS ☒ W-ICP					☒ Ice ☒ HNO3			☒ <2	
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter					☒ Ice				
Chlorophyll	☒ CHLSUITE-W					☒ Ice				
Physical/Aggregate (Fresh)	☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CI-IC / ☒ W-COLOR / ☒ W-SO4-IC / ☒ W-TDS					☒ Ice				
Physical/Aggregate (Marine)	☒ Alkalinity / ☒ 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-HF183 ☒ PCR-BacR ☒ PCR-GULL2 ☒ PCR-GFD					☒ Ice				
Tracers	☒ W-SUC-AA-R ☒ W-UHERB-AA ☒ W-AHERB-AA					☒ Ice				
Pesticides	☒ W-PSNP-TQ ☒ W-UHERB-AA ☒ W-AHERB-AA ☒ W-CARB-AA ☒ W-PCL-SQ-R ☒ W-PYR-AA-R ☒ W-GLYPH ☒ W-SUC-AA-R					☒ Ice ☒ Other				
Notes: EF						Place Label Here				
Signature: [Signature]						Date: 01/31/18				

Enter Field Parameters, Verify Station ID In LIMS DMT: [Signature] 4/23/18 QC Station ID, Field Parameters In LIMS DMT: [Signature]
Scan/Save Field Sheets (Initials/Date) Migrate Data to WIN: (Initials/Date) Verify Data In WIN: (Initials/Date)