



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Ten-mile Creek @ Gordy AM 4/23/18 Date: 01/31/2018
(mm/dd/yyyy)
WIN/ Field ID: G2SE0019 G2SE0009 WBID: 3194A Latitude: 27.402997, -80.399186
(Decimal Degrees)
County: Saint Lucie ORG ID: 21FLWPB Longitude: _____
(Decimal Degrees)
Receiving Body of Water: St. Lucie River (north fork) RQ-2018- 01-29-61

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
<u>Drew Liddell</u>						☒	☒	☒	☒	☒
<u>Matthews Sevell</u>						☒	☒	☒	☒	☒
<u>Alexander Marandez</u>						☒	☒	☒	☒	☒

Sampling Equipment			
☐ Sample Container	☐ Van Dorn	☒ Pole	
☐ Carboy	☐ Syringe		
☐ Dipper	☐ Other		
Depth Measured with <u>VSI</u>			
Equipment ID _____			

Collection Method			
☐ Wading	☐ Canoe/Kayak		
☒ From Shore	☐ Electric Motor		
☐ Other	☐ Gasoline Motor		

Water Level: <u>Dry</u> / Pooled / Low / Normal / High / Flooded				Meter ID# <u>L1 Gub</u>				Matrix: <u>Fresh</u> / Marine / DI			
Photos: Yes ☒ No ☐		Flow: <u>No Flow</u> / Intertidal / Flowing / NA		Tide: <u>Rising</u> / 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°)
<u>EST</u>	<u>1400</u>	<u>3.4</u>	<u>0.3</u>	<u>1.1</u>	<u>5.80</u>	<u>63</u>	<u>7.06</u>	<u>1.6</u>	<u>2140</u>	<u>9.24</u>
<u>CEN</u>			<u>2.9</u>		<u>5.30</u>	<u>57</u>	<u>7.19</u>	<u>1.14</u>	<u>2211</u>	<u>18.62</u>

Biological Samples Collected: <u>None</u> 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	<u>5A7275010</u>	<u>10/22/18</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☒ Ice ☐ HNO3	<u>7226050</u>	<u>8/18</u>	☒ <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	☐ Ice			
	☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Other			

Notes: <u>E</u>	Place Label Here
Signature: <u>[Signature]</u>	Date: <u>01/31/2018</u>

Enter Field Parameters, Verify Station ID in LIMS DMT: AM 4/23/18 QC Station ID, Field Parameters in LIMS DMT: _____
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data in WIN: _____
(Initials/Date) (Initials/Date) (Initials/Date)

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

Visit ID# 79150
HA ID 15589

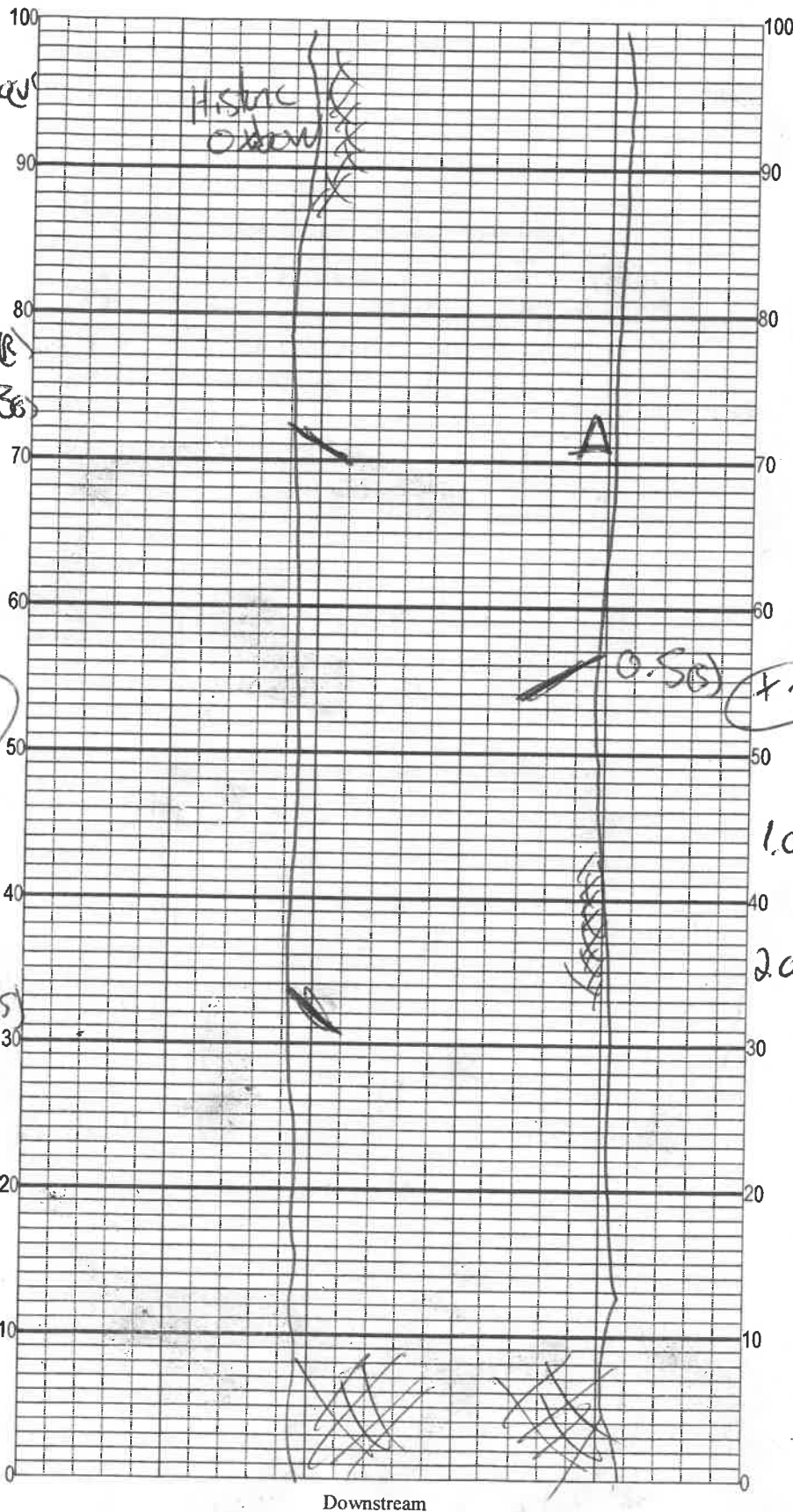
SAMPLING AGENCY: <u>DEP SE</u>		STORET STATION NUMBER: <u>G2SR0009</u>	DATE (MM/DD/YY): <u>07/31/18</u>	RECEIVING BODY OF WATER: <u>St. Louis River</u>
REMARKS:	COUNTY: <u>St. Louis</u>	LOCATION: <u>10 mile creek</u>	FIELD ID/NAME: <u>G2SR0009</u>	

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>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	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 2 1
Water Velocity <u>3</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>13</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
Primary Score <u>23</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	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 <u>2</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 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>6</u> Left Bank <u>5</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>9</u> Left Bank <u>9</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>5</u> Left Bank <u>5</u>	10 9	8 7 6	5 4	3 2 1
Secondary Score <u>41</u>	10 9	8 7 6	5 4	3 2 1

64 TOTAL SCORE

Date: <u>7/31/18</u>	Analyst: <u>Matt Seuld</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: GSEOWY
 Date: 6/3/2018
 Sampler: Sewell

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>0</u> # range expected = <u>25-1</u>

Average width 20 m
 Average depth 2.0 m

Velocity measured at 0 meter mark.

WQ & chemistry taken at 0 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:

Length of grid represents 100 m of stream (not linear meters).
 (Horizontal scale is double vertical scale, draw proportionately).

20180

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site:

G2SE0001

County:

St. Louis

Date:

01/31/2018

Investigator:

mat 8211

STORET Station Number:

G2SE0001

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
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

60

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

Secchi depth
Estimated?

1.1

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

0
0
0

Check accompanying data
collected at same site/date.

Algal mat sample

Linear Veg Survey

Habitat Assessment

SCI/Biorecon

Water sample

RQ-218-01-21-61

10

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

70

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

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

20

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

80

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

30

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

90

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

40

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

100

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

50

1
2
3
4
5
6
7
8
9

N
N
N
N
N
N
N
N
N

X
X
X
X
X
X
X
X
X

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%.

Waterbody: 10 mile creek	Date: 7/3/18	County: St. Louis	Storet Number: 62 SE001
Analyst: Seneil	Signature: [Signature]		
Comments:			

Storet Number: 62.5001

Signature: [Signature]

Comments:

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 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.

62-160.800, F.A.C.