FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2016

PAGE 1 OF 1

Data Qualified? Yes / No

STORET Station Name: Wildwood @ Wildwood Date: 2/25/2016 (mm/dd/yyyy)

STORET Station ID: 2701 0189 Latitude: ~~29.44421~~ 29.822667 (Decimal Degrees)

WBID: 2520 RQ - 2016-02-22-10 ORG ID: 21FLA Longitude: 81.348083 (Decimal Degrees)

Receiving Body of Water: Moultrie Field ID: County: St Johns

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
JParrish		✓	✓	✓			
Poiomr	✓						

Sampling Equipment

- [x] Sample Container
- [ ] V Dorn
- [ ] Pole
- [ ] Carboy
- [ ] Syringe
- [ ] Dipper
- [ ] Other
- Equipment ID

Collection Method

- [x] Wading
- [ ] From Shore
- [ ] Other (note below)

Via Boat
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [ ] Gasoline Motor

Water Level: Dry / Low / Normal / (High) / Flooded

Matrix: (Fresh) / Marine / DI

Meter ID# YSI 556 #1

Photos: (Yes) / No

Tide Falling: Yes / (No) / NA

Field Sample

Time Zone	Time	Total Depth (m)	Sample Depth	Temp (°C)	DO (mg/L)	DO (%SAT)	COND (µmhos/cm)	Salinity (ppt)	pH	Secchi Disk (m)
EST	930	0.8	0.3	15.6	6.8	68.6	234	0.11	6.98	0.6
CEN										

Biological Samples Collected: None HA (SCI) LVS RPS LVI Other

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	[x] TKN / TP / Nox / NH3 / TOC [ ] Other	[x] Ice [x] H_2SO_4	525907U	9/16	[x] < 2
Metals	[ ] W-ICPMS [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] < 2
Filtered Nutrients	[x] oP [ ] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
BOD	[ ] BOD-INHB [x] BOD-UNIN	[x] Ice			
Physical/Aggregate	[x] TSS / Turbidity / Alkalinity / Color [ ] Other	[x] Ice			
Macroinvertebrates	[x] MI-FW-QLDC	[x] Formalin			
Microbiology	[ ] E Coli [ ] F Coli [ ] Entero [ ] QPCR	[ ] Ice			
Periphyton	[ ] ALGAE-ID	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-AHERB-AA [ ] W-PYR-AA-R [ ] W-PC-AA-SF [ ] W-UHERB-AA [ ] W-GLYPH	[ ] Ice [ ] Other			

Place Preservative Sticker(s) Here (If Available)

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PAGE ____ OF ____

Data Qualified? Yes / No

STORET Station Name: _____ Date: _____ (mm/dd/yyyy)

STORET Station ID: _____ Latitude: _____ (Decimal Degrees)

WBID: _____ RQ - _____ ORG ID: _____ Longitude: _____ (Decimal Degrees)

Receiving Body of Water: _____ Field ID: _____ County: _____

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection

Sampling Equipment

- ☐ Sample Container ☐ Van Dorn ☐ Pole
- ☐ Carboy ☐ Syringe
- ☐ Dipper ☐ Other _____

Equipment ID _____

Collection Method

- ☐ Wading
- ☐ From Shore
- ☐ Other (note below) _____

Via Boat
- ☐ Canoe/Kayak
- ☐ Electric Motor
- ☐ Gasoline Motor

Water Level: Dry / Low / Normal / High / Flooded

Matrix: Fresh / Marine / DI

Meter ID#

Photos: Yes / No

Tide Falling: Yes / No / NA

Field Sample

Time Zone	Time	Total Depth (m)	Sample Depth	Temp (°C)	DO (mg/L)	DO (%SAT)	COND (µmhos/cm)	Salinity (ppt)	pH	Secchi Disk (m)
EST										
CEN										

Biological Samples Collected: None HA SCI LVS RPS LVI Other _____

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☐ TKN / TP / Nox / NH3 / TOC ☐ Other _____	☐ Ice ☐ H_2SO_4			☐ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ < 2
Filtered Nutrients	☐ oP ☐ Field Filtered 0.45 µm Filter	☐ Ice			
Chlorophyll	☐ CHLSUITE-W	☐ Ice			
BOD	☐ BOD-INHB ☐ BOD-UNIN	☐ Ice			
Physical/Aggregate	☐ TSS / Turbidity / Alkalinity / Color ☐ Other _____	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR	☐ Ice			
Periphyton	☐ ALGAE-ID	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PSCL-TQA ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other_____			

Place Preservative Sticker(s) Here (If Available)

#75184

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

SAMPLE ID _____ ORG ID 21FLA LATITUDE _____

COUNTY St Johns STORET # 27010189 LONGITUDE _____

DATE 2/25/2016 TIME 0930 SAMPLING AGENCY DEAR NED ROC

SITE NAME Wildwood @ Wildwood

FIELD ID/NAME _____ RECEIVING BODY OF WATER Moultrie creek

RIPARIAN ZONE / STREAM FEATURES

Meter ID:

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): [X] None [ ] Slight [ ] Moderate [ ] Heavy

Local Watershed NPS Pollution: [X] No evidence [ ] Slight [ ] Moderate [ ] Heavy

Width of Riparian Vegetation (m) on Each Buffer Side

Left Bank: >18m Right Bank: >18m

Hydrologic Modification Score (per FT 3101): _____

High Water Mark: 2 (m) + 0.8 (above present water level) = 2.8 (present depth) (above bed)

Artificially Impounded [ ] Yes [X] No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

2.3 m wide

m/s	0.25 m/s	m/s
m deep	0.8 m deep	m deep

Artificially Channelized: [X] No [ ] Some recovery [ ] Mostly recovered, more sinuous [ ] Recent, severe

Canopy Cover % [ ] Open [ ] Lightly Shaded (11-45%) [X] Heavily Shaded [ ] Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils [X] Absent [ ] Slight [ ] Moderate [ ] Profuse

Sediment Odors [X] Normal [ ] Sewage [ ] Petroleum [ ] Chemical [ ] Anaerobic [ ] Other (Specify):

Smothering of Substrates

	None	Slight	Moderate	Severe
Sand Smothering:	[ ]	[X]	[ ]	[ ]
Silt Smothering:	[ ]	[X]	[ ]	[ ]
Algae Smothering:	[X]	[ ]	[ ]	[ ]

SUBSTRATE TYPE

Assessment Tool: [ ] SCI [ ] RPS [ ] LVS [ ] LCI [ ] BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	45%	5	
Undercut Banks / Roots	20	5	
Leaf Packs or Mat	20	5	
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....	90%	5	
Mud / Muck / Silt			
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :								0.6
Mid:	0.3	15.6	6.98	6.8	68.6	234	0.11	TOTAL DEPTH
Bottom	0.5							

System Type: [X] Stream [ ] Lake [ ] Wetland [ ] Estuary [ ] Other(Specify) _____

Water Odors [X] Normal [ ] Petroleum [ ] Sewage [ ] Chemical [ ] Other

Water Surface Oils [X] Normal [ ] Sheen [ ] Globs [ ] Slick [ ] Other

Water Sample Taken? [X] Yes [ ] No

Sample Preserved? [X] Yes [ ] No

Lot Number: _____ Exp: _____

Color [X] Tannic [ ] Green (Algae) [ ] Clear [ ] Other (Specify) _____

Algae Sample Taken? [ ] Yes [X] No

Sample Preserved? [ ] Yes [ ] No

Lot Number: _____ Exp: _____

Clarity [ ] Clear [X] Slightly Turbid [ ] Turbid [ ] Opaque

ABUNDANCE

	Not Obs.	Rare	Common	Abundant
Periphyton:	[ ]	[X]	[ ]	[ ]
Fish:	[ ]	[ ]	[X]	[ ]
Aquatic Plants:	[ ]	[X]	[ ]	[ ]
Iron/Sulfur Bacteria:	[ ]	[X]	[ ]	[ ]

AMBIENT FIELD CONDITIONS / NOTES:

Hydrologic Disturbance Scoring [ ] 1-2 [X] 3-4 [ ] 5-6 [ ] 7-8 [ ] 9-10

[ ] The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM Jenny Carter / Po Correa

SIGNATURE: _____ 3/2/2016

62-160.800, F.A.C.

Revision Date: March 1, 2014

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Wildwood @ Wildwood | County: | Date: 2/25/16 | Investigators: JP / PO | STORET Station Number:

Transect (m)	Point 1=right 9=left	Algal Thickness P or k (N-6, X)	Estimated	Canopy Cover
0	1	N		
	2			
	3			
	4			88%
	5			
	6			
	7			
	8			
	9			
10	1	N		
	2	X		
	3	X		
	4	X		
	5	X		76
	6	N		
	7	N		
	8	N		
	9	N		
20	1	N		
	2	N		
	3	X		
	4	X		
	5	X		92
	6	X		
	7	X		
	8	X		
	9	X		
30	1	N		
	2			
	3			
	4			
	5			98
	6			
	7			
	8			
	9			
40	1	N		
	2	N		
	3			
	4			
	5			84
	6			
	7			
	8			
	9	N		
50	1	N		
	2			
	3			
	4			
	5			86
	6			
	7			
	8			
	9			

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N		
	2			
	3			
	4			
	5			94
	6			
	7			
	8			
	9			
70	1	N		
	2			
	3			
	4			
	5			84
	6			
	7			
	8			
	9			
80	1	N		
	2	N		
	3	N		
	4	X		
	5	N		97
	6			
	7			
	8			
	9			
90	1	N		
	2			
	3			
	4			
	5			72
	6			
	7			
	8			
	9			
100	1	N		
	2	N		
	3	X		
	4	X		
	5	X		62
	6	X		
	7	X		
	8	N		
	9	N		

Secchi depth	
Estimated?	

# 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%.

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

SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
		2701089	2/25/16	
REMARKS:	**COUNTY:**	**LOCATION:**		**FIELD ID/NAME:**
	St Johns	Wildwood Wildwood		

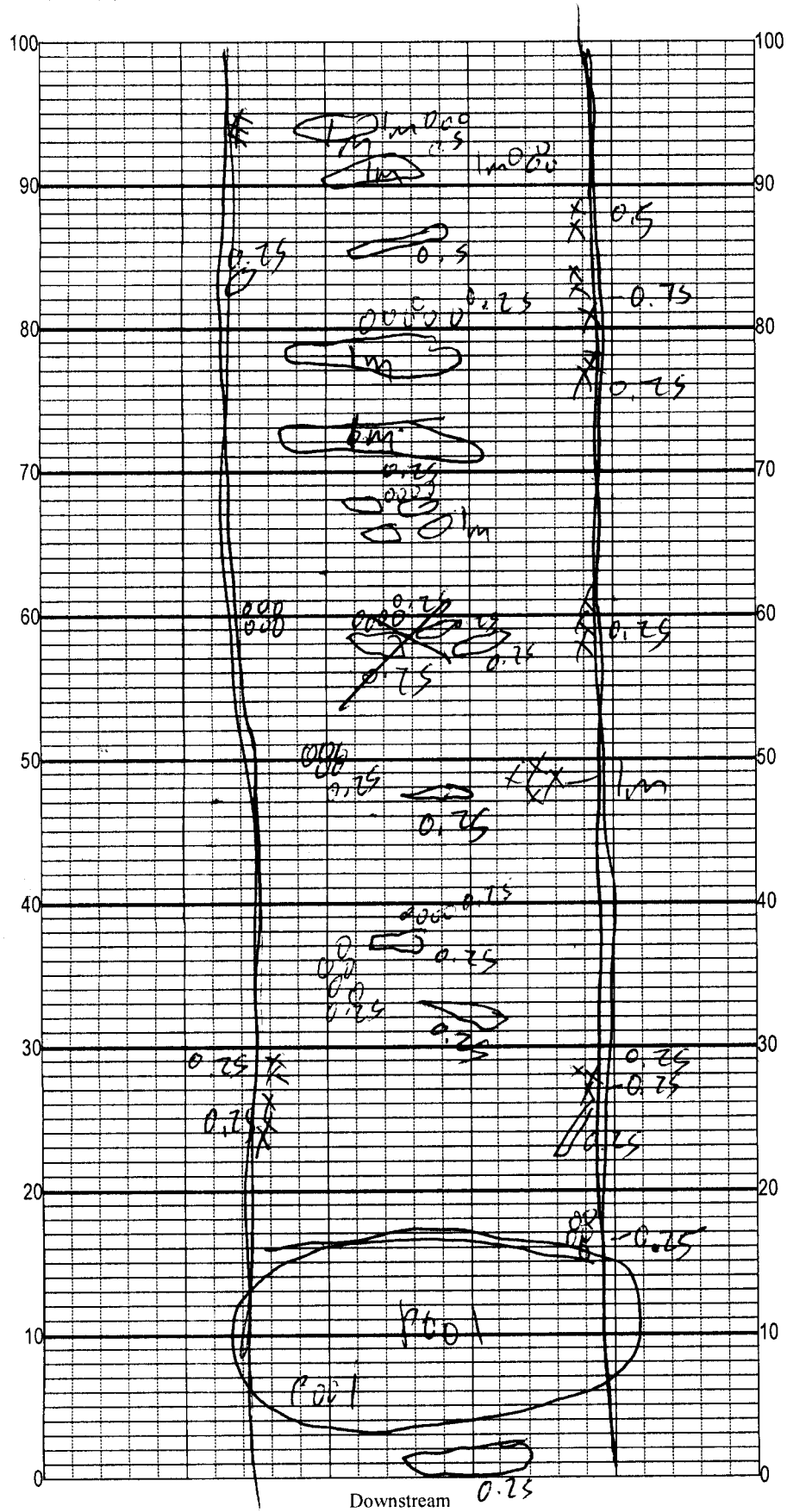
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 13	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 (13) 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability 8	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 15	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 19 Primary Score 55	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 **Artificial Channelization** 20	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
Bank Stability Right Bank 5 Left Bank 5	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful 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 1
Riparian Buffer Zone Width Right Bank 10 Left Bank 10	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 1
Riparian Zone Vegetation Quality Right Bank 9 Left Bank 10 Secondary Score 69	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	ess than 25% of riparian one is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

124 **TOTAL SCORE**

Date: 2/25/16	Analyst: Jeremy Parrish	Signature: Jeremy Parrish

67
+55
124

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: _____

Date: _____

Sampler: _____

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

- ☐ Snags _____
- ☐ Roots/u .ercut banks _____
- ☐ Leaf Packs (or mats) _____
- ☐ Aquatic Macrophytes _____
- ☐ _____ _____
- ☐ _____ _____
- ☐ Pools total # observed = _____ # range expected = _____

Average width _____ m
Average depth _____ m

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 m. ' with unstable, eroding banks.

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

Plants observed / other notes:

width - ~~2.5~~, 2.25

0 = 0.25 x 7 + 1.5 = 8m? 4%

00 = 0.25 ~~x7~~ + 1.5m 4m? = 2%

X = ~~1m~~ + ~~1m~~ 0.25 x 7 + 3m = 5m = 2%

0.25m/sec