



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

April 2018

Data Qualified?

Yes / No

WIN Station Name: Myrtle Slough @ Culvert Under Pine Island

Date: 12/03/2018

(mm/dd/yyyy)

WIN/ Field ID: G3SD0095

WBID: 1995

Latitude: 27.08419

(Decimal Degrees)

County: DeSoto

ORG ID:

Longitude: -81.7623

(Decimal Degrees)

Receiving Body of Water: Peace River

RQ-2018- 11-20-60

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Chase Conley							☒ Sample Container	☐ Van Dorn	☐ Pole		
Maryann Dugan							☐ Carboy	☒ Syringe			
							☐ Dipper	☐ Other			
							Depth Measured with <u>SECCHI</u>				
							Equipment ID <u>DEEPER DUGAN</u>				
							Collection Method				
							☒ Wading	☐ Canoe/Kayak			
							☐ From Shore	☐ Electric Motor			
							☐ Other	☐ Gasoline Motor			
Water Level: Dry/ Pooled/ <u>Low</u> / Normal / High / Flooded							Meter ID# <u>KEM</u>		Matrix: <u>Fresh</u> / Marine / DI		
Photos: Yes / <u>No</u>		Flow: No Flow / Intestinal / <u>Flowing</u> / NA		Tide: Rising/ Falling/ Slack/ <u>NA</u>		Tide Times: High <u>NA</u> Low <u>NA</u>					
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	1030	0.2	0.1	0.2	7.76	89.8	7.18	0.32	662	22.55	
CEN				S							
Biological Samples Collected: None <u>HA</u> SCI <u>RPS</u> Algae ID <u>LVS</u> LVI Other:											
SBIO ID Numbers:		SBIO-ID: <u>79054</u>	HA-ID: <u>15504</u>	RPS-ID: <u>9153</u>	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>SA8197090</u>	<u>07/16/19</u>	☒ <2			
Metals	☒ W-ICPMS ☒ W-ICP				☒ Ice ☒ HNO3	<u>NA-8080070</u>	<u>03/21/19</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-Cl-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice						
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY				☐ Ice						
Macroinvertebrates	☐ ME-PW-QDC				☐ 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-E8321-DI ☒ W-E8321-MS				☒ Ice						
Pesticides	☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI				☒ Ice						
	☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA				☐ Other						

Notes:

Signature:

Date:

Enter Field Parameters, Verify Station ID in LIMS DMT:

QC Station ID, Field Parameters in LIMS DMT:

Scan/Save Field Sheets

Migrate Data to WIN:

Verify Data in WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)

(Initials/Date)

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

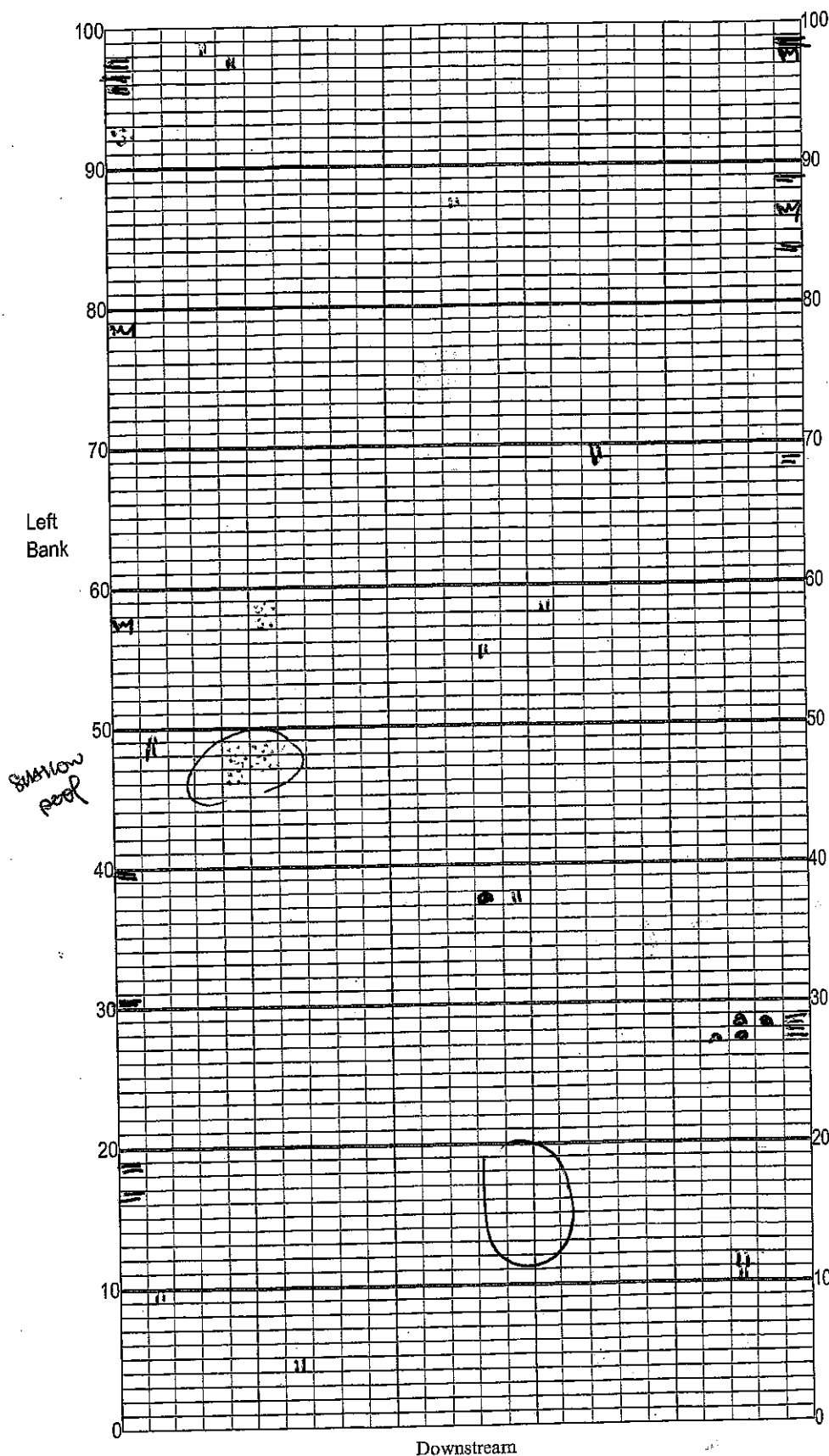
PUT STICKER UP ^ HERE		STORET STATION NUMBER: G3SD0095	DATE (MM/DD/YY): 12/03/2018	SAMPLING AGENCY: FDEP South ROC
FIELD ID/NAME: Myrtle Slough @ Culvert Under Pine Island		COUNTY: DE SOTO	LOCATION:	RECEIVING BODY OF WATER: PEACE RIVER

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <u>4</u>	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 <u>4</u> 3 2 1
Substrate Availability <u>4</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 <u>4</u> 3 2 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>8</u> ----- Primary Score <u>28</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 <u>8</u> 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 <u>14</u>	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 <u>14</u> 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>8</u> Left Bank <u>9</u>	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 <u>9</u> <u>8</u>	Only meets 2 of the 3 requirements for optimal bank stability. <u>8</u> 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 <u>8</u> Left Bank <u>9</u>	Width of vegetation greater than 18 m 10 <u>9</u>	Width of vegetation >12 to 18m <u>8</u> 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 <u>7</u> Left Bank <u>7</u> ----- Secondary Score <u>62</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. <u>8</u> <u>7</u> 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 1

90 TOTAL SCORE

Date: <u>12/03/2018</u>	Analyst: <u>MARYANN DUGAN, CHASE CONLEY</u>	Signature: <u>Maryann Dugan</u>
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DEP-SOP-001/01 Form FD 9000-4
Stream/River Habitat Sketch Sheet



Location: Myrtle Stought 1995

Date: 12/03/2008

Sampler: MD, CC

100 m: Latitude 27.0848520
Longitude -81.7617382

0 m: Latitude 27.0842410
Longitude -81.7622029

Substrates: Code key, draw proportionate habitat abundance. %

	Snags	<u>1.2</u>	<u>1.2</u>
	Roots/undercut banks	<u>1.3</u>	<u>1.3</u>
	Leaf Packs (or mats)	<u>0.8</u>	<u>0.8</u>
	Aquatic Macrophytes	<u>0.4</u>	<u>0.4</u>
	ROCKS	<u>0.5</u>	<u>0.5</u>
	Pools	total # observed = <u>12</u> # range expected = <u>8</u>	

Average width 1.0 m
Average depth 0.2 m

Velocity measured at 90 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:

AVAILABLE HABITAT
4.2%.

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

Revision Date: June 2, 2011

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

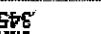
SAMPLE ID Field ID/WIN ID G3SD0095 LATITUDE _____
 COUNTY _____ Location _____ LONGITUDE _____
 DATE _____ SAMPLING AGENCY _____
 SITE NAME MyrtleSlough@Pineland
 FIELD ID/NA _____ RECEIVING BODY OF WATER _____

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) : Forest/Natural <u>20</u> Silviculture _____ Field/Pasture <u>60</u> Agricultural <u>20</u> 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 _____ m wide <u>1.0</u> m wide			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank : <u>18</u> Right Bank : <u>13</u>		Hydrologic Modification Score (per FT 3101) _____		_____ m/s <u>0.13</u> m/s _____ m/s			
High Water Mark: <u>0.8</u> + <u>0.2</u> = <u>1.0</u> (m) (above present water level) (present depth) (above bed)		Artificially Impounded ☐ Yes ☐ No		_____ m deep <u>0.2</u> m deep _____ 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																																										
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ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☒ ☐ ☐ Fish: ☐ ☒ ☐ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐																																										
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐			Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐																																										
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																													
SAMPLING TEAM <u>MARYANN DUGAN, CHASE CONLEY</u>			SIGNATURE : <u>Maryann Dugan</u>		DATE : <u>12/03/2018</u>																																								

Field ID/MIN ID	G3SD0095	Location	Mytleslough@PineIsland
			
			



MyrtleSlough@PinelIsland

Date: 12/3/02

County: DE JOTO

Waterbody: <u>Myrtle Slough</u>

Signature: Myahana Doo

Analyst: MD, CC

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. **bold is exotic invasive**

Spaces for additional taxa names. bold is exotic/invasive										Meter Mark										Specime n collected (check)	Meter Mark										Specime n collected (check)										
HERBACEOUS SPECIES										0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specime n collected (check)	HERBACEOUS SPECIES										0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specime n collected (check)
Alternanthera philoxeroides													X					X			Micranthemum glomeratum																				
Bacopa caroliniana																					Micranthemum umbrosum																				
Bacopa monneri																					Myriophyllum aquaticum																				
Bidens mitis																					Najas guadelupensis																				
Boehmeria cylindrica																					Nuphar luteum																				
Centella asiatica																					Orontium aquaticum																				
Ceratophyllum demersum																					Panicum hemitomon																				
Chara sp.																					Panicum repens													X		X					
Cicuta maculata																					Panicum rigidulum										X		X								
Cladium jamaicense																					Pistia stratioides																				
Colocasia esculenta																					Polygonum glabra																				
Commelina diffusa																					Polygonum hydropiperoides																				
Commelina virginica																					Polygonum punctatum																	X		X	
Crinum americanum																					Pontedaria cordata																				
Cyperus																					Potamogeton illinoensis																				
Diodia virginiana																					Ruellia simplex																				
Eichhornia crassipes																					Sacciolepis striata																				
Eleocharis (wispy viviparous)																X					Sagittaria kurziana																				
Hydrilla verticillata																					Sagittaria lancifolia																				
Hydrocotyle sp.													X								Sagittaria latifolia																				
Hygrophila polysperma																					Salvinia minima																				
Hymenachne amplexicaulis																					Samolus parviflora																				
Hymenocallis																					Saururus cernuus																				
Lachnanthes caroliniana																					Sparganium americanum																				
Landoltia punctata																					Sphagneticola trilobata (Wedelia)																				
Lemna sp.																					Typha sp.																				
Limnophila sessiflora																					Urochloa mutica (Brachiaria)																				
Ludwigia leptocarpa																					Vallisneria americana																				