



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: South Creek near Legacy **Date:** 8/4/2021
WIN/Field ID: G3SD0183 **WBID:** 1982 **ENR:** - **Latitude:** 27.1954
County: SARASOTA **Org ID:** 21FLFTM **Longitude:** -82.4624
Receiving Body of Water: Sarasota Bay - Peace - Myakka **RQ:** 2021-09-08-71

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Nicole Reistad		x		x	x
☒	William Mullen	x		x		
☒	Monica Jaeger		x		x	x
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: DEEP BLUE	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# PRO MOVE					
Photos: YES		Flow: FLOW		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☐ None ☒ HA ☒ SCI ☒ RPS ☐ Algae ID ☒ LVS ☐ LVI Other:											
SBIO ID Numbers:											
Notes: RAIN											

Duplicate Sample

Time Zone: EST	Time:	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID:			

Blank

Time Zone:	Time:	Field ID:	(Blank Type_DDDMMYYY)
DI Source:	Location:		
DI Type:	Equipment ID:		
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: WIN Import ID:
Enter Field Parameters, Verify Station ID In LIMS DMT: 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)



RQ-2021-09-08-71

Customer: WQAP

Project ID: SMP

Collected By: Nicole Reistad, William Mullen

Field Report Prepared By: Nicole Reistad

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G3SD0183

Location: South Creek near Legacy

Comments:

Matrix: Fresh

(Check one)

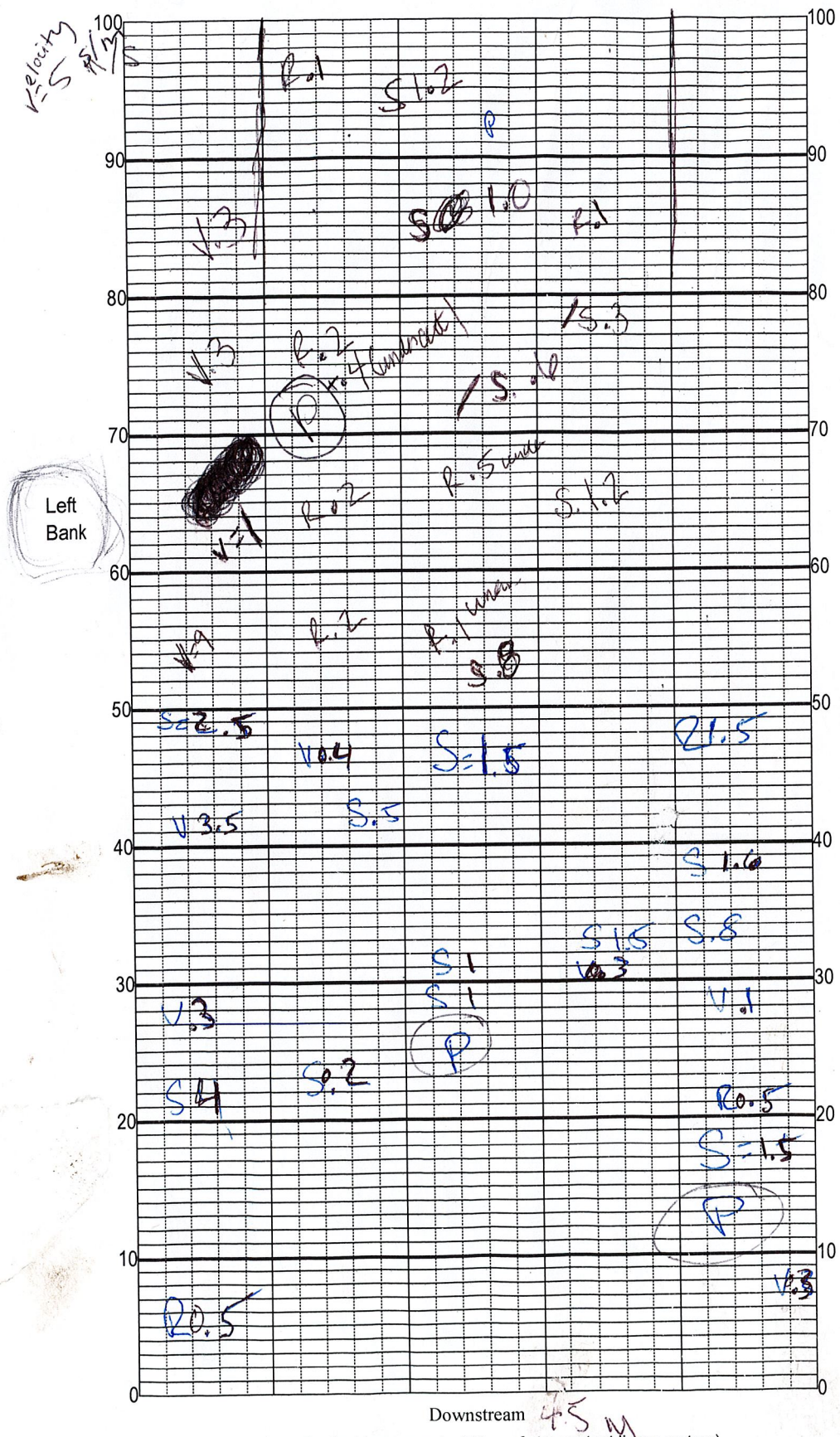
☒ GRAB☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)		
	1120 EST	4.19	53.6	28.0	7.21	0.25	0.5 ☒ VOB (S)	0.5	662	0.32		
8/4/2021												
	EST											
Parameter Suite		Parameter Methods				Preservation		pH Check	# Bottles sent to Lab	Bottle Group		
Preserved Nutrients (P-500ML)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4*		☒ <2	1	A		
		Lot #	SA1105060		Exp:	04/30/22						
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A		
		Lot #	NA1105100		Exp:	06/07/22						
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A		
		Filter Lot #	17162587									
		Syringe Lot #	1091364									
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	A		
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice			1	A		
Physical/Aggregate (Marine) (P-1L)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice						
Macroinvertebrates (PJ-2L)		☒ MI-FW-QLDC	Formalin Lot #	9.28091819TR		☒ Formalin			2	B		
Periphyton (PT-50ML)		☐ ALGAE-ID				☐ Ice						
Microbiology (Contract Lab Bottle)		☒ E Coli ☐ F Coli ☐ Enterococci ☒ Contract Lab				☒ Ice			1	A		
Molecular (QPCR-P-500ML)		☒ PCR-HF183 ☒ PCR-BacR ☒ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐				☒ Ice			1	A		
		☒ W-E8321-DI ☒ W-E8321-MS				☒ Ice			1	A		
Tracers (BG-500ML)		☒ W-E8321-DI ☒ W-E8321-MS				☒ Ice			8	A		
Pesticides (BG-500ML) (BG-1L)		W-E8321-DI	W-E8321-MS	☒	W-PSNP-TQ	☒	W-CT-CL-R	☒ Ice				
Phytoplankton/Periphyton		W-PCL-TQ-R	W-CARB-AA (5 ml of MCAA** Buffer Solution)									
					DTY-QN-C							
					PKD-QN-BV			☐ Ice				
Name: Nicole Reistad William Mullen					Signature:				Date:			

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



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

SAMPLING AGENCY: <u>FL DEP - SROC</u>		STORET STATION NUMBER: <u>G3SDC183</u>	DATE (MM/DD/YY): <u>08/04/21</u>	RECEIVING BODY OF WATER: <u>Sarasota Bay</u>
REMARKS:	COUNTY: <u>Sarasota</u>	LOCATION: <u>South Creek</u>	FIELD ID/NAME: <u>J</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>12</u>	20 19 18 17 16	15 14 13 <u>12</u> 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>7</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 <u>7</u> 6	Less than 5% major productive habitat 5 4 3 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 <u>14</u> 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>11</u> Primary Score <u>44</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 <u>11</u>	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	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 or straightening 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>4</u>	20 19 18 17 16	15 <u>14</u> 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>9</u> Left Bank <u>6</u>	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody root zone with few raw, eroded areas. 10 <u>9</u> <u>R</u>	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 <u>6</u> <u>L</u>	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 woody root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>10</u> Left Bank <u>4</u> <u>NR</u>	Width of vegetation greater than 18 m <u>10</u> <u>9</u>	Width of vegetation >12 to 18 m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 <u>4</u> <u>BL</u>	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank <u>9</u> Left Bank <u>6</u> Secondary Score <u>58</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 <u>9</u> <u>R</u>	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 <u>6</u> <u>L</u>	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

102

TOTAL SCORE

Date: <u>08/04/21</u>	Analyst: <u>Nicole Reistad,</u> <u>Monica Jaeger,</u> <u>William Mullen</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID G3SD0183 ORG ID 21FLFTM LATITUDE 27.1954
COUNTY Sarasota STORET# G3SD0183 LONGITUDE -82.4624
DATE 08/04/2021 TIME 1120 SAMPLING AGENCY DEP-SROC
SITE NAME South Creek near Legacy Trail
FIELD ID/NAME G3SD0183 RECEIVING BODY OF WATER Sarasota Bay

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
15%	0	0	0	85%	0	0	0

Landscape Development Intensity Index (LDI)

Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy

Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side: Left Bank: 18 Right Bank: 10

Hydrologic Modification Score (per FT 3101)

High Water Mark: 10.5 + 0.5 = 11.0
(m) (above present water level) (present depth) (above bed)

Artificially Impounded: ☐ Yes ☒ No

Artificially: ☒ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Channelized: ☐ Some recovery ☐ Recent, severe

Canopy Cover %: ☐ Open ☐ Lightly Shaded (11-45%) ☒ Heavily Shaded ☐ Moderate Shaded (46-80%)

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

4.5 m wide

— m/s 20 m/s — m/s
NR

0.5 m deep 1.1 m deep 0.2 m deep

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

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	<u>4.71</u>	<u>5</u>	<u>—</u>
Undercut Banks / Roots	<u>0.95</u>	<u>5</u>	<u>—</u>
Leaf Packs or Mat	<u>0</u>	<u>—</u>	<u>—</u>
Aquatic Vegetation	<u>3.44</u>	<u>5</u>	<u>—</u>
Rock or Shell Rubble	<u>—</u>	<u>—</u>	<u>—</u>
Sand	<u>—</u>	<u>5</u>	<u>—</u>
Mud / Muck / Silt	<u>—</u>	<u>—</u>	<u>—</u>
Other	<u>—</u>	<u>—</u>	<u>—</u>
Other	<u>—</u>	<u>—</u>	<u>—</u>

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top	<u>0.25</u>	<u>28.0</u>	<u>7.21</u>	<u>4.19</u>	<u>53.6</u>	<u>662</u>	<u>0.32</u>	<u>0.5</u>
Mid	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	☒ VOB
Bottom	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	TOTAL DEPTH <u>0.5</u>

Meter ID: PRO MOVE

Water Odors: Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils: Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No

Sample Preserved? ☒ Yes ☐ No

Lot Number: _____ Exp: _____

Algae Sample Taken? ☐ Yes ☒ No

Sample Preserved? ☐ Yes ☒ No

Lot Number: _____ Exp: _____

Color: Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐

Clarity: Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐

ABUNDANCE

	Not Obs.	Rare	Common	Abundant
Periphyton:	☒	☐	☐	☐
Fish:	☐	☐	☒	☐
Aquatic Plants:	☐	☐	☒	☐
Iron/Sulfur Bacteria:	☒	☐	☐	☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐

AMBIENT FIELD CONDITIONS / NOTES

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

SAMPLING TEAM: Nicole Reistad, Monica Jaeger, William Mullen

SIGNATURE: [Signature]

DATE: 08/04/2021

Visit ID: 82995

RPS: 9799

LVS:

HA: 17082

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: South CreekCounty: SarasotaDate: 08/04/21Investigators: William MullenNicole Reistad, Monica Jeger

STORET Station Number:

G3SD0183

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			60	1	2		
	2	2				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2	X	46		5	2		96
	6	2	X			6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		
10	1	2			70	1	2		
	2	2				2	2		
	3	2	X			3	2		
	4	2	X			4	2		
	5	2	X	72		5	2		43
	6	2	X			6	2		
	7	2	X			7	2		
	8	2				8	2		
	9	2				9	2		
20	1	2			80	1	2		
	2	2				2	2		
	3	2				3	2		
	4	2	X			4	2		
	5	2	X	92		5	2		94
	6	2	X			6	2		
	7	2	X			7	2		
	8	2				8	2		
	9	2				9	2		
30	1	2			90	1	2		
	2	2	X			2	2		
	3	2	X			3	2		
	4	2	X			4	2		
	5	2	X	90		5	2		64
	6	2	X			6	2		
	7	2	X			7	2		
	8	2	X			8	2		
	9	2				9	2		
40	1	2			100	1	2		
	2	2				2	2		
	3	2				3	2		
	4	2	X			4	2		
	5	2	X	72		5	2		91
	6	2	X			6	2		
	7	2	X			7	2		
	8	2				8	2		
	9	2				9	2		
50	1	2				1	2		
	2	2				2	2		
	3	2	X			3	2		
	4	2				4	2		
	5	2		46		5	2		
	6	2	X			6	2		
	7	2	X			7	2		
	8	2				8	2		
	9	2				9	2		

Secchi depth 0.5
Estimated?# points ranked 4-6 0
total points assessed 99
% 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-2021-08-09-71

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 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: South Creek Date: 08/04/21 County: Sarasota Storet Number: G35D0183
 Analyst: Nicole Reistad Signature: Nicole Reistad
 Comments: LIMS ID: 2267707

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

HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)	HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
<i>Alternanthera philoxeroides</i>	✓			✓	✓	✓	✓	✓	✓	✓		<i>Micranthemum glomeratum</i>											
<i>Bacopa caroliniana</i>												<i>Micranthemum umbrosum</i>											
<i>Bacopa monnieri</i>												<i>Myriophyllum aquaticum</i>											
<i>Bidens mitis</i>												<i>Najas guadelupensis</i>											
<i>Boehmeria cylindrica</i>												<i>Nuphar luteum</i>											
<i>Centella asiatica</i>												<i>Orontium aquaticum</i>											
<i>Ceratophyllum demersum</i>												<i>Panicum hemitomon</i>											
<i>Chara</i>												<i>Panicum repens</i>											
<i>Cicuta maculata</i>									✓			<i>Panicum rigidulum</i>											
<i>Cladium jamaicense</i>												<i>Pistia stratioides</i>					✓						
<i>Colocasia esculenta</i>												<i>Polygonum glabra</i>											
<i>Commelina diffusa</i>												<i>Polygonum hydropiperoides</i>											
<i>Commelina virginica</i>												<i>Polygonum punctatum</i>											
<i>Crinum americanum</i>									✓	✓		<i>Pontedaria cordata</i>											
<i>Diodia virginiana</i>												<i>Potamogeton illinoensis</i>											
<i>Eichhornia crassipes</i>												<i>Ruellia simplex</i>											
<i>Eleocharis (wispy viviparus)</i>					✓	✓						<i>Sacciolepis striata</i>											
<i>Hydrilla verticillata</i>												<i>Sagittaria kurziana</i>											
<i>Hydrocotyle</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		<i>Sagittaria lancifolia</i>											
<i>Hygrophila polysperma</i>												<i>Sagittaria latifolia</i>											
<i>Hymenocallis</i>												<i>Salvinia minima</i>											
<i>Lachnanthes caroliniana</i>												<i>Samolus parviflora</i>											
<i>Landoltia punctata</i>												<i>Saururus cernuus</i>											
<i>Lemna</i>		✓	✓		✓	✓	✓					<i>Sparganium americanum</i>											
<i>Limnophila sessiflora</i>												<i>Typha</i>											
<i>Ludwigia leptocarpa</i>												<i>Vallisneria americana</i>											
<i>Ludwigia palustris</i>												<i>Zizania aquatica</i>											
<i>Ludwigia peruviana</i>																							
<i>Ludwigia repens</i>				✓	✓	✓	✓	✓	✓	✓		<i>Eupatorium capillifolium</i>						✓			✓		
<i>Luziola fluitans</i>												<i>Hymenachne amplexicaulis</i>		✓			✓	✓					
												<i>(edge) Cyperus lasiocarpus</i>					✓					✓	
												<i>Pluchea odoratus</i>							✓				
												<i>(mud grass) Eleocharis elongata</i>			✓					✓		✓	
If no Dominant or Co-Dominant were selected, indicate with "X"																							
Indicate % cover macrophytes per section																							
0-5% Macrophyte Coverage	×	×	×	×					×	×	×	×											
>5 and ≤10% Macrophyte Coverage					×																		
>10 and ≤25% Macrophyte Coverage						×																	
>25 and ≤50% Macrophyte Coverage																							
> 50% Macrophyte Coverage																							