



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2022

Meter Passed End

of Day CCV

Yes

No

WIN Station Name: Bass Slough 10m N of Neptune Rd.

Date: 1/26/2022

WIN/Field ID: G4CE0219

WBID: 3173A1

ENR: -

Latitude: 28.2796

County: OSCEOLA

Org ID: 21FLCEN

Longitude: -81.36

Receiving Body of Water: Kissimmee River

RQ: 2022-01-24-20

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Leif Boman		x		x	x
☒	Victoria Schwartz	x	x	x		
☐						
☐						

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

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded		Meter ID# CRAW DADDY	
Photos: YES	Flow: FLOW	Tide:	Tide Times: High: Low:
Biological Samples Collected: ☐ None ☒ HA ☐ SCI ☒ RPS ☒ Algae ID ☒ LVS ☐ LVI Other:			
SBIO ID Numbers: SBIO ID: 83668 RPS ID: 9890 MACRO ID 12070			LIMS 2302028
Notes: OVERCAST WITH COOL TEMP AND SCATTERED RAIN. SITE WAS NOT SCI APPROPRIATE. LARGE QUANTITY OF CONSTRUCTION TRASH/DEBRIS DUMPED IN STREAM UPSTREAM OF SITE (28°16'57.1"N, 81°21'45.7"W) Note: Illegal dumping reported to State Watch Office 2/9/22 -VS Algae ID collected for RPS > 20%			

Duplicate Sample

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

Blank

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

LIMS EVENT ID: CEN-DIST-2022-01-27-01

WIN Import ID: 31606

Enter Field Parameters, Verify Station ID In LIMS DMT: EB 1/31/22

QC Station ID, Field Parameters In LIMS DMT: KWM 2/11/22

(Initials/Date)

(Initials/Date)

Scan/Save Field Sheets KWM 3/15/22

(Initials/Date)

Migrate Data to WIN: KWM 3/15/22

(Initials/Date)

Verify Data In WIN:

(Initials/Date)



RQ-2022-01-24-20

Customer: WQAP

Project ID: SMP

Collected By: Leif Boman, Victoria Schwartz

Field Report Prepared By: Leif Boman

Sampling Agency: FDEP

Place Label Here						Comments: Attn Cheryl Swanson: Algal ID collected for RPS >20%					
WIN ID/Field ID:  G4CE0219											
Location: Bass Slough 10m N of Neptune Rd.											
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)	
1/26/2022	1141 EST	8.4	81.7	14.1	6.4	0.3	0.6 ☒ VOB (S)	0.6	185.9	0.09	
	EST						Central Lab please use top row for login purposes				
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:	4/30/22					
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A	
		Lot #	NA1105100		Exp:	6/7/22					
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A	
		Filter Lot #	17135566			Syringe Lot #	1335260				
BOD (BP-1L)		☐ OV-BODUNIN				☐ Ice					
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					
Periphyton (PT-50ML)		☒ ALGAE-ID				☒ Ice			1	B	
Microbiology (Contract Lab Bottle)		☒ E. Coli ☐ Coli ☐ Enterococci ☐ Contract Lab				☒ Ice			1	A	
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐				☐ Ice					
Tracers (BG-500ML)		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice		MCAA Exp.			
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI		☒ WE8321-MS		☒ W-PSNP-TQ		☒ W-CT-CL-R		5	A
		☐ W-PCL-TQ-R		☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)		☐ W-TR-SQ-R					
		☐ W-PCB-TQ-R									
Phytoplankton/Periphyton		☐ PKD-QN-C ☐ PKD-QN-BV				☐ Ice					
Name: Leif Boman Victoria Schwartz						Signature: <i>Victoria Schwartz</i>			Date: 1/26/22		

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

WBID: 3173A

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

RQ-2022-01-24-20

SAMPLE ID	83668	ORG ID		LATITUDE	28.2796
COUNTY	OSCEOLA	STORET #		LONGITUDE	-81.36
DATE	01/26/2022	TIME	11:41	SAMPLING AGENCY	DEP - CERO
SITE NAME	BASS Slough 10m N of Neptune Rd.				
FIELD ID/NAME	G4CE0219	RECEIVING BODY OF WATER		Kissimmee River	

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) ☐						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 12 m wide 12 m/s 11 m/s 0.08 m/s 0.09 m/s	
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 18 Right Bank: 10				Hydrologic Modification Score (per FT 3101) 7		12 m/s 11 m/s 0.08 m/s 0.09 m/s	
High Water Mark: 2 + 5 = 7 (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No		5 m deep 6 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 ☒	
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SUBSTRATE TYPE

Assessment Tool: ☐ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon				WATER QUALITY							
				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top:				0.3	14.1	6.4	8.4	81.7	185.9	0.09	0.6
Mid:											☒ VOB
Bottom:											TOTAL DEPTH
Meter ID: <u>Craw Daddy</u>				0.6							
Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐				Water Surface Oils Normal ☐ Sheen ☒ Globs ☐ Slick ☐ Other ☐							
Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: SA1105060 Exp: 4/30/22				Color Tannic ☐ Green (Algae) ☒ Clear ☐ Other (Specify) ☐							
Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: Exp:				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:

LARGE AMOUNT OF TRASH (CONSTRUCTION WASTE)
 ILLEGALLY DUMPED UPSTREAM. REPORTED FOR REMOVAL.

Site was not SCI appropriate
☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM

Lef Bonan, Victoria Schwartz

SIGNATURE:

Lef Bonan

DATE:

01/26/22

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

SAMPLING AGENCY: <u>FDAP-COROL</u>		STORE STATION NUMBER: <u>G4CE0219</u>		DATE (MM/DD/YY): <u>01/26/2012</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: <u>OSCEOLA</u>	LOCATION: <u>BASS SLACK</u>		FIELD ID/NAME:	

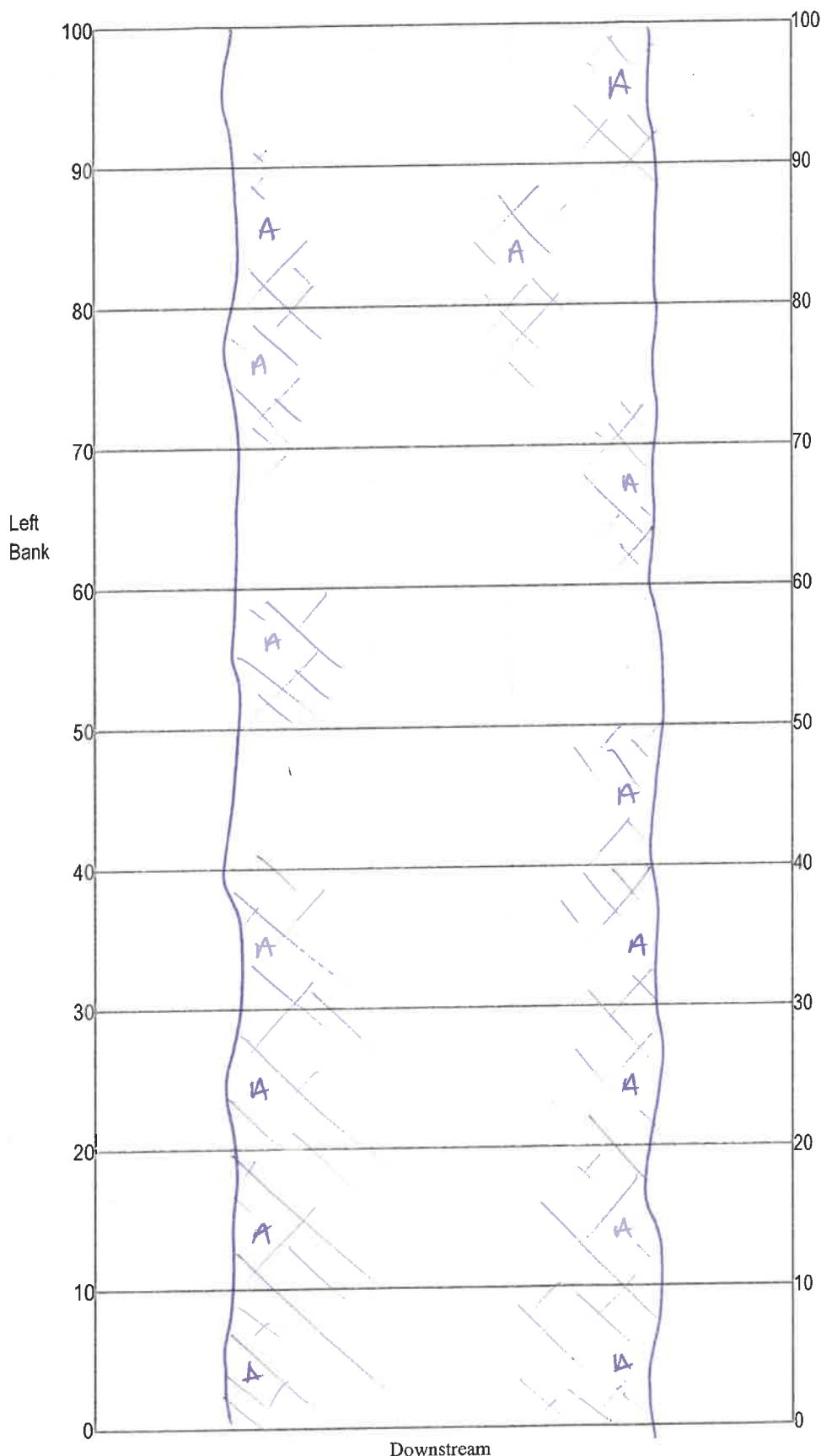
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh 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>4</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 <u>4</u> 3 2 1
Substrate Availability <u>3</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 <u>3</u> 2 1
Water Velocity <u>8</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 <u>8</u> 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>3</u> ----- Primary Score <u>18</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 <u>3</u> 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>3</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 <u>3</u> 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 woody 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 woody root zone with raw, eroded areas.
Right Bank <u>3</u> Left Bank <u>4</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>4</u> Left Bank <u>10</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>3</u> Left Bank <u>3</u> ----- Secondary Score <u>30</u>	10 9	8 7 6	5 4	3 2 1

48

TOTAL SCORE

Date: <u>01/26/12</u>	Analyst: <u>Leif Boman, Victoria Schwartz</u>	Signature: <u>Leif Boman</u>
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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: G4CE0219
BASS SLOUGH
Date: 01/26/2022
Sampler: Leif Boman, Victoria Schwartz

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 2.75

☐ _____

☐ _____

☐ Pools total # observed = 0
range expected = _____

Average width 12 m

Average depth .6 m

Velocity measured at 0.50 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:

Waterbody: Bass Slough Date: 1/26/22 County: Osceola Store Number: G4CE0219

Analyst: Victoria Schwartz / Kif Boman Signature: Vet Ref

Comments:

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>	ND →	X										<i>Myriophyllum aquaticum</i>	ND →	/	/	/	/	/	/	/	/	/	
<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 viviparous)</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>	/	/	/	/	/</																		

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Bass Slough County: Osceola Date: 1/26/22 Investigators: Leif Borman + Victoria Schuch
STORET Station Number: WIN 64CE0219

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	4		
	2	2				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2		14		5	2		64
	6	2				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				3	2		
	4	2				4	2		
	5	2		38		5	2		76
	6	2				6	2		
	7	5				7	2		
	8	2				8	2		
	9	2				9	2		
20	1	2	✓		80	1	2		
	2	4	✓			2	2		
	3	2				3	2		
	4	6				4	2		
	5	5		10		5	2		72
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		
30	1	2			90	1	2		
	2	4				2	2		
	3	2				3	2		
	4	2				4	2		
	5	2		30		5	2		88
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	4				9	2		
40	1	2			100	1	2		
	2	2				2	2		
	3	4				3	2		
	4	2				4	2		
	5	2		55		5	2		92
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	4				9	2		
50	1	2	✓			1	2		
	2	5	✓			2	2		
	3	5	✓			3	2		
	4	2				4	2		
	5	2		68		5	2		
	6	2				6	2		
	7	2				7	2		
	8	2				8	2		
	9	2				9	2		

(VDB)
Secchi depth 0.6
Estimated?

points ranked 4-6 26
total points assessed 99
% points ranked 4-6 26.1 VS

Check accompanying data collected at same site/date.
Algal mat sample ☒
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☐
Water sample ☒
RQ- 2022-01-2420

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

ALGAL ID COLLECTED

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%.