



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

April 2018

Data Qualified?

Yes / No

WIN Station Name: Pollywog Creek @ SR 78

Date: 08/28/2018

(mm/dd/yyyy)

WIN/ Field ID: G3SD0098

WBID: 3235F

Latitude: 26.76890

County: Glades

ORG ID:

Longitude: -81.45862

Receiving Body of Water: Caloosahatchee River

RQ-2018- 08-13-29

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment																														
MARYANN DUGAN GARY SNOREK STEVEN COFONE				☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☒ Pole																												
									☐ Carboy	☒ Syringe																													
									☐ Dipper	☐ Other																													
Depth Measured with				Equipment ID				Collection Method																															
SECCHI				33128				☐ Wading				☐ Canoe/Kayak																											
								☒ From Shore				☐ Electric Motor																											
								☐ Other				☐ Gasoline Motor																											
Water Level: Dry/ Pooled/ Low / Normal / High / Flooded				Meter ID#				Matrix: Fresh / Marine / DI																															
Photos: Yes / No				Flow: No Flow / Intestinal / Flowing / NA				Tide: Rising/ Falling/ Slack/ NA				Tide Times: High / Low																											
EST 1345				0.3				0.3				0.4				6.30				80.0				5.82				0.05				111.4				27.5			
CEN																																							
Biological Samples Collected: None / HA / SCI / RPS / Algae ID / LVS / LVI / Other:																																							
SBIO ID Numbers: SBIO-ID: 78909 HA-ID: 15399 RPS-ID: 9096 Macrophyte-ID: 11082 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				SA8085170				03/26/19				☒ <2																			
Metals				☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO3												☐ <2																			
Filtered Nutrients				☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice																															
Chlorophyll				☒ CHLSUTE-W				☒ Ice																															
Physical/Aggregate (Fresh)				☒ Alkalinity / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY / ☐ W-CH-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-E8321-DI ☐ W-E8321-MS				☐ Ice																															
Pesticides				☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA				☐ Ice ☐ Other																															

Notes:

Field ID/WIN ID



G3SD0098

Location



Pollywog Creek @ SR 78

Signature:

Maryann Dugan

Date:

08/28/2018

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)

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

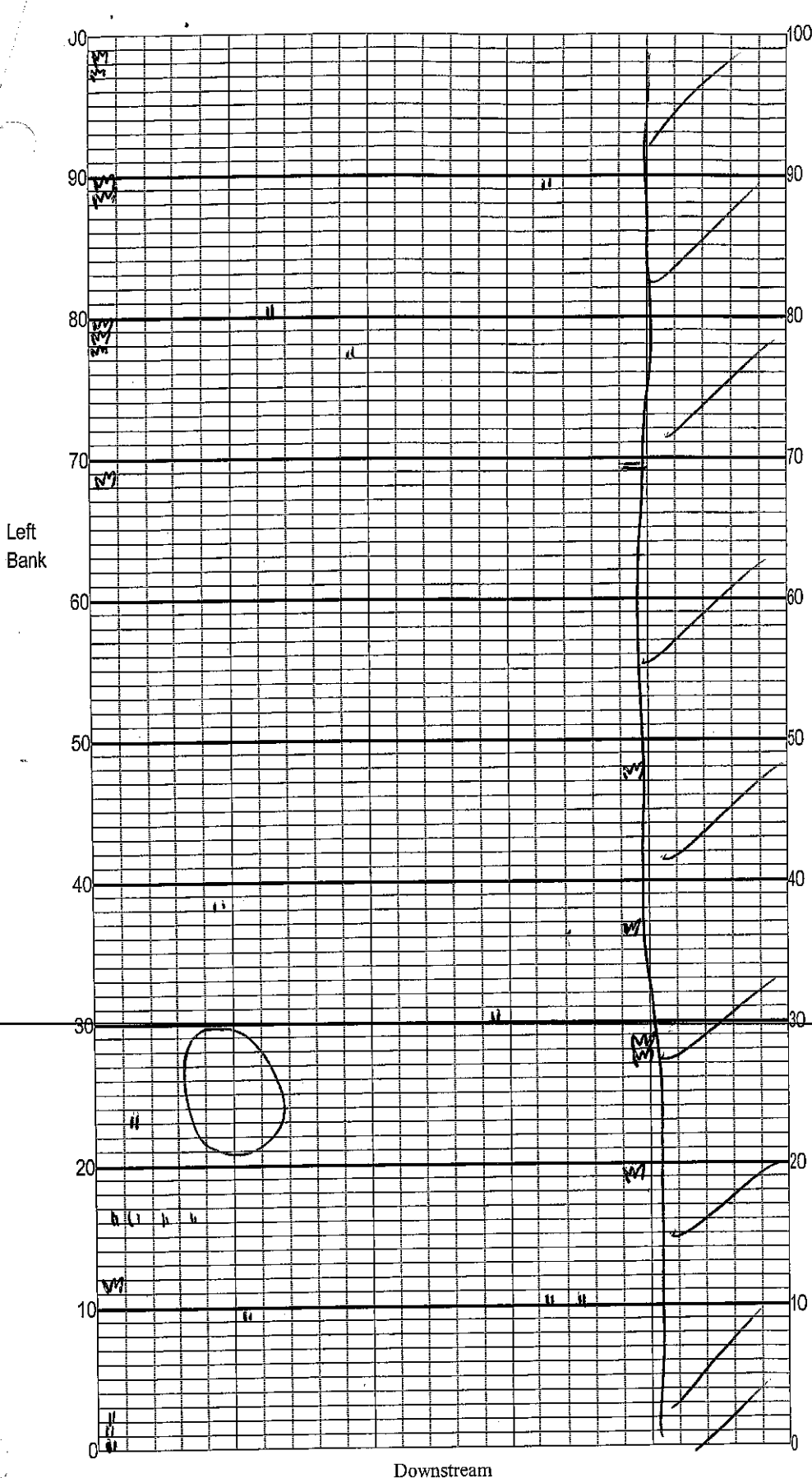
SAMPLING AGENCY: SROC		STORET STATION NUMBER: G35D0098	DATE (MM/DD/YYYY): 08/28/2008	RECEIVING BODY OF WATER: Caloosahatchee
REMARKS:	COUNTY: Glades	LOCATION: Polygog Creek @ SR78	FIELD ID/NAME:	

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 4	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 3	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 12	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 6 ----- Primary Score 27	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	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 4	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability 4 Right Bank 4 Left Bank 4	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 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. RL 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 4 Right Bank 4 Left Bank 4	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 RL	Less than 6 m of buffer zone due to intensive human activities 3 2 1 RL MD
Riparian Zone Vegetation Quality 2 Right Bank 2 Left Bank 2 ----- Secondary Score NR 24	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	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). RL 3 2 1

10 4 51 TOTAL SCORE

Date: 08/28/2008	Analyst: MARYANN DUGAN, STEVEN LOFONG	Signature: Maryann Dugan
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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: Pollyhog Creek
Date: 08/28/2008
Sampler: MO

100 m: Latitude	<u>24.769293</u>
Longitude	<u>-81.4583</u>
0 m: Latitude	<u>24.769133</u>
Longitude	<u>-81.458250</u>
Substrates: Code key, draw proportionate habitat abundance.	
	Snags
	Roots/undercut banks
	Leaf Packs (or mats)
	Aquatic Macrophytes
	Pools
total # observed = <u>1</u> # range expected = <u>2</u>	
Average width	<u>4</u> m
Average depth	<u>0.8</u> m
Velocity measured at <u>50</u> meter mark.	
WQ & chemistry taken at <u>0</u> 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:

$$\text{velocity} = \frac{355 \text{ cc}}{5 \text{ m}} = 7 \text{ s/m} = 0.14 \text{ m/s}$$

$$185 \text{ cc} = .25 \text{ m}^2$$

$$1.94 \text{ / HABITAT}$$

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

SAMPLE ID G3590098 ORG ID 2IFLFTM LATITUDE 26.769293 (100m)
 COUNTY Glades STORET # _____ LONGITUDE -81.4583
 DATE 08/28/2018 TIME 1345 SAMPLING AGENCY S Rol
 SITE NAME Pollywog Creek (2) SP78
 OLD ID/NAME _____ RECEIVING BODY OF WATER Caloosahatchee

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) ☐ <u>60</u> <u>35</u> <u>5</u>								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 <u>4</u> m wide			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>10</u> Right Bank: <u>7</u>				Hydrologic Modification Score (per FT 3101) ☐					
High Water Mark: <u>0.5</u> + <u>0.8</u> = <u>1.3</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No					
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 Woody Debris (Snags) ☐ ☐ ☐ Undercut Banks / Roots ☐ ☐ ☐ Leaf Packs or Mat ☐ ☐ ☐ Aquatic Vegetation ☐ ☐ ☐ Rock or Shell Rubble.. ☐ ☐ ☐ Sand..... ☐ ☐ ☐ 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: <u>0.3</u> <u>27.50</u> <u>5.82</u> <u>6.30</u> <u>80.0</u> <u>111.4</u> <u>0.05</u> <u>0.4</u> Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Bottom: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Meter ID: _____					
Water Odors: Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils: Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐			Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐		
Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SP2005170</u> Exp: <u>03/24/19</u>			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: ☒ The antecedent hydrologic conditions have been met to my best knowledge.								

SAMPLING TEAM

MD, SC

SIGNATURE:

Ryan Dye

DATE:

08/28/2018

Site:				County:				Date:				Investigators:			
Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N - 6)	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N - 6)	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N - 6)	Canopy Cover				
0	1	N		40	1	N		80	1	N		# points ranked 4-6			
	2	N			2	N			2	N			total points assessed		
	3	N			3	N			3	N					
	4	N			4	N			4	N					
	5	N	14		5	N	43		5	N	31				
	6	N			6	N			6	N					
	7	N			7	N			7	N					
	8	N			8	N			8	N					
	9	N			9	N			9	N				% points ranked 4-6	
10	1	N		50	1	N		90	1	N		Secchi depth:			
	2	N			2	N			2	N					
	3	N			3	N			3	N					
	4	N			4	N			4	N					
	5	N	17		5	N	27		5	N	0				
	6	N			6	N			6	N					
	7	N			7	N			7	N					
	8	N			8	N			8	N					
	9	N			9	N			9	N					
20	1	N		60	1	N		100	1	N		Check accompanying data collected at same site/date.			
	2	N			2	N			2	N					
	3	N			3	N			3	N					
	4	N			4	N			4	N					
	5	N	48		5	N	26		5	N	8				
	6	N			6	N			6	N					
	7	N			7	N			7	N					
	8	N			8	N			8	N					
	9	N			9	N			9	N					
30	1	N		70	1	N		Record "N" for points deeper than the Secchi depth; algae are presumed absent. Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. Note if thickness estimated for deep points which can be seen but not reached.	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 an 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%.	Algal Thickness Rank	N	rough, no algae; slimy; algae to 1 mm		
	2	N			2	N						3	>1mm - 6 mm		
	3	N			3	N						4	>6 - 20 mm		
	4	N			4	N						5	>20 mm - 10 cm		
	5	N	73		5	N	10					6	>10 cm		
	6	N			6	N									
	7	N			7	N									
	8	N			8	N									
	9	N			9	N									

(This fits with paper margins and orientation.)

IN-2013-10-01-12
Date: 1/2/34
User Defined Space.
Location, directions,
samplers, whatever...

ASU-2013-10-01-12
Field ID
STORET
1234567890123456

Store Number: ^A put sticker here

Date: 08/28/18

County: Citrus

Waterbody: 00/28/2011

Analyst: Maryann Dugan

Signature: Maryann Dugan

Biology Center

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**

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>		X			X		X	X	X	X		<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> sp.												<i>Panicum repens</i>																
<i>Cicuta maculata</i>												<i>Panicum rigidulum</i>																
<i>Cladium jamaicense</i>												<i>Pistia stratioides</i>																
<i>Colocasia esculenta</i>	X	X					X	X	X	X		<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>Pontederia cordata</i>																
<i>Cyperus</i>												<i>Potamogeton illinoensis</i>																
<i>Diodia virginiana</i>												<i>Ruellia simplex</i>																
<i>Eichhornia crassipes</i>												<i>Sacciolepis striata</i>																
<i>Eleocharis (wispy viviparous)</i>												<i>Sagittaria kurziana</i>																
<i>Hydrilla verticillata</i>												<i>Sagittaria lancifolia</i>																
<i>Hydrocotyle</i> sp.												<i>Sagittaria latifolia</i>																
<i>Hygrophila polysperma</i>												<i>Salvinia minima</i>																
<i>Hymenachne amplexicaulis</i>												<i>Samolus parviflora</i>																
<i>Hymenocallis</i>												<i>Saururus cernuus</i>																
<i>Lachnanthes caroliniana</i>												<i>Sparganium americanum</i>																
<i>Landoltia punctata</i>												<i>Sphagneticola trilobata (Wedelia)</i>																
<i>Lemna</i> sp.												<i>Typha</i> sp.																
<i>Limnophila sessiflora</i>												<i>Urochloa mutica (Brachiaria)</i>																
<i>Ludwigia leptocarpa</i>												<i>Vallisneria americana</i>																
<i>Ludwigia palustris</i>												<i>Zizania aquatica</i>																
<i>Ludwigia peruviana</i>	X						X					<i>Salvinia teresbintifolia</i>	X	X	X		X	X		X								
<i>Ludwigia repens</i>												<i>Salvinia caroliniana</i>	X															
<i>Luziola fluitans</i>																												
If no Dominant or Co-Dominant were selected, indicate with "X"																												
Indicate % cover macrophytes per section																												
0-5% Macrophyte Coverage	X	X	X	X	X	X	X	X	X	X																		
>5 and ≤10% Macrophyte Coverage																												
>10 and ≤25% Macrophyte Coverage																												
>25 and ≤50% Macrophyte Coverage																												
> 50% Macrophyte Coverage																												