



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE ____ OF ____

February 2016

Data Qualified?
Yes / No

STORET Station Name: L-48 canal @ Buckhead Rd community center

Date: _____

(mm/dd/yyyy)

STORET Station ID: 645E0090

Latitude: 27.144094

(Decimal Degrees)

WBID: RQ - 2016-08-22-51

ORG ID: 21FWPP

Longitude: -80.875084

(Decimal Degrees)

Receiving Body of Water: _____

Field ID: 645E0090

County: Okechobee

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
<u>L. W. POIRCE</u> <u>M. S. S. S. S.</u> <u>A. BRENTAN</u>				☒	☒	☒	☒	☒	☒	☒
				☒	☒	☒	☒	☒	☒	
				☒	☒	☒	☒	☒	☒	
				☒	☒	☒	☒	☒	☒	

Sampling Equipment			
☒ Sample Container	☐ Van Dorn	☐ Pole	
☐ Carboy	☐ Syringe		
☐ Dipper	☐ Other		
Equipment ID: _____			
Collection Method			
☐ Wading	☒ Via Boat		
☐ From Shore	☒ Canoe/Kayak		
☐ Other (note below)	☐ Electric Motor		
	☐ Gasoline Motor		

Water Level: Dry / Low / <u>Normal</u> / High / Flooded				Matrix: <u>Fresh</u> / Marine / DI						
Meter ID# <u>A F3</u>				Photos: Yes / <u>No</u>						
Tide Falling: Yes / No / <u>NA</u>										
Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
<u>EST</u>	<u>1345</u>	<u>0.3</u>	<u>1.3</u>	<u>3.8</u>	<u>49</u>	<u>6.5</u>	<u>0.32</u>	<u>0.6</u>	<u>663</u>	<u>29.8</u>
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 ₂ SO ₄	<u>6201100</u>	<u>7/17</u>	☒ <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 ☐ Enter ☐ 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)

Notes:	Place Label Here (If Available)
Signature: <u>[Signature]</u>	Date: <u>8/23/16</u>

Field Parameters Entered into LIMS: JP 9/22/16 (Initials/Date) Field Parameters QC in LIMS: [Signature] (Initials/Date)

Date Migrated to STORET: 1209/1 (Initials/Date) Field Sheets Scanned/Saved: _____ (Initials/Date)

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: L-48 canal G4SE0090 County: okee Date: 8/23 Investigators: T WAPPA M Sewe

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				60	1			
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
10	1				70	1			
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
20	1				80	1			
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
30	1				90	1			
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
40	1				100	1			
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			
50	1					1			
	2					2			
	3					3			
	4					4			
	5					5			
	6					6			
	7					7			
	8					8			
	9					9			

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%.

STORET Station Number:

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

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

Location: L-48 camp

Date: 8/23/16

Sampler: TOM NIPPICK

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	_____
☐	_____	_____
☐	_____	_____
☒	Pools	total # observed = <u>0</u> # range expected = <u>0-1</u>

Average width 20 m
Average depth 1.5 m

Velocity measured at 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:
No pools observed

$\Delta - 380 m^2$

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

62-160.800, F.A.C

UPSET ID: 117442

velocity - 0 m/s

Revision Date: March 1, 2014

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

SAMPLING AGENCY: <u>FDEP</u>		STORET STATION NUMBER: <u>645E0090</u>	DATE (MM/DD/YY): <u>8/23/16</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: <u>Okeechobee</u>	LOCATION: <u>L-48 Canal</u>	FIELD ID/NAME: <u>645E0090</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>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	<u>5</u> 4 3 2 1
Substrate Availability <u>11</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 <u>11</u>	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>1</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 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 <u>1</u>
Habitat Smothering <u>13</u> ----- Primary Score <u>25</u> <u>30</u> <u>DL</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 <u>13</u> 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 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>1</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 <u>1</u>
Bank Stability	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.	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 root zone with raw, eroded areas.
Right Bank <u>7</u> Left Bank <u>7</u>	10 9	8 <u>7</u> 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>1</u> Left Bank <u>3</u>	10 9	8 7 6	5 4	<u>3</u> 2 <u>1</u>
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>1</u> Left Bank <u>1</u> ----- Secondary Score <u>21</u>	10 9	8 7 6	5 4	3 2 <u>1</u>

44 51 **TOTAL SCORE**

Date: <u>8/23</u>	Analyst: <u>T Wapnick</u>	Signature: <u>Tom Wapnick</u>
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VESET ID: 77442

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

SAMPLE ID _____ ORG ID 214WFB LATITUDE _____
 COUNTY _____ STORET # G4SE0090 LONGITUDE _____
 DATE _____ TIME 3:45 SAMPLING AGENCY FDAP
 SITE NAME L-48 canal
 FIELD ID/NAME G4SE0090 RECEIVING BODY OF WATER Lake Okeechobee

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>70</u> <u>30</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 _____ m wide _____ m/s <u>0.0</u> m/s _____ m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>0</u> Right Bank: <u>5</u>				Hydrologic Modification Score (per FT 3101) _____					
High Water Mark: <u>0.2</u> + <u>1.3</u> = <u>1.6</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 % Coverage INVERT PERI # Times Sampled # Times Sampled 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>21.8</u> <u>6.5</u> <u>3.8</u> <u>47</u> <u>66.3</u> <u>0.52</u> <u>0.6</u> Mid: _____ Bottom: _____ Meter ID: <u>AK3</u> Water Odors Normal ☐ Petroleum ☐ Sewage ☐ Chemical ☐ 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: _____		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☒ ☒ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Water Surface Oils Normal ☐ Sheen ☒ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐ Clarity Clear ☐ Slightly Turbid ☐ Turbid ☒ Opaque ☐		
System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☒ <u>canal</u>			AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.		
SAMPLING TEAM <u>Seal / [signature]</u>			SIGNATURE: <u>[signature]</u>		DATE: <u>8/23</u>

VFSIT ID: 77442

Waterbody: _____	Date: _____	County: _____	Storet Number: _____
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Analyst: _____ Signature: _____

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.

Species for additional data names												Meter Mark												Specimen collected (check)	Meter Mark												Specimen collected (check)									
HERBACEOUS SPECIES												0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)	HERBACEOUS SPECIES												0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)	
Alternanthera philoxeroides												P	P	P	P	P	P	P	P	P	P		Micranthemum glomeratum																							
Bacopa caroliniana																							Micranthemum umbrosum																							
Bacopa monnieri																							Myriophyllum aquaticum																							
Bidens mitis																							Najas guadelupensis																							
Boehmeria cylindrica																							Nuphar luteum												V	U	S	P	P	P	P	P	P	P	P	
Centella asiatica																							Orontium aquaticum																							
Ceratophyllum demersum																						P	Panicum hemitomon												V	S	P	P	P	P	P	P	P	P	P	
Chara																							Panicum repens																							
Cicuta maculata																							Panicum rigidulum																							
Cladium jamaicense																							Pistia stratioides												O	P	O	O	O	O	O	O	O	O	O	
Colocasia esculenta																							Polygonum glabra																							
Commelina diffusa																							Polygonum hydropiperoides																							
Commelina virginica																							Polygonum punctatum																							
Crinum americanum																							Pontedaria cordata																							
Diodia virginiana																							Potamogeton illinoensis																							
Eichhornia crassipes																							Ruellia simplex																							
Eleocharis (wispy viviparous)												P											Sacciolepis striata																							
Hydrilla verticillata																							Sagittaria kurziana																							
Hydrocotyle												P	P	P	P	P	P	P	P	P	P		Sagittaria lancifolia																							
Hygrophila polysperma																							Sagittaria latifolia																							
Hymenocallis																							Salvinia minima																							
Lachnanthes caroliniana																							Samolus parviflora																							
Landoltia punctata																							Saururus cernuus																							
Lemna												P	P	P	P	P	P	P	P	P	P		Sparganium americanum																							
Limnophila sessiflora																							Typha												V	V	V									
Ludwigia leptocarpa																							Vallisneria americana																							
Ludwigia palustris																							Zizania aquatica																							
Ludwigia peruviana																																														

VISIT ID: 27442