



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

PAGE 1 OF 1

Data Qualified?
Yes / No

STORET Station Name: Jackson Canal @ 1100 m DS of ctrl structure Date: 3/22/16
(mm/dd/yyyy)

STORET Station ID: 26011459

Latitude: 27.8813
(Decimal Degrees)

WBID: 3183F RQ - 2016-03-21-36 ORG ID: CEROc Longitude: 81.1795
(Decimal Degrees)

Receiving Body of Water: Kissimmee River Field ID: G4CE0060 County: Osceola

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Natalie Ayala					X		X		
Terry Diarden						X		X	X

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 / Normal / High / Flooded Matrix: Fresh / Marine / DI

Meter ID# Betty Boop Photos: Yes / No Tide Falling: Yes / No / NA

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°)
EST	1630	0.3	2.0	3.4	39	6.7	0.07	0.6	143	21.5
CEN	N/A	1.8		3.4	39	6.7	0.07		143	21.5

Biological Samples Collected: None HA SCI LVS RPS LVI Other

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	SA-5259020	9/16	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
BOD	☒ BOD-UNIN	☒ Ice			
Physical/Aggregate (Kit A/C)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Kit B/D)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Enteroc ☐ 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			

Contains
1:1
Sulfuric Acid
SA-5259020
EXP: 09/16/16
Warning!
See MSDS

Notes:

RQ-2016-03-21-36
Date: 03/22/16
Time:

G4CE0060
Field ID ↑
STORET ↓
26011459

Signature: [Signature] Date: 3/22/2016

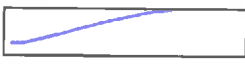
Field Parameters Entered into LIMS: (Initials/Date) Field Parameters QC in LIMS: Kmw 4/22/16 (Initials/Date)

Date Migrated to STORET: 20 4/28/16 Field Sheets Scanned/Saved:

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

SAMPLE ID 75955 ORG ID 2IFLCEN LATITUDE 27.8813
 COUNTY Osceola STORET # 260114501 LONGITUDE -81.1795
 DATE 03/22/2016 TIME _____ SAMPLING AGENCY 2IFLCEN/CEROL
 SITE NAME Jackson Canal @ 1100m DS of Control Structure
 FIELD ID/NAME G4C60060 RECEIVING BODY OF WATER Kissimmee River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>100</u> 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 _____ m wide _____ m/s _____ m/s _____ m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>>18</u> Right Bank: <u>>18</u>				Hydrologic Modification Score (per FT 3101) <u>_____</u>			
High Water Mark: <u>0.3</u> + <u>1.79</u> = <u>2.2</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 <u>N/A</u> ☐ Absent ☐ Slight ☐ Moderate ☐ Profuse	Sediment Odors <u>N/A</u> ☐ 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:	<u>0.3</u>	<u>21.5</u>	<u>6.7</u>	<u>3.4</u>	<u>39</u>	<u>143</u>	<u>0.07</u>	<u>0.6</u>		
Mid:									☐ VOB	
Bottom:	<u>1.8</u>	<u>21.5</u>	<u>6.7</u>	<u>3.4</u>	<u>39</u>	<u>143</u>	<u>0.07</u>		TOTAL DEPTH	
									<u>2.0</u>	
Meter ID: <u>Betty Boop</u>										
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 <u>SA-5259020</u> Exp: <u>9/16</u>				Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐						
Algae Sample Taken? ☒ Yes ☐ No Sample Preserved? ☐ Yes ☒ No Lot Number: <u>lab preserved</u> Exp: _____				Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐						

ABUNDANCE Not Obs. Rare Common Abundant				System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☒ <u>Canal</u>			
Periphyton: ☐ Not Obs. ☐ Rare ☒ Common ☒ Abundant				AMBIENT FIELD CONDITIONS / NOTES: <u>Sunny day; clear skies; burning on adjacent property.</u>			
Fish: ☐ Not Obs. ☐ Rare ☒ Common ☒ Abundant				☐ The antecedent hydrologic conditions have been met to my best knowledge.			
Aquatic Plants: ☐ Not Obs. ☐ Rare ☐ Common ☒ Abundant							
Iron/Sulfur Bacteria: ☒ Not Obs. ☐ Rare ☐ Common ☐ Abundant							

SAMPLING TEAM N. Ayala; T. Riordan SIGNATURE: [Signature] DATE: 03/22/2016

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

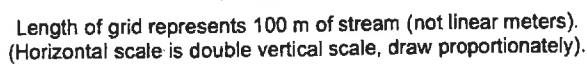
SAMPLING AGENCY: ZIFLCEN		STORET STATION NUMBER: 26011459	DATE (MM/DD/YY): 08/22/16	RECEIVING BODY OF WATER: Kissimmee Rvr
REMARKS:	COUNTY: Osceola	LOCATION: Jackson Canal @ 110m DS of Control Structure	FIELD ID/NAME: G4CE0060	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity 3	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 4 3 2 1
Substrate Availability 7	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 3 36 s	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 3 Primary Score 16	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 Artificial Channelization 2	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 14 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 6 Left Bank 5	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 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. 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 10 Left Bank 10	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	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank 7 Left Bank 6 Secondary Score 46	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). 3 2 1

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TOTAL SCORE

Date: 3/22/16	Analyst: N. Ayala	Signature: Natalia Ayala
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Plants observed / other notes:

70mV $\downarrow$ see LVS sheet

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Jackson Canal 1100m DS of control structure County: Osceola Date: 03/22/2016 Investigators: N. Ayala/T. Borden

Transect (m) Point 1=right 9=left Algal Thickness Rank (N-6, X) Did you estimate? Canopy Cover

Transect (m) Point 1=right 9=left Algal Thickness Rank (N-6, X) Estimated Canopy Cover

STORET Station Number: 26011459

Secchi depth 0.6
Estimated? 54

points ranked 4-6 27
total points assessed 247
% points ranked 4-6 11

Check accompanying data collected at same site/date.

Algal mat sample ☒
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☒
Water sample ☒
RQ-2016-03-21-36

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

*REVERSE Order

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%.

Waterbody: <u>Jackon Canal @ 1100mDS of CS</u>	Date: <u>3/22/16</u>	County: <u>Osceola</u>	Storet Number: <u>2601459</u>
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Analyst: N. Ayala / T. Riordan

Signature: Waleed

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.

[illegible]