



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE ____ OF ____

February 2016

Data Qualified?
Yes / No

STORET Station Name: Oak Creek

Date: 3/02/2016
(mm/dd/yyyy)

STORET Station ID: G4SE0080

Latitude: 27.47554 27.4758
(Decimal Degrees)

WBID: 3187D RQ: 2016-02-29-43 02-24-60 ORG ID: 21FLWPB

Longitude: -81.134748 -81.13473
(Decimal Degrees)

Receiving Body of Water: Kissimmee

Field ID: Oak Creek - 03022016

County: Okeechobee

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
<u>Mont Seel</u>						
<u>Ashley Hoyer</u>						
<u>Rachel Benth</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>AE3</u>						Photos: <u>Yes</u> / <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°)					
EST	<u>11:00</u>	<u>0.3</u>	<u>0.6</u>	<u>6.6</u>	<u>73</u>	<u>6.7</u>	<u>6.05</u>	<u>0.60</u>	<u>112</u>	<u>20.3</u>					
CEN															

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 ☐ H ₂ SO ₄	<u>9/16</u>	<u>5/23/16</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ <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)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CLIC / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Kit B)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococcus ☐ QPCR	☐ Ice			
Periphyton	☐ ALGAE-ID	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R	☐ Ice			
	☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Other			

Place Preservative Sticker(s) Here
(if Available)

Notes:

Very little flow stream of Road All 710cm

Station visit 76063

Place Label Here
(If Available)

Signature: Mont Seel

Date: 3/4/16

Field Parameters Entered into LIMS: pm 03/30/2016

Field Parameters QC in LIMS: ms 5/23/16

Date Migrated to STORET: 11/16/13

Field Sheets Scanned/Saved: 11/16/13

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: Oaf Creek

Date: 3/2/14

County: Cheek

Storet Number: G-4 SFT008

Analyst: S. J. H. H.

Signature: Robert D. Hulse

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]

less than 2 m2

RPS ID# 8056
SBID# 76063

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Oak Creek</u>	County: <u>Okeechobee</u>	Date: <u>3/2/16</u>	Investigators: <u>Hurkey / Sewell</u>
			STORET Station Number: <u>GUSEW80</u>

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	N			60	1	N			
	2					2				
	3					3				
	4					4			X	
	5					5			X	0
	6					6			X	
	7					7				
	8					8				
	9	N				9	N			
10	1	N			70	1	N			
	2					2				
	3					3				
	4		X			4			X	
	5		X	0		5			X	0
	6		X			6			X	
	7		X			7			X	
	8					8				
	9	N				9	N			
20	1	N			80	1	N			
	2					2				
	3					3			X	
	4					4			X	
	5			0		5			X	0
	6					6			X	
	7					7				
	8					8				
	9	N				9	N			
30	1	N			90	1	N			
	2					2				
	3					3			X	
	4					4			X	
	5		X	0		5			X	0
	6					6			X	
	7					7			X	
	8					8			X	
	9	N				9	N			
40	1	N			100	1	N			
	2					2				
	3					3			X	
	4					4			X	
	5		X	0		5			X	0
	6					6			X	
	7					7			X	
	8					8				
	9	N				9	N			
50	1	N			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%.					
	2									
	3									
	4									
	5			0						
	6									
	7		X							
	8									
	9	N								

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- 2016-02-29-60	

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 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID 64500807663 ORG ID 21FWP LATITUDE _____
 COUNTY Okeechobee STORET # 6450080 LONGITUDE _____
 DATE 3/2/16 TIME 1150 SAMPLING AGENCY 8050
 SITE NAME Oak Creek
 FIELD ID/NAME _____ RECEIVING BODY OF WATER Kissimmee River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):							Landscape Development Intensity Index (LDI)
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
<u>50</u>		<u>50</u>					
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy							Typical Width (m) Depth (m)/Velocity (m/sec) Transect <u>8</u> m wide
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☐ Moderate ☒ Heavy							
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)		m/s <u>0.04</u> m/s	
High Water Mark: <u>25</u> + <u>0.6</u> = <u>1.1</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☐ No		m deep <u>0.6</u> 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: <u>0.3</u> <u>20.3</u> <u>6.7</u> <u>6.6</u> <u>73</u> <u>112</u> <u>0.1</u> <u>0.6</u> Mid: <u>0.6</u> <u>20.3</u> <u>6.7</u> <u>6.6</u> <u>73</u> <u>112</u> <u>0.1</u> <u>0.6</u> Bottom: <u>0.6</u> <u>20.3</u> <u>6.7</u> <u>6.6</u> <u>73</u> <u>112</u> <u>0.1</u> <u>0.6</u> Meter ID: <u>AE3</u>
Woody Debris (Snags) <u>0.1</u> Undercut Banks / Roots Leaf Packs or Mat Aquatic Vegetation <u>1.7</u> Rock or Shell Rubble Sand Mud / Muck / Silt Other Other	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: _____
	Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐ 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

Hurley/Brewton/Sewell

SIGNATURE

DeLong

DATE

3/2/16

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

SRIO #76063

13574

HA #15574

SAMPLING AGENCY: 8050		STORET STATION NUMBER: 6456080	DATE (MM/DD/YY): 3/2/16	RECEIVING BODY OF WATER: Kissimmee R.vv
REMARKS:	COUNTY: Okeechobee	LOCATION: Oak Creek	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>2</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 <u>2</u> 1
Substrate Availability <u>2</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 3 <u>2</u> 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 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 <u>4</u> 3 2 1
Habitat Smothering <u>2</u> ----- Primary Score <u>10</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 3 <u>2</u> 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>11</u>	20 19 18 17 16	15 14 13 12 <u>11</u>	10 9 8 7 6	5 4 3 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 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>10</u> Left Bank <u>10</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>9</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>8</u> Left Bank <u>8</u> ----- Secondary Score <u>66</u>	10 9	<u>8</u> 7 6	5 4	3 2 1

76 TOTAL SCORE

Date: 3/2/16	Analyst: A. Hurley/Brewton/Sewell	Signature: [Signature]
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3m
00-4 Stre



double vertical

Plants observed / other notes:

V-12.2/720
S-0.7/720