



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

April 2018

Data Qualified?
Yes / No

WIN Station Name: Okaloacoochee Branch @ Eucalyptus

Date: 12/12/2018

WIN/ Field ID: G3SD0099

WBID: 32350

Latitude: 26.75602

(mm/dd/yyyy)

County: Hendry

ORG ID:

Longitude: -81.39836

(Decimal Degrees)

Receiving Body of Water: Caloosahatchee River

RQ-2018-12-10-53

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
Steve Cofone							☒ Sample Container	☐ Van Dorn	☐ Pole
Maryann Dugan							☐ Carboy	☒ Syringe	
							☐ Dipper	☐ Other	
							Depth Measured with <u>SECCHI</u>		
							Equipment ID <u>DEEPER BLUE</u>		
							Collection Method		
							☒ Wading	☐ Canoe/Kayak	
							☐ From Shore	☐ Electric Motor	
							☐ Other	☐ Gasoline Motor	

Water Level: Dry/ Pooled/ Low Normal / High / Flooded
Photos: Yes / No Yes Flow: No Flow / Intertidal / Flowing / NA
Meter ID# Kelp Matrix: Fresh / Marine / DI
Tide: Rising/ Falling/ Slack NA Tide Times: High NA Low NA

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)
EST	1510	0.4	0.2	0.4	7.70	86.1	7.50	0.32	665	20.78
CEN				5						

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:
SBIO ID Numbers: SBIO-ID: 79072 HA-ID: 15514 RPS-ID: 9168 Macrophyte-ID: 1143 LIMS# 2040595

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	SA8274050	10/01/19	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	NA8099110	04/09/19	☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-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 ☐ W-E8321-MS ☐ W-CARB-AA	☐ Ice ☐ Other			

Notes: B

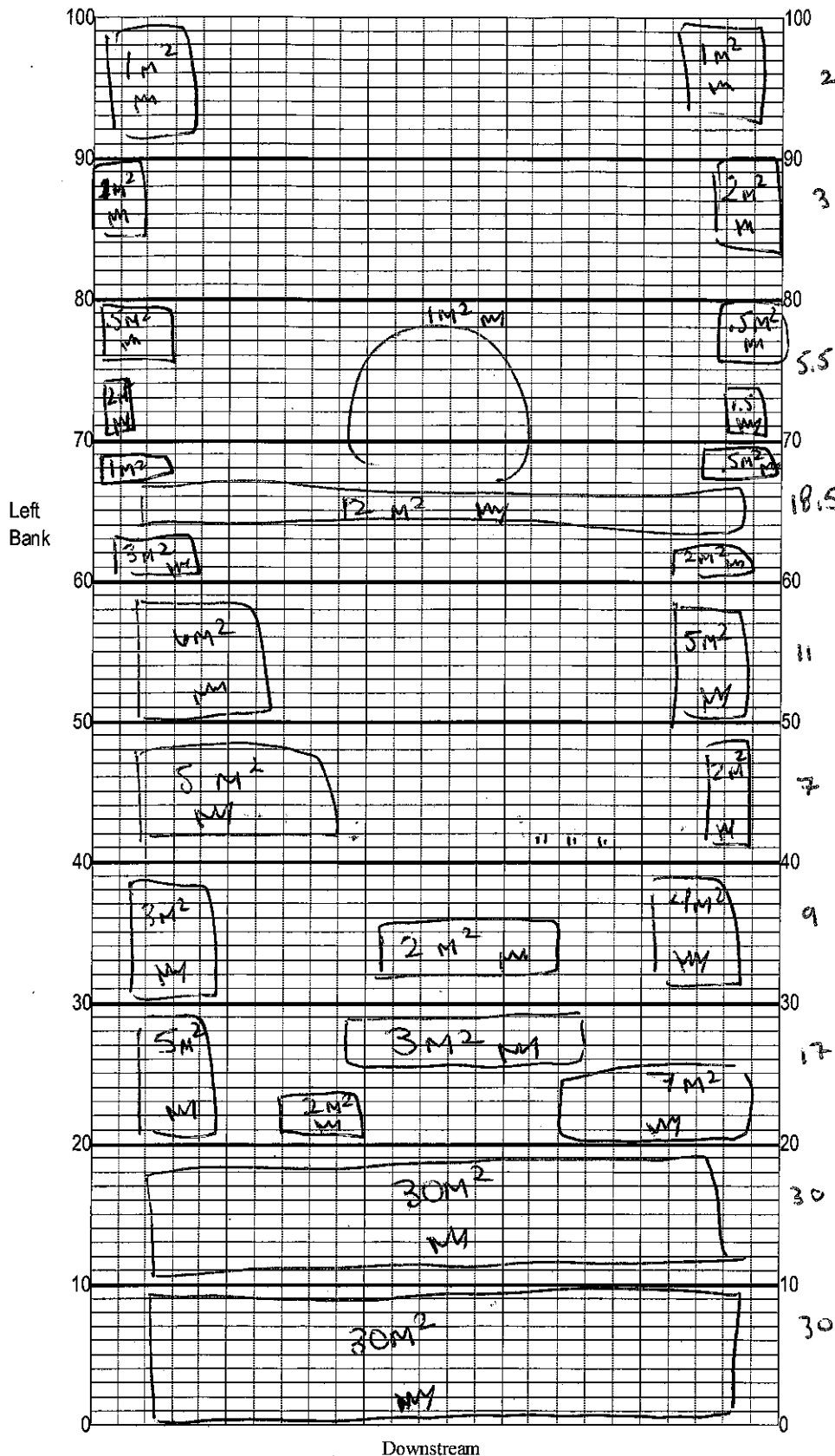
Field ID/WIN ID: G3SD0099

Location: OK Branch @ Eucalyptus

Signature: Maryann Dugan Date: 12/12/2018

Enter Field Parameters, Verify Station ID in LIMS DMT: _____ QC Station ID, Field Parameters in LIMS DMT: _____
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data in WIN: _____
(Initials/Date) (Initials/Date) (Initials/Date)

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



Location: OK BRANCH

Date: 12/12/2018

Sampler: MARTIN DUGAN, STEVEN COFONE

100 m: Latitude 26.7505259
Longitude -81.3927832

0 m: Latitude 26.75676
Longitude -81.393452

Substrates: Code key, draw proportionate habitat abundance.

	%	m²
Snags	0.25	0.75
Roots/undercut banks	0	0
Leaf Packs (or mats)	0	0
Aquatic Macrophytes	44.33	133.0
ROCKS	0	0
Pools	total # observed = 1 4 # range expected = 2-3	

Average width 3.0 m
Average depth 0.4 m

Velocity measured at 40 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:

~~4~~ ~~VEGETATION~~
~~40~~ ~~SPRAYED~~

9 5/m
velocity = 0.11 m/s

AVAILABLE HABITAT = 44.58%

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

SAMPLING AGENCY: <u>S ROC</u>		STORET STATION NUMBER: <u>G3500099</u>	DATE (MM/DD/YY): <u>12/12/2018</u>	RECEIVING BODY OF WATER: <u>CALOUSAHA TEE</u>
REMARKS:	COUNTY: <u>HENRY</u>	LOCATION: <u>OK BRANCH</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>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	(5) 4 3 2 1
Substrate Availability <u>17</u> <u>44.58%</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 2 1
Water Velocity <u>11</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 1
Habitat Smothering <u>6</u> ----- Primary Score <u>39</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 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>2</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 (2) 1
Bank Stability Right Bank <u>9</u> Left Bank <u>9</u>	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) R	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 woody root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>2</u> Left Bank <u>2</u>	Width of vegetation greater than 18 m 10 9	Width of vegetation >12 to 18m 8 7 (6) R	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 R, L VEG SPRAYED
Riparian Zone Vegetation Quality Right Bank <u>4</u> Left Bank <u>1</u> ----- Secondary Score <u>33</u>	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) R	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 (1) L

400 68

TOTAL SCORE

Date: <u>12/12/2018</u>	Analyst: <u>MC, SC</u>	Signature: <u>[Signature]</u>
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DEP-SOP-001/01: Form FD 9000-3 (9/19/12)
PHYSICAL/CHEMICAL CHARACTERIZATION FIELD SHEET

RQ-2013-10-07-72

Date: 1/2/34



User Defined Space.
 Location, directions,
 samplers, whatever...

SAMPLE ID RQ-208-12-10-53 ORG ID _____
 COUNTY Henry SAMPLING AGENCY S. ROL
 DATE 12/2/2018 TIME 1510
 SITE NAME OK BRANCH
 FIELD ID/NAME G35D0099 RECEIVING BODY OF WATER CAHOSSAHATCHEE

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>20</u> <u>30</u> <u>50</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>3.0</u> m wide m/s <u>0.11</u> m/s m/s m deep <u>0.4</u> m deep m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>2</u> Right Bank: <u>2</u>				Hydrologic Modification Score (per FT 3101)				
High Water Mark: <u>0.5</u> + <u>0.4</u> = <u>0.9</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) <u>0.25</u> ☐ ☐ Undercut Banks /Roots ☐ ☐ Leaf Packs or Mat ☐ ☐ Aquatic Vegetation <u>44.33</u> ☐ ☐ Rock or Shell Rubble... ☐ ☐ Sand/Silt..... ☐ ☐ Sand/Gravel..... ☐ ☐ Mud/Muck/Silt ☐ ☐ Other ☐ ☐			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.2</u> <u>28.78</u> <u>7.50</u> <u>7.70</u> <u>86.1</u> <u>665</u> <u>0.32</u> <u>04</u> Mid: ☒ VOB Bottom: Meter ID: <u>K945</u> Meter Verify: Y ☒ N ☐ <u>0.4</u>					
ABUNDANCE Absent Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☐ ☒ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			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>SP0274050</u> Exp: <u>10/2019</u> <u>NW0099110</u> <u>04/2019</u>			Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐			Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐		
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐			WEATHER CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.					

SAMPLING TEAM

MARYANN DUGAN, STEVEN WOFON

SIGNATURE:

Maryann Dugan

DATE:

12/2/2018

Site: OK PRANKA County: FLANDERS Date: 12-12-2018 Investigators: MAR-ANNE DUBOIS, STEVEN COFFINÉ

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

Check accompanying data collected at same site/date.

Algal mat sample ☒

Habitat Assessment ☒

Linear Veg. Survey ☒

SC/Biorecon (circle 1) ☒

Water sample ☒

RO: 2018-12-10-53

(This fits with paper margins and orientation.)

User Defined Space.
Location, directions, samplers, whatever...

100-2013-10-01-12
Date: 1/2/34

Field ID
STORET
1234567890123456

