



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / ☒ No

Location/STORET Station Name: West Sandy Creek

Date: 05/23/18
(mm/dd/yyyy)

WIN ID G3NW0053

WBID: 269

Latitude: 30.77757

County: Walton

RQ - 2018-0521-45

ORG ID: 21FLPNS

Longitude: -86.07091

(Decimal Degrees)

(Decimal Degrees)

Receiving Body of Water: Sandy Creek

Field ID: G3NW0053

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment								
S. Slade N. Mulkey										☒ Sample Container	☐ Van Dorn	☐ Pole						
										☐ Carboy	☒ Syringe							
										☐ Dipper	☐ Other							
Equipment ID										Collection Method								
										☒ Wading	☐ Canoe/Kayak							
										☐ From Shore	☐ Electric Motor							
										☐ Other	☐ Gasoline Motor							
Water Level: Dry / ☒ Low / Normal / Above Normal / Flooded										Meter ID# 113529			Matrix: ☒ Fresh Marine / DI					
Photos: Yes / ☒ No										Flow: No Flow / Intestinal / ☒ Flowing / NA			Tide: Rising / Falling / Slack / ☒ NA			Tide Times: High Low		
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTH)	Sp COND (µmhos/cm)	Temp. (C°)								
EST	1220	0.2	0.1	UOB	7.88	89.8	6.51	0.01	33	21.94								
CEN																		

Biological Samples Collected: None ☒ HA ☒ SCI ☒ RPS Algae ID LVS LVI Other:									
SBIO ID Numbers:		SBIO-ID:	HA-ID:	RPS-ID:	Macrophyte-ID:	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	215010	10/2/18	☐ <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				
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 Coll ☐ F Coll ☐ Enterococci				☒ Ice				
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD				☐ Ice				
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA				☐ Ice				
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R				☐ Ice ☐ Other				

Notes: A/Macro/SCI/RPS/LVS

Ref: Date: 07May18 SHIPPING: 0.00
Dep: Wgt: 15.00 LBS SPECIAL: 0.00
DV: 0.00 HANDLING: 0.00
TOTAL: 0.00

Field/WIN ID

Location:



G3NW0053



WEST SANDY CREEK

Signature: *[Signature]*

Date: 05/23/2018

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: FDEP NW ROC		STORET STATION NUMBER: G3NW0053	DATE (MM/DD/YY): 05/23/18	RECEIVING BODY OF WATER: Sandy Creek
REMARKS:	COUNTY: Walton	LOCATION: West Sandy Creek	FIELD ID/NAME: G3NW0053	

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 14	20 19 18 17 16	15 (14) 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 8	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 16	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 14 ----- Primary Score 52	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. (20) 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging or straightening 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	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. 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	Width of vegetation greater than 18 m (10) 9	Width of vegetation > 12 to 18 m 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	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

131

TOTAL SCORE

Date: 05/23/18	Analyst: Stophor Slade	Signature: <i>Stophor Slade</i>
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DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID 78415 ORG ID 21 FL PWS LATITUDE 30.77257
 COUNTY Walton STORET # G3NW0053 LONGITUDE -86.07088
 DATE 05/23/2018 TIME 1220 SAMPLING AGENCY FDEP-NWROC
 SITE NAME West Sandy Creek
 FIELD ID/NAME G3NW0053 RECEIVING BODY OF WATER Sandy Creek

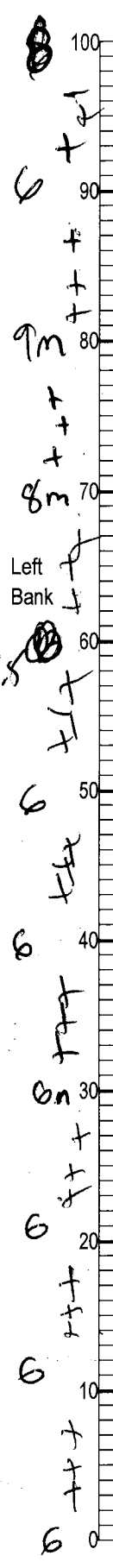
RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industry ☐ Other (Specify) ☐							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 60 m wide 0.25 m/s 0.25 m/s 0.25 m/s
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>7.8m</u> Right Bank: <u>>18m</u>				Hydrologic Modification Score (per FT 3101) ☐		0.3 m deep 0.2 m deep 0.2 m deep	
High Water Mark: <u>2.3</u> + <u>0.3</u> = <u>2.6</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			WATER QUALITY <table border="1"> <thead> <tr> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top: <u>0.1</u></td> <td><u>21.94</u></td> <td><u>6.51</u></td> <td><u>7.88</u></td> <td><u>89.8</u></td> <td><u>33</u></td> <td><u>0.01</u></td> <td><u>0.8</u></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>☒ VOB</td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top: <u>0.1</u>	<u>21.94</u>	<u>6.51</u>	<u>7.88</u>	<u>89.8</u>	<u>33</u>	<u>0.01</u>	<u>0.8</u>	Mid:							☒ VOB	Bottom:							
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Woody Debris (Snags) <u>615</u> <u>5</u> Undercut Banks / Roots <u>1.05</u> <u>5</u> Leaf Packs or Mat <u>0.5</u> <u>5</u> Aquatic Vegetation Rock or Shell Rubble.. Sand..... <u>69.3</u> <u>3</u> Mud / Muck / Silt Other <u>Gravel</u> <u>23</u> <u>2</u> Other			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: _____ Exp: _____			Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐																																		
			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐																																		
ABUNDANCE <table border="1"> <thead> <tr> <th></th> <th>Not Obs.</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton:</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fish:</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Aquatic Plants:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Iron/Sulfur Bacteria:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>				Not Obs.	Rare	Common	Abundant	Periphyton:	☐	☒	☐	☐	Fish:	☐	☐	☒	☐	Aquatic Plants:	☒	☐	☐	☐	Iron/Sulfur Bacteria:	☒	☐	☐	☐	System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐												
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AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																								
SAMPLING TEAM <u>S. Slack, N. Mulkey</u>				SIGNATURE: <u>[Signature]</u>		DATE: <u>5/23/2018</u>																																		

9000-4 Stream/River Map



5.5

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5

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9

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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: West Sandy Creek County: _____ Date: 8/23/18 Investigator: S. Wade N. Mulkey

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				
	5			85		5			90	
	6					6				
	7					7				
	8	N				8	N			
	9	N				9	N			
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5			90		5			95	
	6					6				
	7					7				
	8	N				8	N			
	9	N				9	N			
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4	N		40	
	5			70		5	3			
	6					6	3			
	7					7	N			
	8	N				8	N			
	9	N				9	N			
30	1	N			90	1	N			
	2					2				
	3					3				
	4					4				
	5			96		5			75	
	6					6				
	7					7				
	8	N				8	N			
	9	N				9	N			
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			96		5			85	
	6					6				
	7					7				
	8	N				8	N			
	9	N				9	N			
50	1	N				1	N			
	2					2				
	3					3				
	4					4				
	5			90		5				
	6					6				
	7					7				
	8	N				8	N			
	9	N				9	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%.

STORET Station Number:
63NW0053

Secchi depth 6.8
Estimated? Y

points ranked 4-6 0
total points assessed 90
% points ranked 4-6 0%

Check accompanying data collected at same site/date.
Algal mat sample _____
Linear Veg Survey ✓
Habitat Assessment ✓
SCI/Biorecon _____
Water sample ✓
RQ-²⁰¹⁸ 05-21-45

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