

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

SAMPLE ID 78500 ORG ID 21FLWQSP LATITUDE 30.1321
 COUNTY Wakulla STORET # 22020050 LONGITUDE -84.4944
 DATE 4/24/18 TIME 1310 SAMPLING AGENCY FDEP TLH
 SITE NAME Sopchoppy @ 363
 FIELD ID/NAME SopRef RECEIVING BODY OF WATER Ochlocknee Bay
RQ-2018-04-23-61

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>100</u> Silviculture <u>0</u> Field/Pasture <u>0</u> Agricultural <u>0</u> Residential <u>0</u> Commercial <u>0</u> Industry <u>0</u> Other (Specify) <u>0</u>								Landscape Development Intensity Index (LDI) <u>not calc.</u>	
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy						Typical Width (m) <u>6</u> Depth (m)/Velocity (m/sec) <u>0.2</u> m/s <u>0.2</u> m/s <u>0</u> 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>1-2</u>			
High Water Mark: <u>9</u> + <u>1</u> = <u>10</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											
% Coverage Woody Debris (Snags) <u>2</u> Undercut Banks / Roots <u>1</u> Leaf Packs or Mat <u><1</u> Aquatic Vegetation <u>NA</u> Rock or Shell Rubble <u>0.5</u> Sand <u>3</u> Mud / Muck / Silt <u>0</u> Other <u>0</u> Other <u>0</u>			INVERT # Times Sampled Woody Debris (Snags) <u>5</u> Undercut Banks / Roots <u>5</u> Leaf Packs or Mat <u>2</u> Aquatic Vegetation <u>0</u> Rock or Shell Rubble <u>5</u> Sand <u>3</u> Mud / Muck / Silt <u>0</u> Other <u>0</u> Other <u>0</u>			PERI # Times Sampled Woody Debris (Snags) <u>NA</u> Undercut Banks / Roots <u>NA</u> Leaf Packs or Mat <u>NA</u> Aquatic Vegetation <u>0</u> Rock or Shell Rubble <u>NA</u> Sand <u>NA</u> Mud / Muck / Silt <u>0</u> Other <u>0</u> Other <u>0</u>			Depth (M) Top: <u>19.8</u> Mid: <u>0</u> Bottom: <u>0</u> Meter ID: <u>1483</u>			Temp. (°C) <u>19.8</u> pH (SU) <u>4.56</u> D.O. (MG/L) <u>N/A</u> D.O. Sat (%) <u>N/A</u> Cond. (UMHO/CM) <u>415</u> Salinity (PPT) <u>0</u> SECCHI (M) <u>0</u> VOB <u>0</u> TOTAL DEPTH <u>0</u>		
ABUNDANCE Not Obs. 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>NX-1731010</u> Exp: <u>2/7/18</u>			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) <u>very tannic</u>		
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u>0</u> Exp: <u>0</u>			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐					
AMBIENT FIELD CONDITIONS / NOTES: Sunny, 70's, low wind Meter reading D.O. improperly L J qualify ☒ The antecedent hydrologic conditions have been met to my b			Contains: 1:1 H2SO4 Lot No.: SA7341020 Expires: 12/07/18 See Safety Data Sheet (SDS)			Contains: 1:1 H2SO4 Lot No.: SA7341020 Expires: 12/07/18 See Safety Data Sheet (SDS)			Contains: 1:1 H2SO4 Lot No.: SA7341020 Expires: 12/07/18 See Safety Data Sheet (SDS)					

SAMPLING TEAM: Jon Claypool, Todd Risk, Jessica Patronis, Lisa Homann SIGNATURE: Jon Claypool DATE: 4/25/18

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

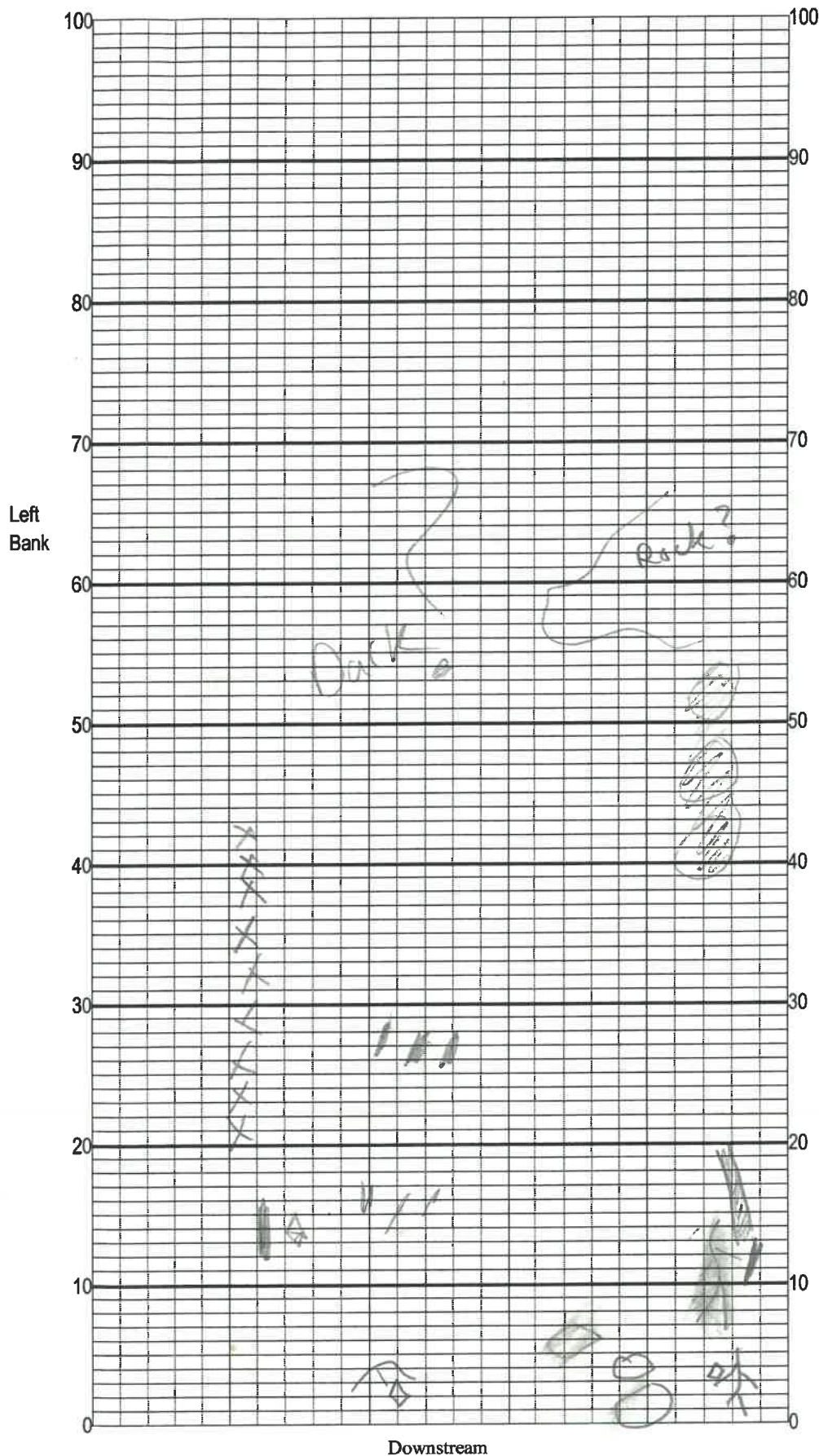
SAMPLING AGENCY: TLH DEP		STORET STATION NUMBER: 22020050	DATE (MM/DD/YY): 04/25/18	RECEIVING BODY OF WATER: Ochlockonee Bay
REMARKS:	COUNTY: Wakulla	LOCATION: Sapchoppy @ FR 363	FIELD ID/NAME: Sop Ref	

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>12</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>4</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>12</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>18</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae.	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae.	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth).	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation.
Primary Score <u>18</u> <u>46</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	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>20</u>	20 19 18 17 16	15 14 13 12 11	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>5</u> Left Bank <u>5</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>7</u> Left Bank <u>8</u>	10 9	8 7 6	5 4	3 2 1
Secondary Score <u>64</u>				

110 TOTAL SCORE

Date: 4/24/18	Analyst: Jen Claypool, Tod Risk, Lisa Homann, Jessica Patronis	Signature: <i>Jen Claypool</i>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



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

Location: Supchappy @ FR 363
Date: 4/24/2018
Sampler: J. Claypool

100 m: Latitude _____	
Longitude _____	
0 m: Latitude _____	
Longitude _____	
Substrates: Code key, draw proportionate habitat abundance. %	
☒ S	Snags _____
☒ S	Roots/undercut banks _____
☒ S	Leaf Packs (or mats) _____
☒ S	Aquatic Macrophytes _____
☒ S	<u>rock</u> _____
☐	_____
☐	Pools total # observed = _____ # range expected = _____
Average width <u>6</u> m	
Average depth <u>1</u> m	
Velocity measured at <u>50</u> meter mark.	
WQ & chemistry taken at _____ 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:
2m snag
6m
2m rock

RQ-2018-04-23-61

Request Number: ~~RQ-2018-04-08-59~~

Florida Department of Environmental Protection

Page 1 of 2

Reference Stream Sampling

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: **BSSP**

Requester: Sarah Panek

Field Report Prepared By: Jen Claypool

Project ID: **SCIREF**

Collected By: de Todd Risk

Sampling Agency: DEP

Location <u>Sopchoppy @ 363</u>		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <u>4/25/18</u> Time <u>1310</u>		☒ Eastern ☐ Central	Composite end Date _____ Time _____		Bottle Group(s) (See pg 2) <u>A+B</u>
Field ID		Matrix (type, e.g., Salt, Fresh, etc) <u>Fresh</u>		Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C) <u>19.8</u>	pH <u>4.56</u>	Sample Depth <u>.15</u>	☐ ft ☒ m	Sp. Conductance (umho/cm) <u>41.5</u>		
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) ☐ dd ☐ dms		Comments				
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____		☐ Eastern ☐ Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) ☐ dd ☐ dms		Comments				
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____		☐ Eastern ☐ Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) ☐ dd ☐ dms		Comments				
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____		☐ Eastern ☐ Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen ☐ mg/L ☐ % sat		Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt) ☐ dd ☐ dms		Comments				

Relinquished By: <u>Jen Claypool</u>	Date/Time <u>4/25/18 3:08 pm</u>	Shipping Method	Number of Coolers Shipped:	Received By: <u>JC</u>	Date/Time <u>4/25/18 3:08</u>
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Group: A	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab _____
	ALKALINITY TURBIDITY W-BR-IC W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS					
Group: A	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab _____
	CHLSUITE-W					
Group: A	Bottle Type:	P-250ML-WO-THI	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab _____
	ECOLI-18QT					
Group: A	Bottle Type:	QPCR-P-250ML	# of Bottles: 4	Preservative:	ICE	Enter Number of Bottles Sent to Lab _____
	PCR-BACR PCR-GFD PCR-HF183					
Group: A	Bottle Type:	BG-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab _____
	W-E8321-DI W-E8321-MS					
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	HNO3	Enter Number of Bottles Sent to Lab _____
	W-ICP					
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab _____
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC					
Group: B	Bottle Type:	PJ-2L	# of Bottles: 4	Preservative:	Formalin	Enter Number of Bottles Sent to Lab _____
	MI-FW-QLDC					