



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?
Yes / ☒ No

Location/STORET Station Name: Choctawhatchee River South of Carlisle Lake

Date: 07/14/18
(mm/dd/yyyy)

WIN ID G3NW0130

WBID: 49E

Latitude: 30.613300

County: Walton

RQ - 2018-06-18-21

ORG ID: 21FLPNS

Longitude: -85.907440

(Decimal Degrees)

(Decimal Degrees)

Receiving Body of Water: Choctawhatchee Bay Field ID: G3NW0130

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 / <u>Above Normal</u> / Flooded				Meter ID# 132237				Matrix: <u>Fresh</u> / Marine / DI				
Photos: ☒ Yes / ☐ No				Flow: No Flow / Intestinal / <u>Flowing</u> / NA				Tide: Rising / Falling / Slack / <u>NA</u>				
Tide Times: High Low												
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)		
EST			3.7	0.5	6.43	81.6	6.81	0.04	81	27.61		
<u>CEN</u>	1:55	4.2	0.3		6.43	81.5	6.81	0.04	81	27.60		
Biological Samples Collected: None <u>HA</u> <u>SCI</u> <u>RPS</u> 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	8085120	3/26/19	☒ <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-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-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:

Field/WIN ID



G3NW0130

Location:

Choctawhatchee River South of Carlisle Lake

Signature: *[Signature]*

Date: 7/11/18

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:

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

SAMPLE ID	ORG ID <u>21FLPKS</u>	LATITUDE <u>30.61251</u>
COUNTY <u>Walton</u>	STORET # <u>63NW0130</u>	LONGITUDE <u>85.90265</u>
DATE <u>7/11/18</u>	TIME <u>1:55</u>	SAMPLING AGENCY <u>FWEP NWROC</u>
SITE NAME <u>Chactawhatchee River South of Carlisle Lake</u>		
FIELD ID/NAME <u>63NW0130</u>		RECEIVING BODY OF WATER <u>Chactawhatchee Bay</u>

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 55 m wide
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: >18 Right Bank: >18		Hydrologic Modification Score (per FT 3101)
High Water Mark: 1 + 4.2 = 5.2 (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	INVERT PERI % # Times # Times Coverage Sampled Sampled
Woody Debris (Snags)	
Undercut Banks / Roots	
Leaf Packs or Mat	
Aquatic Vegetation	
Rock or Shell Rubble..	
Sand.....	
Mud / Muck / Silt	
Other	
Other	

WATER QUALITY

Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top: 0.3	27.60	6.81	6.43	81.5	81	0.04	0.5
Mid:							
Bottom: 3.7	27.61	6.81	6.43	81.6	81	0.04	4.2
Meter ID: 132237							TOTAL DEPTH

Water Odors Normal ☒ Petroleum ☐	Water Surface Oils Normal ☒ Sheen ☐
Sewage ☐ Chemical ☐ Other ☐	Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No	Color Tannic ☐ Green (Algae) ☐
Sample Preserved? ☒ Yes ☐ No	Clear ☒ Other (Specify) ☐
Lot Number: 7275010	Exp: 10/12/18

Algae Sample Taken? ☐ Yes ☒ No	Clarity Clear ☐ Slightly Turbid ☐
Sample Preserved? ☐ Yes ☐ No	Turbid ☒ Opaque ☐
Lot Number:	Exp:

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.	Large River System sampled right bank only
--	--

SAMPLING TEAM

Signature: [Signature]	DATE: 7/11/18
--	---

Stream/River Habitat Sketch Sheet, Form FD 9000-4 (June 1, 2001)

Length of grid represents 100 m of stream (not linear meters).

(Horizontal scale is double vertical scale, draw proportionately).

100	BF				Snag 2.0	
	%S				Root	
	Vg				LP	
90	BF				Plant	
	%S				OTR	
	Vg				Snag 3.0	
	BF				Root 2.0	
	%S				LP	
	Vg				Plant	
80	BF				OTR	
	%S				Snag 3.0	
	Vg				Root 1.0	
70	BF				LP	
	%S				Plant	
	Vg				OTR	
60	BF				Snag 4.0	
	%S				Root 2.0	
	Vg				LP	
50	BF				Plant	
	%S				OTR	
	Vg				Snag .5	
40	BF				Root .5	
	%S				LP	
	Vg				Plant	
30	BF				OTR	
	%S				Snag 3.5	
	Vg				Root .5	
20	BF				LP .4	
	%S				Plant	
	Vg				OTR	
10	BF				Snag 5	
	%S				Root	
	Vg				LP	
					Plant	
					OTR	

Left Bank

Downstream

1.0d

STORET: G3NW0130

Location: Choctawhatchee R.
S of Carlisle Lake

Project: SMP

Sampled By:

Substrates: Code key, draw proportionate habitat abundance.



Snags

12 0.6



Roots/undercut banks

7 0.25



Leaf Packs (or mats)



Macrophytes

0.85%

Velocity:

Note where velocity measures were taken: 50 m

Habitat Smothering:

Note areas (on map) where sand or silt is something 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.

Date: 7/11/18

Average width 28 m

Average depth 4 m

WQ & chemistry taken @ 50 m

0 m Latt. 30.6/251

0 m Long. 85.90/265

100 m Latt. 30.6/36

100 m Long. 85.90/30

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

SAMPLING AGENCY: FDEP NW/ROC		STORET STATION NUMBER: 63NW0130	DATE (MM/DD/YY): 07/16/18	RECEIVING BODY OF WATER: Choct. Bay
REMARKS: Large River System	COUNTY: Walton	LOCATION: Choctawhatchee River	FIELD ID/NAME: 63NW0130	

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 7	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability 5	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 20	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 5 ----- Primary Score 37	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 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 20	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank 10 Left Bank 10	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 10 Left Bank 10 ----- Secondary Score 80	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

TOTAL SCORE

SB10 ID 78625

HA ID 15291

Date: 7/11/18	Analyst: Nathan Mulky	Signature: Nathan Mulky
----------------------	------------------------------	--------------------------------

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Chocomauchee River County: Walton Date: 7/10/18 Investigators: Nathan M. Miller

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

STORET Station Number: 631W0130

Secchi depth 5
Estimated? 7

points ranked 4-6 9
total points assessed 99
% points ranked 4-6 9

Check accompanying data collected at same site/date:
Algal mat sample ☐
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☒
Water sample ☒
RQ 2018-06-18-21

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

SB10 ID 78628
RPS ID 9062

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%.

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

Waterbody: Choctawhatchee R.	Date: 7/11/18	County: Washington	Storet Number: F3140132
------------------------------	---------------	--------------------	-------------------------

Analyst: <u>Nathan Mulkey</u>	Signature: _____
-------------------------------	------------------

Comments: no veg

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]