



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / ☒ No

Location/STORET Station Name: Turkey Creek upstream of Eglin Road 232

Date: 06/06/2018
(mm/dd/yyyy)

WIN ID G3NW0093

WBID: 495

Latitude: 30.56202

County: Okaloosa

RQ: 2018-05-28-23

ORG ID: 21FLPNS

Longitude: -86.53627

(Decimal Degrees)

(Decimal Degrees)

Receiving Body of Water: Boggy Bayou

Field ID: G3NW0093

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
N. Mulkey F. Barber S. P. H. S.				/	/	/	/	/	☒ 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# 132237				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	11:30	0.8	0.3	1.5	8.46	95.6	5.03	0.01	15	21.43			
CEN			0.8	S									

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	5A7275410	12/02/18	☒ <2					
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2					
Filtered Nutrients	☐ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	16570048							
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: Insufficient veg, NO LVS.
RQ 2018-05-28-23

Field/WIN ID

G3NW0093

Location:

Turkey Creek upstream of Eglin Road 232

Signature: Frank Barber

Date: 06/06/2018

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 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID 78424 ORG ID 21 FCPNS LATITUDE 30.56202
 COUNTY Okfuska STORET # 63NW0093 LONGITUDE -86.53627
 DATE 04/06/2018 TIME 10:20 → 12:00 CTZ SAMPLING AGENCY FL DEP - ALUROC
 SITE NAME Turkey Creek upstream of Eglin Rd 232
 FIELD ID/NAME 63NW0093 RECEIVING BODY OF WATER Boggy Bayou

RIPARIAN ZONE / STREAM FEATURES

RQ-2018-05-28-23

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 <u>20</u> <u>8</u> m wide
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>718</u> Right Bank: <u>718</u>				Hydrologic Modification Score (per FT 3101) <u>1-2</u>		☐ m/s <u>1.5</u> m/s ☐ m/s	
High Water Mark: <u>0.5</u> + <u>71.5</u> = <u>72.0</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No		☐ m deep <u>0.9</u> m deep ☐ 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 ☐	
SUBSTRATE TYPE Assessment Tool: ☒ SCI ☒ RPS ☐ LVS ☐ LCI ☐ BioRecon % Coverage ☐ INVERT ☐ PERI # Times Sampled # Times Sampled			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>21.43</u> <u>5.43</u> <u>8.46</u> <u>95.6</u> <u>0.01</u> <u>15</u> <u>0.8</u> Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☒ VOB Bottom: <u>0.8</u> ☐ ☐ ☐ ☐ ☐ ☐ ☐ TOTAL DEPTH Meter ID: <u>132237</u>		
Woody Debris (Snags) <u>12.4</u> <u>4</u> Undercut Banks / Roots <u>4.1</u> <u>4</u> Leaf Packs, or Mat <u>0.3</u> <u>4</u> Aquatic Vegetation <u>0.2</u> <u>3</u> Rock or Shell Rubble.. ☐ ☐ Sand..... <u>83.4</u> <u>1</u> 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: _____		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☐ ☒ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☒ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐		
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐			AMBIENT FIELD CONDITIONS / NOTES: <u>Trees cleared @ 90m near @ stream margins</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.		

SAMPLING TEAM

Nathan Muller, F. Burton, Jimmy P. H.S.

SIGNATURE:

[Signature]

DATE:

06/06/2018

-86.53698

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

SAMPLING AGENCY: FL DEP- NWROC (21FLPNS)		STORET STATION NUMBER: G3NW0093	DATE (MM/DD/YY): 06/06/18	RECEIVING BODY OF WATER: Bugger Bayou
REMARKS: SB10 ID 78424	COUNTY: Okaloosa	LOCATION: Turkey Pk up 531' rd 232	FIELD ID/NAME: G3NW0093	

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 12	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 0.5 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 18 ----- Primary Score 64	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 20	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 woody 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 woody root zone with raw, eroded areas.
Right Bank 10 Left Bank 10	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 18 m	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 10 Left Bank 10	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 10 Left Bank 10 ----- Secondary Score 78	10 9	8 7 6	5 4	3 2 1

144 142 TOTAL SCORE 144/160 = 90% HA ID 15178

Date: 06/06/2018	Analyst: F. Butera	Signature: 
-------------------------	---------------------------	--

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Turkey Creek E.R. 232 County: Ole County Date: 6/6/2018 Investigators: F. Butler

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	2		60	1	N	2		
	2					2				
	3					3				
	4					4				
	5			93		5			96	
	6					6				
	7					7				
	8					8				
	9	N	2			9	N	2		
10	1	N	2		70	1	N	2		
	2	N	2			2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9	N	2			9	N	2		
20	1	N	2		80	1	N	2		
	2					2				
	3					3				
	4					4				
	5			96		5			96	
	6					6				
	7					7				
	8					8				
	9	N	2			9	N	2		
30	1	N	2		90	1	N	2		
	2					2				
	3					3				
	4					4				
	5			96		5			90	
	6					6				
	7					7				
	8					8				
	9	N	2			9	N	2		
40	1	N	2		100	1	N	2		
	2					2				
	3					3				
	4					4				
	5			96		5			12	
	6					6				
	7					7				
	8					8				
	9	N	2			9	N	2		
50	1	N	2		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			96						
	6									
	7									
	8									
	9	N	2							

STORET Station Number: G3NW0093

Secchi depth 1.6
 Estimated? Y

points ranked 4-6 0
 total points assessed 99
 % 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- 2018-05-28-23

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

RP: SB10 ID: 78424
 RPS: 9027

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

Waterbody: <u>Turkey Creek E.R. 232</u>	Date: <u>4/6/18</u>	County: <u>Okfuskee</u>	Storet Number: <u>63N0009</u>
---	---------------------	-------------------------	-------------------------------

Analyst: F. Budra Signature: [Signature]

Comments: Insufficient resolution ($< 2m^2$), no LOS conducted

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m² 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]