



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

October 2017

Qualified Data

Yes

Location/STORET Station Name: Rocky Comfort Creek

Date: 1/10/2018

STORET # G1TLHR0086

WBID: 1304

Latitude: 30.492735

County: Gadsden RQ - 2018-01-01-24

ORG ID: 21FLTLHR

Longitude: 84.613758

Receiving Body of Water: Lake Talquin

Field ID: G1TLHR0086

Sampling Team Members

San Woods
Jessie Tolbert

Sampling Equipment

☒ 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# 118157

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	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1400	0.15	0.3	9.57	94.5	6.74	003	0.3	63	14.87
CEN								S		

Biological Samples Collected:

None

HA

SCI

RPS

Algae ID

LVS

LVI

Other

SBIO ID Numbers:

SBIO-ID: 78176

HA-ID: 14973

RPS-ID: 8884

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

7875010

10/2/18

☒ <2

Metals

☐ W-ICPMS ☐ W-ICP

☐ Ice ☐ HNO3

☐ <2

Filtered Nutrients

☒ W-P04-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-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R

☐ Ice
☐ Other

Notes:

Secchi visible on bottom

Field/WIN ID

Location

G1TLHR0086

ROCKY COMFORT CREEK

Signature:

Date:

1/10/18

Field Parameters Entered into LIMS:

Field Parameters QC in LIMS:

Date Migrated to STORET:

Field Sheets Scanned/Saved:

(Initials/Date)

(Initials/Date)

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

SAMPLE ID _____ ORG ID 21FLTLHR LATITUDE _____
 COUNTY Caddo STORET # G1TLHR0086 LONGITUDE _____
 DATE 1/10/16 TIME 1400 SAMPLING AGENCY 4034
 SITE NAME Rocky Creek
 FIELD ID/NAME G1TLHR0086 RECEIVING BODY OF WATER Lake Talquin

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>50</u> Silviculture <u>40</u> Field/Pasture <u>10</u> Agricultural <u>10</u> Residential <u>10</u> Commercial <u>10</u> Industry <u>10</u> Other (Specify) <u>10</u>							Landscape Development Intensity Index (LDI) <u>10</u>
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>10</u> m wide <u>0.33</u> m/s <u>0.33</u> m/s <u>0.33</u> m/s			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>716</u> Right Bank: <u>716</u>				Hydrologic Modification Score (per FT 3101) <u>10</u>			
High Water Mark: <u>0.2</u> + <u>0.3</u> = <u>0.5</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 Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.15</u> <u>14.67</u> <u>6.74</u> <u>9.57</u> <u>94.5</u> <u>63</u> <u>0.03</u> <u>0.3</u> Mid: <u>0.45</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> Bottom: <u>0.675</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u> Meter ID: <u>118157</u>		
Woody Debris (Snags) <u>0.975</u> <u>5</u> <u>5</u> Undercut Banks / Roots <u>0.45</u> <u>5</u> <u>5</u> Leaf Packs or Mat <u>0.675</u> <u>5</u> <u>5</u> Aquatic Vegetation <u>0.075</u> <u>1</u> <u>1</u> Rock or Shell Rubble.. <u>97.625</u> <u>4</u> <u>4</u> Sand..... <u>0.075</u> <u>1</u> <u>1</u> Mud / Muck / Silt <u>0.075</u> <u>1</u> <u>1</u> Other <u>0.075</u> <u>1</u> <u>1</u> Other <u>0.075</u> <u>1</u> <u>1</u>			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>7875010</u> Exp: <u>10/2/16</u> 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>Entered S6102: JTL 1-22-16</u> <u>SCI @ 1410</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.		

SAMPLING TEAM Woods / Tolbert **SIGNATURE:** JTL **DATE:** 1/10/16

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

SAMPLING AGENCY: <u>8034</u>		STORET STATION NUMBER: <u>GITLHAR0086</u>	DATE (MM/DD/YY): <u>1/16/2018</u>	RECEIVING BODY OF WATER: <u>Lake Talquin</u>
REMARKS:	COUNTY: <u>Gadsden</u>	LOCATION: <u>61 Rocky Comfort creek</u>	FIELD ID/NAME: <u>GITLHAR0086</u>	

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>2</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>20</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>20</u> Primary Score <u>54</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 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>9</u> Left Bank <u>9</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>10</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>10</u> Left Bank <u>10</u> Secondary Score <u>76</u>	10 9	8 7 6	5 4	3 2 1

132

TOTAL SCORE

Date: <u>1/10/18</u>	Analyst: <u>Woods</u>	Signature: <u>[Signature]</u>
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entered SB102 JTH 1-22-18

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>GITLHR0096</u>	County: <u>Gadsden</u>	Date: <u>1/10/16</u>	Investigators: <u>Woods/Tolbert</u>
STORET Station Number: <u>GITLHR0096</u>			

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	N	96	60	1	N	N	96
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
10	1	N	N	96	70	1	N	N	94
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
20	1	N	N	96	80	1	N	N	90
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
30	1	N	N	96	90	1	N	N	92
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
40	1	N	N	92	100	1	N	N	96
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
50	1	N	N	96		1	N	N	
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								

Secchi depth	<u>0.3</u>
Estimated?	<u>N</u>

# points ranked 4-6	
total points assessed	
% points ranked 4-6	

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	<u>X</u>
Habitat Assessment	<u>X</u>
SCI/Biorecon	<u>X</u>
Water sample	<u>X</u>
RQ: <u>2016-01-01-24</u>	

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

Entered SB102: GT III 1-22-18

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: GITHR0086	Date: 1/10/16	County: Gradsden	Storet Number: GITHR0086

Waterbody: GITHR0036	Date: 1/10/16	County: Gradsen	Storet Number: GITHR004
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Analyst: Woods Signature: [Signature]

Comments: $\leq 2m^2$ entered SB102; BT711-22-18

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]

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

Left Bank

Downstream

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

0.25 S Location: GILTHROO46
0.25 L Date: 1/10/18
Sampler: Woods

100 m: Latitude _____
Longitude _____
0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

<u>S</u>	Snags	<u>0.975</u>
<u>R</u>	Roots/undercut banks	<u>0.45</u>
<u>L</u>	Leaf Packs (or mats)	<u>0.075</u>
<u>A</u>	Aquatic Macrophytes	<u>0.675</u>
<u>K</u>	<u>Rock</u>	<u>0.075</u>
<u></u>	<u>Sand</u>	<u>97.625</u>
<u></u>	Pools	total # observed = _____ # range expected = _____

Average width 10 m
Average depth 0.3 m

Velocity measured at 100 meter mark.

WQ & chemistry taken at 100 meter mark. 0.33

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:

9.75 S
6.75 L
4.5 R
0.75 K

Sampling Agency:

Relinquished By: Woods	Date/Time 1/10/18	Shipping Method HD	Number of Coolers Shipped: 1	Received By:	Date/Time
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CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there is qualified data on this page.

Meter ID: YSI 6420 118157

RQ:

Project: SMP 2018

Notes: (1) Always wait for meter to stabilize before recording any readings.

(2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).

(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Circle/Fill In: Lab Calibration or Calibration/Verification on Site

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 11/17

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Jessie Tolbert	1-10-18	8:28	17.5	9.57	9.57	100	N/A	1.02	<u>P</u> /F	<u>L</u> /F
ICV		↓	8:29	21.3	8.86	8.84	100	N/A	1.02	<u>P</u> /F	<u>L</u> /F
CCV	Sam Woods	↓	1421	19.8	9.129	9.23	100	N/A	1.02	<u>P</u> /F	<u>L</u> /F
CCV										P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Optical: DO gain range 0.85 to 1.15; DO charge N/A.

Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Jessie Tolbert	1-10-18	8:30	171121D	12/2018	1000	1000	<u>P</u> /F	<u>L</u> /F
ICV		↓	831	2710781	9/2019	100	98	<u>P</u> /F	<u>L</u> /F
CCV	Sam Woods	↓	1422	171031B	11/18	1000	990	<u>P</u> /F	<u>L</u> /F
CCV	11	11	1423	2710781	9/19	100	103	<u>P</u> /F	<u>L</u> /F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Jessie Tolbert	1-10-2018	835	171121A	6/2019	7.0	7.0	-49	<u>P</u> /F	<u>L</u> /F
Calibr.		↓	836	171121C	12/2018	4.0	4.0	119	<u>P</u> /F	<u>L</u> /F
Calibr.		↓	838	171121B	6/2019	10.0	10.0	-222	<u>P</u> /F	<u>L</u> /F
ICV		↓	839	171121B	6/2019	10.0	10.0	-223	<u>P</u> /F	<u>L</u> /F
CCV	Sam Woods	↓	1425	1709260	10/18	4.0	4.1	111	<u>P</u> /F	<u>L</u> /F
CCV									P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ;

mV pH 4 Range $+180 \pm 50$;

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 173, slope from 4 to 7 168 (both must be between 165 and 180 mV)

Is meter equipped with depth sensor? Yes / No If yes, list date of last quarterly depth verification N/A

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value meters	Pass / Fail	Lab / Field
Pressure mode in air						P/F	L/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS: