CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

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

Meter ID: 15477 **RQ-** 2019-02-FB-31 **Project:** G2 SMP 1906

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.

Temperature (Quarterly) FT 1400 Date of Last Temperature Verification 04/19

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Barometer mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Ben Harden	06/13/19	0755	20.0	756.1	9.0	9.10	99.5		0.9876	P / F	L / F
ICV	"	"	0756	19.5	756.1	9.10	9.13	99.3			P / F	L / F
CCV	"	"	0607	24.2	757.0	8.4	8.38	99.8			P / F	L / 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 (Pro DSS 0.75 to 1.50); 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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Ben Harden	06/13/19	0757	180621C	07/19	1000	1000	P / F	L / F
ICV	"	"	0758	2808884	07/20	100	100.9	P / F	L / F
CCV	"	"	1606	180621C	07/19	1000	1001	P / F	L / F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 5%

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Ben Harden	06/13/19	0802	180621E	01/20	7.03	18.6	7.03	-12.4	P / F	L / F
Calibr.	"	"	0803	190405B	10/20	4.00	18.4	4.00	162.9	P / F	L / F
Calibr.	"	"	0805	180621F	01/20	10.08	18.3	10.08	-176.9	P / F	L / F
ICV	"	"	0806	"	"	10.08	18.5	10.07	-176.9	P / F	L / F
CCV	"	"	1609	190405B	10/20	4.00	20.0	3.98	165.7	P / F	L / F
CCV										P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50; mV pH 4 Range +180 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 ~~165.3~~ 164.3 slope from 4 to 7 165.3 (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)
If **YES**, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 04/19
If **NO**, what will be used? (circle one) **Secchi Disk Line / Sonar** Unique ID: _____; Date of last verification: _____

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	Ben Harden	06/13/19	0751	0.272	0.271	P / F	L / F

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

COMMENTS:

Form effective August 1, 2018

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified? Yes / No

WIN Station Name: Brothers River **Date:** 6/13/2019 (mm/dd/yyyy)

WIN/ Field ID: G2TLHR0024 **WBID:** 375I **Latitude:** 29.94442 (Decimal Degrees)

County: Gulf **ORG ID:** 21FLTLHR **Longitude:** 85.04166 (Decimal Degrees)

Receiving Body of Water: Apalachicola River **RQ-** 2019-02-185-31

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Jon Woods	X		X		
Ben Harden		X		X	X

Sampling Equipment

- [x] Sample Container
- [ ] Van Dorn
- [ ] Pole
- [ ] Carboy
- [x] Syringe
- [ ] Dipper
- [ ] Other
- Depth Measured with YSI
- Equipment ID 154177

Collection Method

- [ ] Wading
- [ ] Canoe/Kayak
- [ ] From Shore
- [ ] Electric Motor
- [ ] Other
- [x] Gasoline Motor

Water Level: Dry/ Pooled/ Low / Normal / (High) / Flooded **Meter ID#** 154177 **Matrix:** (Fresh) / Marine / DI

Photos: (Yes) / No **Flow:** No Flow / Intestital / (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)	1050	8.0	0.3	0.3	6.27	80.4	7.54	0.06	126	28.2
CEN	1054		7.5		6.21	79.6	7.44	0.06	126	28.2

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	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[x] Ice [x] H_2SO_4	7163030	10/30/19	[x] <2
Metals	[x] W-ICPMS [ ] W-ICP	[x] Ice [x] HNO_3	9099030	4/9/20	[x] <2
Filtered Nutrients	[x] W-PO4-F [ ] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
Physical/Aggregate (Fresh)	[x] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[x] Ice			
Physical/Aggregate (Marine)	[ ] Alkalinity / W-BR-IC / 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-BacR [ ] PCR-GULL2 [ ] PCR-HF183 [ ] PCR-DG3 [ ] PCR-GFD	[ ] Ice			
Tracers	[ ] W-E8321-DI [ ] W-E8321-MS	[ ] Ice			
Pesticides	[x] W-PSNP-TQ [ ] W-CT-CL-R [x] W-E8321-DI [ ] W-PCL-SQ-R [x] WE8321-MS [ ] W-CARB-AA	[x] Ice			
Phytoplankton	[ ] DTY-QN-C [ ] PKD-QN-C	[ ] Ice			

Place Preservative Sticker(s) Here (If Available)

Notes:

Place Label Here

Signature: JWoods **Date:** 6/13/19

LIMS EVENT ID: **WIN Import ID:**

Enter Field Parameters, Verify Station ID In LIMS DMT: (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** (Initials/Date)

Scan/Save Field Sheets CG 6-14-19 (Initials/Date) **Migrate Data to WIN:** (Initials/Date) **Verify Data In WIN:** (Initials/Date)

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

SAMPLE ID _____ ORG ID 8034 LATITUDE _____
COUNTY _____ STORET # _____ LONGITUDE _____
DATE 6/13/19 TIME 1050 SAMPLING AGENCY _____
SITE NAME Brothers River
FIELD ID/NAME 62TLAR0024 RECEIVING BODY OF WATER Apalachicola River

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)
60	20		15	5			

Landscape Development Intensity Index (LDI): _____

Local Watershed Erosion (select one): [X] None [ ] Slight [ ] Moderate [ ] Heavy

Local Watershed NPS Pollution: [X] No evidence [ ] Slight [ ] Moderate [ ] Heavy

Width of Riparian Vegetation (m) on Each Buffer Side
Left Bank: >18 Right Bank: >18

Hydrologic Modification Score (per FT 3101): _____

Typical Width (m) Depth (m)/Velocity (m/sec) Transect
20 m wide

0.33 m/s	0.33 m/s	0.25 m/s
1.0 m deep	8.0 m deep	2.0 m deep

High Water Mark: 0.3 (m) + 8.0 (above present water level) = 8.3 (present depth) (above bed)

Artificially Impounded [ ] Yes [X] No

Artificially Channelized: [X] No [ ] Some recovery [ ] Mostly recovered, more sinuous [ ] Recent, severe

Canopy Cover % [ ] Open [X] Lightly Shaded (11-45%) [ ] Heavily Shaded [ ] Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils [X] Absent [ ] Slight [ ] Moderate [ ] Profuse

Sediment Odors [X] Normal [ ] Sewage [ ] Petroleum [ ] Chemical [ ] Anaerobic [ ] Other (Specify):

Smothering of Substrates

	None	Slight	Moderate	Severe
Sand Smothering:	[X]	[ ]	[ ]	[ ]
Silt Smothering:	[ ]	[X]	[ ]	[ ]
Algae Smothering:	[X]	[ ]	[ ]	[ ]

SUBSTRATE TYPE

Assessment Tool: [X] SCI [X] RPS [X] LVS [ ] LCI [ ] BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	0.75	6	
Undercut Banks / Roots	0.013	1	
Leaf Packs or Mat			
Aquatic Vegetation	0.4	7	
Rock or Shell Rubble..			
Sand.....			
Mud / Muck / Silt			
Other	98.84	6	
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top:	0.3	28.2	7.54	6.77	80.4	128	0.06
Mid:							
Bottom	7.5	26.2	7.44	6.21	79.6	128	0.06

SECCHI (M): 0.3 [ ] VOB

TOTAL DEPTH: 8.0

Meter ID: 154177

Water Odors Normal [X] Petroleum [ ] Sewage [ ] Chemical [ ] Other [ ]

Water Surface Oils Normal [X] Sheen [ ] Globs [ ] Slick [ ] Other [ ]

Water Sample Taken? [X] Yes [ ] No
Sample Preserved? [X] Yes [ ] No
Lot Number: 763030 Exp: 10/30/19

Color Tannic [X] Green (Algae) [ ] Clear [ ] Other (Specify) [ ]

Algae Sample Taken? [ ] Yes [X] No
Sample Preserved? [ ] Yes [ ] No
Lot Number: _____ Exp: _____

Clarity Clear [ ] Slightly Turbid [ ] Turbid [X] Opaque [ ]

ABUNDANCE

	Not Obs.	Rare	Common	Abundant
Periphyton:	[ ]	[X]	[ ]	[ ]
Fish:	[ ]	[ ]	[X]	[ ]
Aquatic Plants:	[ ]	[ ]	[X]	[ ]
Iron/Sulfur Bacteria:	[X]	[ ]	[ ]	[ ]

System Type: Stream [ ] Lake [ ] Wetland [ ] Estuary [ ] Other(Specify) [X] River

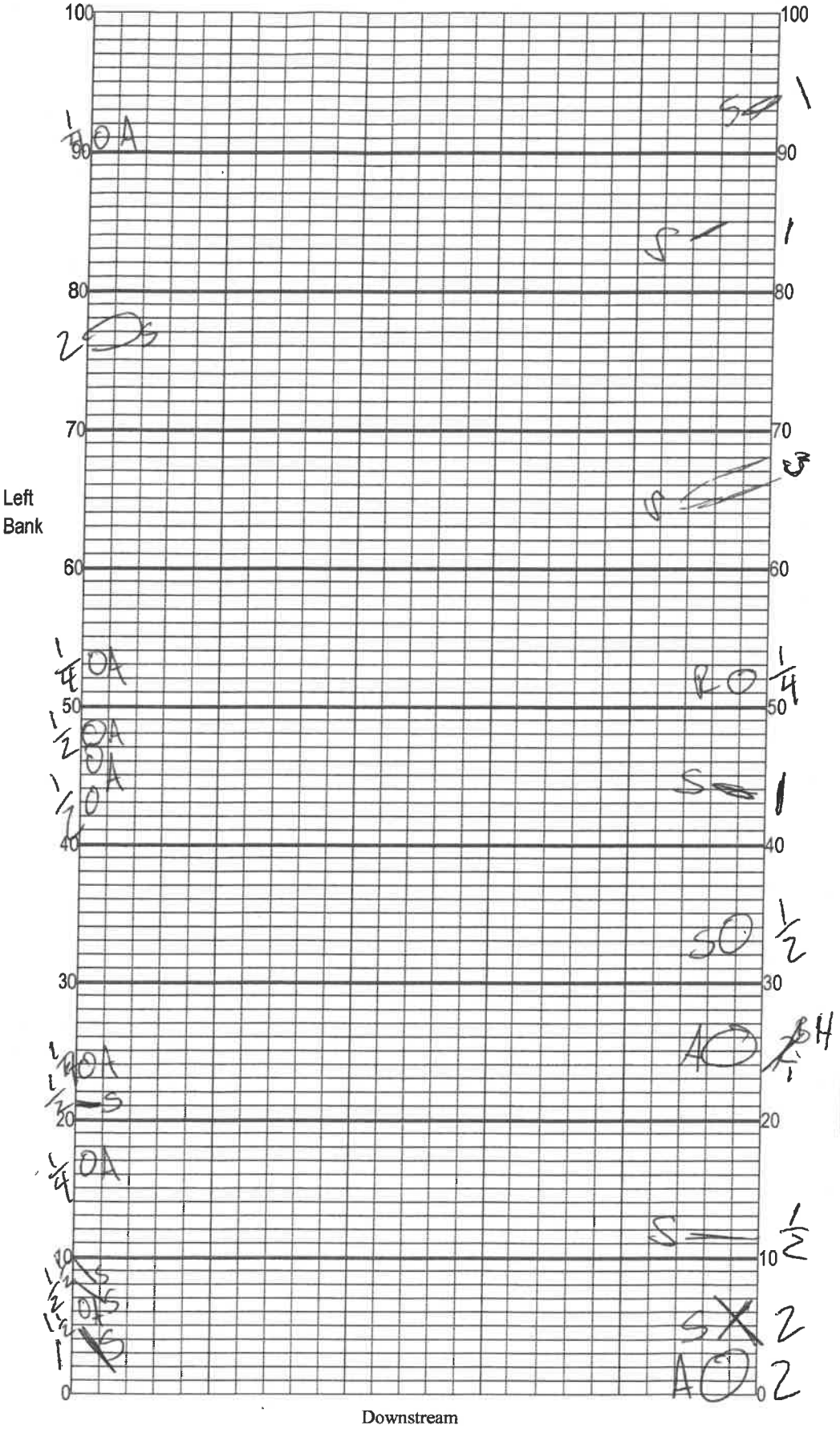
AMBIENT FIELD CONDITIONS / NOTES:

[X] The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM Woods / Harden

SIGNATURE: _____ DATE: _____

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: Brothers River

Date: 6/13/19

Sampler: Jon Woods / Ben Harden

100 m: Latitude		
Longitude		
0 m: Latitude		
Longitude		

Substrates: Code key, draw proportionate habitat abundance. %

S	Snags	0.75
R	Roots/undercut banks	0.013
L	Leaf Packs (or mats)	
A	Aquatic Macrophytes	0.21
K	ROCK	
	Pools	total # observed = ____ # range expected = ____

Average width 20 m

Average depth 8 m

Velocity measured at 0 meter mark.

WQ & chemistry taken at 0 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:

0.33 m/s

15 S

8 A

0.25 R

62-160.800, F.A.C

Revision Date: January 2017

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

Waterbody: Brothers River	Date: 06/13/19	County:	Storet Number:
Analyst: Woods		Signature: JWoods	

Comments:

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m^2 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.

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Alternanthera philoxeroides											
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Ceratophyllum demersum											
Chara											
Cicuta maculata											
Cladium jamaicense											
Colocasia esculenta											
Commelina diffusa											
Commelina virginica											
Crinum americanum	P	P	P	D				D	P	D	
Diodia virginiana											
Eichhornia crassipes	D	D	D	P	D	D	D	P	D	P	
Eleocharis (wispy viviparous)											
Hydrilla verticillata											
Hydrocotle											
Hygrophila polysperma											
Hymenocallis											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna											
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with "X"											
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage											
>5 and ≤10% Macrophyte Coverage											
>10 and ≤25% Macrophyte Coverage											
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Micranthemum glomeratum											
Micranthemum umbrosum											
Myriophyllum aquaticum											
Najas guadelupensis											
Nuphar luteum											
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum											
Pontedaria cordata											
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Sparganium americanum											
Typha											
Vallisneria americana											
Zizania aquatica											

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Brothers River	County:	Date: 06/13/19	Investigators:

STORET Station Number:

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	8
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
10	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	12
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
20	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	0
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
30	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	16
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
40	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	88
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
50	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	92
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
60	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	80
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
70	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	28
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
80	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	12
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
90	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	4
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	
100	1	N	✓	
	2	↓	↓	
	3	↓	↓	
	4	↓	↓	
	5	↓	↓	0
	6	↓	↓	
	7	↓	↓	
	8	↓	↓	
	9	↓	↓	

Secchi depth	0.3
Estimated?	

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

Check accompanying data collected at same site/date.	
Algal mat sample	✓
Linear Veg Survey	✓
Habitat Assessment	✓
SCI/Biorecon	✓
Water sample	✓
RQ-299-02-18-31	

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

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 9000-5 Stream/River Habitat Assessment Field Sheet

SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
8034		62TLHR0024	6/13/19	Apalachicola River
REMARKS:	COUNTY:	LOCATION: Brothers River		FIELD ID/NAME:

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 8	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability 1	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 14 Primary Score 43	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 **Artificial Channelization** 20	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 Right Bank 10 Left Bank 10	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful 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 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 8 Left Bank 8 Secondary Score 76	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

119 **TOTAL SCORE**

Date: 6/13/19	Analyst: Woods	Signature: JHWoods

Request Number: RQ-2019-02-18-31

SCI Kits

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: TLH-ROC

Project ID: SMP

Requester: Michael Eckles

Collected By: Woods / Harden

Field Report Prepared By: Jon Woods

Sampling Agency: 8034

Field/WIN ID → G2TLHR0024

Location ↓ BROTHERS RIVER

Location	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 6/13/19 Time 1050	Eastern Central	Composite end Date Time	Bottle Group(s) (See pg 2) A
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 6.27 ☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STOR	Temp (C) 28.2	pH 7.54	Sample Depth 0.3 ☐ ft ☒ m	Sp. Conductance (umho/cm) 128	
Latitude ☐ dd ☐ dms	Salinity (ppt) 0.06	Comments			

Field/WIN ID → G2TLHR0024

Location ↓ BROTHERS RIVER

Location	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 6/13/19 Time 1100	Eastern Central	Composite end Date Time	Bottle Group(s) B
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen — ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STO	Temp (C) —	pH —	Sample Depth — ☐ ft ☐ m	Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Salinity (ppt) —	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	Salinity (ppt)	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	Salinity (ppt)	Comments			

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
JW	6/13/19 1601	HD			6/18/19 1600

Group:	Bottle Type:	# of Bottles:	Preservative:	Enter Number of Bottles Sent to Lab
A	P-1L	7	ICE	1
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS			
A	BP-1L	7	ICE	1
	CHLSUITE-W			
A	P-250ML-WO-THI	7	ICE	1
	ECOLI-18QT			
A	BG-500ML	7	ICE	1
	W-E8321-DI W-E8321-MS			
A	P-500ML	7	HNO3	1
	W-ICP W-ICPMS		9099030 4/9/20	
A	P-500ML	7	ICE And H2SO4	1
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC		7163030 10/30/19	
A	P-125ML	7	FILTER-ICE	1
	W-PO4-F			
A	BG-1L	16	ICE	3
	W-PSNP-TQ			
B	PJ-2L	14	Formalin	2
	MI-FW-QLDC			