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: 155077 RQ- 2021-02-22-14 Project: SMP RIO

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 2/9/21

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	NM	3/3/21	0710	22.4	763	8.7	8.70	99.1			P / F	L / F
ICV	↓	↓	0712	↓	↓	↓	8.57	97.3			P / F	L / F
CCV	↓	↓	1315	21.1	763	8.9	9.00	100.7			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.	NM	3/3/21	0714	2001248	8/21	1000	1000	P / F	L / F
ICV	↓	↓	0716	2010134	10/21	100	104	P / F	L / F
CCV	↓	↓	1317	↓	↓	↓	104	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.	NM	3/3/21	0720	202114	5/22	7.	22.4	7.0		P / F	L / F
Calibr.	↓	↓	0722	200620	6/22	4.	↓	4.0		P / F	L / F
Calibr.	↓	↓	0724	201473	5/22	10.	↓	10.0		P / F	L / F
ICV	↓	↓	0726	200620	6/22	4.0	↓	3.91	143.9	P / F	L / F
CCV	↓	↓	1320	202114	5/22	7.0	21.7	7.01	-39.4	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 _____, slope from 4 to 7 _____ (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: 2/9/21
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	NM	3/3/21	0730	0.00	0.00	P / F	/ F

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

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date:	3/31/2021	**Collected By:**	Nathan Mulkey, Myranda Butler
Customer:	NW-DIST	**Sampling Agency:**	FDEP
RQ:	RQ-2021-02-22-14	**Project ID**:	SMP

PLEASE RETURN THE ORIGINAL OF THIS FORM WITH SAMPLE SUBMITTAL FORMS AND THE COOLER PACKING WORKSHEET TO THE LAB

Number of Coolers Shipped: ~~2~~ 1 MB 3/31/21 **Delivery Method:** UPS

FIELD ID (Labels) submitted under this RQ for this collection date.

Site Location	Field ID/WIN ID
Collins Mill Creek upstream of Conecuh Street	G4NW0507

RELINQUISHED BY(SIGNATURE): Myranda Butler **DATE/TIME:** 3/31/2021 13:00ct

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By: **Rec'd/Inspected Date**:

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End of Day CCV [Yes] / [No]

WIN Station Name: Collins Mill Creek upstream of Conecuh Street **Date:** 3/31/2021

WIN/Field ID: G4NW0507 **WBID:** 24AC **ENR:** - **Latitude:** 30.6259

County: SANTA ROSA **Org ID:** 21FLPNS **Longitude:** -87.0385

Receiving Body of Water: Pensacola **RQ-** 2021-02-22-14

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Nathan Mulkey		x		x	x
[x] Myranda Butler	x		x		
[ ]					
[ ]					

Sampling Equipment

- [x] Sample Container
- [ ] Dipper
- [x] Syringe
- [ ] Carboy
- [ ] Van Dorn
- [ ] Pole

Depth measured with: Meter

Secchi Equipment ID:

Collection Method

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

Water Level: [x] Normal [ ] Low [ ] High [ ] Dry [ ] Pooled [ ] Flooded

Meter ID# 155077 (PRODSS)

Photos: YES **Flow:** FLOW **Tide:**

Tide Times: High: Low:

Biological Samples Collected: [ ] None [x] HA [x] SCI [x] RPS [ ] Algae ID [x] LVS [ ] LVI Other:

SBIO ID Numbers: SVIO Visit ID 81993. HA ID 16792. RPS ID 9687

Notes:

Duplicate Sample

Time Zone: CEN **Time:** _____ **Field ID:** N/A (WIN ID_DUP)

WIN DMT Activity ID: _____

Blank

Time Zone: _____ **Time:** _____ **Field ID:** _____ (Blank Type_DDMMYYYY)

DI Source: _____ **Location:** _____

DI Type: _____ **Equipment ID:** _____

DI Container (Name/ID): **DI Container Type:**

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 _____ (Initials/Date) **Migrate Data to WIN:** _____ (Initials/Date) **Verify Data In WIN:** _____ (Initials/Date)

RQ-2021-02-22-14
Customer: WQAP
Project ID: SMP

Collected By: Nathan Mulkey, Myranda Butler
Field Report Prepared By: Nathan Mulkey
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: G4NW0507

Location: Collins Mill Creek upstream of Conecuh Street

Comments: Microbiology sample(s) submitted to contract laboratory

Matrix: Fresh

(Check one) ☒ GRAB ☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
3/31/2021	910 CEN	8.1	91.8	21.8	5.87	0.3	0.9 ☒ VOB (S)	0.9	54.5	0.02
							Central Lab please use top row for login purposes			
	CEN									

Parameter Suite	Parameter Methods			Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			☒ Ice ☒ $H2SO_4$*	☒ <2	1	A
	Lot #	SA0293040	**Exp:**	10/19/21			
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☐ W-HARD			☒ Ice ☒ HNO_3*	☒ <2	1	A
	Lot #	NA0344060	**Exp:**	1/4/22			
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter			☒ Ice		1	A
	Filter Lot #	17097890					
	Syringe Lot #	0079929					
Chlorophyll (BP-1L)	☒ CHLSUITE-W			☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS			☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY			☐ Ice			
Macroinvertebrates (PJ-2L)	☐ MI-FW-QLDC			☒ Formalin		2	
Periphyton (PT-50ML)	☐ ALGAE-ID			☐ Ice			
Microbiology (Contract Lab Bottle)	☒ E Coli ☐ F Coli ☐ Enterococci ☒ Contract Lab			☒ Ice		1	A
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐			☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS			☐ Ice			
Pesticides (BG-500ML) (BG-1L)	☒ W-E8321-DI ☒ WE8321-MS ☒ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution) ☐ W-DIELDRIN			☒ Ice		5	A
Phytoplankton/Periphyton	☐ DTM-QL-C ☐ PEN-QL-C ☐ DTY-QN-C ☐ PKD-QN-C ☐ DTM-QN-C ☐ PRN-QN-C ☐ PKD-QN-BV			☐ Ice			

Name:
Nathan Mulkey
Myranda Butler

Signature:

Date:

*2.0 ml of Preservative used unless noted otherwise.
**MCAA: Monochloroacetic acid buffer solution

Site Name Collins mill creek

Field ID G4NW0507 Storet G4NW0507

Visit ID 81993

RPS ID 9687

VPDB ID N/A

HA ID 76792

Date: 3/31/2021

Project: SMP

RQ: 2021-02-2214

LIMS ID: 2235612

WBID: ~~24AE~~ 24AC

☐ LVI

☐ RPS/LVS Only

☐ Sample Site Created in SBIO

☑ Phys/Chem entered in SBIO

☑ HA entered in SBIO Initial FB ☑ Date and Initial QA: 4/8/21

☑ RPS entered in SBIO Initial FB ☑ Date and Initial QA: 4/8/21

☐ LVI entered in SBIO Initial _____ ☐ Date and Initial QA: _____

☑ < 2 m² vegetation

☐ Plants getting verified Date submitted: _____

☐ Plants verified Date returned: _____

☑ RPS authorized in SBIO ☑ Date and Initial: FB 4/12/2021

☑ RPS score: 0.0

☐ VPDB authorized in SBIO ☐ Date and Initial: _____

☐ VPDB score: _____

☑ SCI complete: TRisk 6/24/2021 SCI Score: 23

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

SAMPLE ID S1993 ORG ID 21FLANS LATITUDE 30.62581
COUNTY Santa Rosa WIN ID/STORET # G4NW0507 LONGITUDE 87.03867
DATE 3/31/21 TIME 0910 CTZ SAMPLING AGENCY FL DEP - NWROC
SITE NAME Collins Mill Creek RQ- 2021-02-22-14
FIELD ID/NAME G4NW0507 RECEIVING BODY OF WATER. Blackwater WBID 24AC Project: SMP

RIPARIAN ZONE / STREAM FEATURES

LIMS ID: 2235612

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) :

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
				100			

Landscape Development Intensity Index (LDI):

Local Watershed Erosion (select one) : ☐ None ☐ Slight ☒ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side
Left Bank : 2 Right Bank : >18

Hydrologic Modification Score (per FT 3101):

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

~~.15~~ 0.04 m/s	0.04 m/s	0.04 m/s
.9 m deep	.9 m deep	.9 m deep

High Water Mark: 1.0 + .9 = 1.9
(m) (above present water level) (present depth) (above bed)

Artificially Impounded ☒ Yes ☐ No

Artificially Channelized : ☐ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☒ Recent, severe

Canopy Cover % ☐ Open ☐ Heavily Shaded ☐ Lightly Shaded (11-45%) ☒ Moderate Shaded (46-80%)

SEDIMENT / SUBSTRATE

Sediment Oils: ☐ Absent ☒ Slight ☐ Moderate ☐ Profuse

Sediment Odors: ☐ Normal ☒ Sewage ☐ Petroleum ☒ Chemical ☒ Anaerobic ☐ Other (Specify) :

Smothering of Substrates

	None	Slight	Moderate	Severe
Sand Smothering:	☐	☐	☒	☐
Silt Smothering:	☐	☐	☐	☒
Algae Smothering:	☐	☒	☐	☐

SUBSTRATE TYPE

Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon

2 Primaries

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	29		
Undercut Banks / Roots	4.3		
Leaf Packs or Mat	.04		
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	21.8	5.87	8.10	91.8	54.5	0.02	
Mid:								☒ VOB
Bottom								TOTAL DEPTH
Meter ID:	13/155077							0.9

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 ☐ Globs ☒ Slick ☒ Other ☐

Water Sample Taken? ☒ Yes ☐ No
Sample Preserved? ☒ Yes ☐ No
Lot Number: 0293040 Exp: 10/14/21

Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐

Algae Sample Taken? ☐ Yes ☒ No
Sample Preserved? ☐ Yes ☐ No
Lot Number:________ Exp:________

Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐

AMBIENT FIELD CONDITIONS / NOTES:

☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM: Nathan Milky / Miyanda Butler
SIGNATURE : [signature]
DATE : 3/31/21

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

SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
FDEP NWROC		64NW0507	03/31/21	Blackwater River
REMARKS: 16792 WBID 24AC	COUNTY: Santa Rosa	LOCATION: Collins Mill Creek		FIELD ID/NAME: 64NW0507

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 6	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 6	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 4	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 2 Primary Score 18	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** 3	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 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 7 Left Bank 7	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful 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 9 Left Bank 3	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 4 Secondary Score 41	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

59 **TOTAL SCORE**

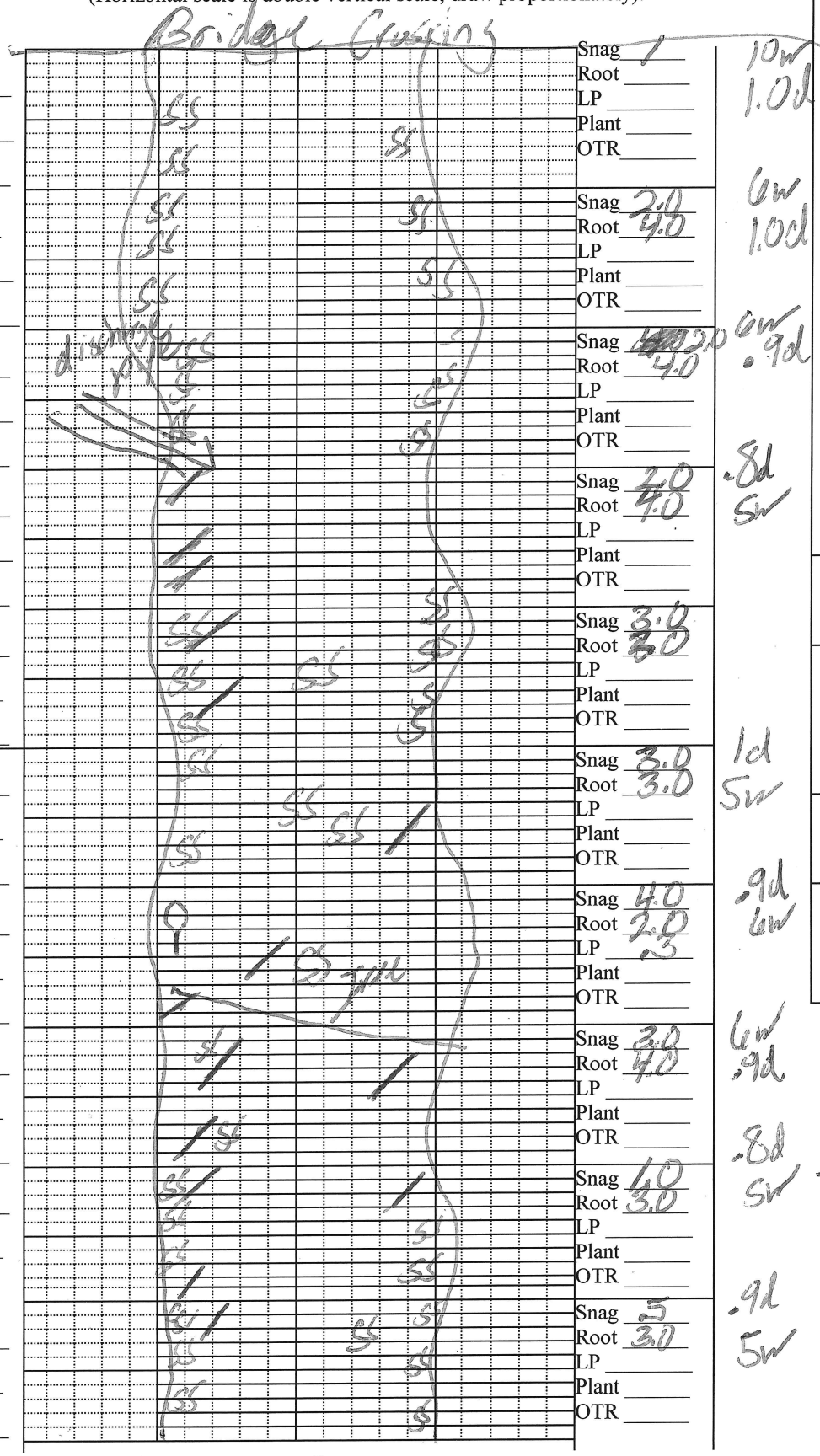
Date: 3/31/21	Analyst: Nathan Mulkey	Signature: Nathan Mulkey

SBIO ID: 81993 HA ID: 16792

62-160.800, F.A.C.

Revision Date: March 1, 2014

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).



	Snag	Root	LP	Plant	OTR
100	1				
90	2.0	4.0			
80	2.0	4.0			
70	4.0	4.0			
60	3.0	3.0			
50	3.0	3.0			
40	4.0	2.0	.3		
30	3.0	4.0			
20	4.0	3.0			
10	5	3.0			

10w 1.0d
6w 1.0d
6w .9d
.8d Sw
1d Sw
.9d 6w
6w .9d
.8d Sw
.9d 5w
.9d 4m w

WIN ID G4NW0507
Substrates: Code key, draw proportionate habitat abundance.

- [x] Snags 20.5/100 2.9% 4.3%
- [x] SS Roots/undercut banks
- [x] LP Leaf Packs (or mats) .04
- [ ] Macrophytes
- [ ] _____
- [ ] _____
- [ ] _____

Velocity: 0.04
Note where velocity measures were taken. 50 m

Habitat Smothering:
Note areas (on map) where sand or silt is something substrates, limiting habitability. smothering throughout

Bank Stability:
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
Note areas (on map) where natural vegetation is altered or eliminated.

Average width 7 m
Average depth .9 m
WQ & chemistry taken @ 0 m

~~Little Black Creek upstream of Black Creek~~
Project. SMP / TMDL Studies
Sampled By/Date: 3/31/21

0 m Latt. 30.62581
0 m Long. 87.03867
100 m Latt 30.62587
100 m Long 87.03966

TOW

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Collins Mill Creek | County: Santa Rosa | Date: 3/3/21 | Investigators: Nathan Mulky / Miranda Butler

STORET Station Number: G4NW0507

RPS ID: 9687

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N	X	
	2			
	3			
	4			
	5			75
	6			
	7			
	8			
	9			
10	1	N		
	2		X	
	3			
	4			
	5			75
	6			
	7			
	8			
	9			
20	1	N	X	
	2			
	3			
	4			
	5			70
	6			
	7			
	8			
	9			
30	1	N	X	
	2			
	3			
	4			
	5			70
	6			
	7			
	8			
	9			
40	1	N	X	
	2			
	3			
	4			
	5			70
	6			
	7			
	8			
	9			
50	1	N	X	
	2			
	3			
	4			
	5			65
	6			
	7			
	8			
	9			

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N	X	
	2			
	3			
	4			
	5			40
	6			
	7			
	8			
	9			
70	1	N	X	
	2			
	3			
	4			
	5			40
	6			
	7			
	8			
	9			
80	1	N	X	
	2			
	3			
	4			
	5			25
	6			
	7			
	8			
	9			
90	1	N	X	
	2			
	3			
	4			
	5			20
	6			
	7			
	8			
	9			
100	1	N	X	
	2			
	3			
	4			
	5			20
	6			
	7			
	8			
	9			

Secchi depth	0.9
Estimated?	

# 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	X
Habitat Assessment	X
SCI/Biorecon	X
Water sample	X

RQ-2021-02-22-14

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

SBIO ID 81993

RPS ID 9684

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:	Date: 3/3/21	County: Santa Rosa	Storet Number: G4NW0507
Analyst: Nathan Mulkey		Signature:	
Comments: <2m SAV			

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

Field ID: G4NW0507	**RPS ID** 9687	**SBIO ID** 81993	**VPDB ID** N/A
LIMS ID 2235612			

SAMPLE TRANSMITTAL FORM
Document Reference # 05.1.0

Project: FDEP | Laboratory: Wetlands Research Laboratory | Sampler's intials : NW

Method of transport: on ice by hand | Page 1 of 1

Samples delivered by: [illegible] of FDEP | Date/Time: 3/31/21 1155

Sample received by: Jeremy Jones of WRL | Date/Time: 3/31/21 1155

Instructions: Fill in all fields except "Lab ID" on sample transport form completely. Each sample container must use a separate line. Place this form in a waterproof bag and place it with the samples for transport. If a field log or other chain of custody is attached, that information may be referenced on this form and the log or COC attached.

CST

Lab ID	Sample ID	Matrix[1]	Type[2]	Container Type	Analyses Requested	Preservative	Sample (°C)[3]	Sampling Date/Time
21-471030	GWWO507 Collins Mill Creek	FW	G	Sterile plastic	Escherichia coli 18-QT	ice/$Na_2S_2O_3$	4.6	3/31/21/0910

Comments: **Sample Container lot#** 20020

RQ -2021- 02-22-14

Surface water, no chlorine expected

Contact organization FDEP | Contact name Nathan Mulkey | Phone:

Address 160 Governmental Center, suite 308, Pensacola, FL 32502 | Sampler's name:

[1]Matrix examples: SW = surface water, PW = pore water, GW = ground water, FW = Freshwater, MW = Marine Water, BW = Brackish Water, S = soil/sediment, Other X =

[2]Type codes: G = grab, C = composite, X =

[3] Recorded using IRT-2