FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date:	9/20/2021	**Collected By:**	Blake Spencer, Jesse Pfadenhauer
Customer:	WAS	**Sampling Agency:**	FDEP
RQ:	RQ-2021-01-11-11	**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: 1 **Delivery Method:** HandDelivered

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

Site Location	Field ID/WIN ID
Richlander Creek at CR 65B	G1WA0093

RELINQUISHED BY(SIGNATURE):

DATE/TIME: 9/20/2021 EST

THIS SECTION TO BE COMPLETED BY LABORATORY

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

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End of Day CCV
Yes / No

WIN Station Name: Richlander Creek at CR 65B **Date:** 9/20/2021

WIN/Field ID: G1WA0093 **WBID:** 680 **ENR:** - **Latitude:** 30.5228

County: GADSDEN **Org ID:** 21FLWQA **Longitude:** -84.55

Receiving Body of Water: Ochlockonee - St. Marks **RQ-** 2021-01-11-11

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Blake Spencer		x	x		
[x] Jesse Pfadenhauer	x	x		x	x
[x] Caryn Crabb		x		x	x
[ ]					

Sampling Equipment

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

Depth measured with: MeterStick

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# EXO #1

Photos: NO **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: SBIO:83138 LIMS:2276781 HA:17015 RPS:9779

Notes:

Duplicate Sample

Time Zone: EST **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: WAS-SECT-2021-09-20-01 **WIN Import ID:** 21FLWQA_WAS-SECT-2021-09-20-01_12-10-2021.TXT

Enter Field Parameters, Verify Station ID In LIMS DMT: ESB 9/24/21 (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** CC 10/06/2021 (Initials/Date)

Scan/Save Field Sheets ESB 9/24/21 (Initials/Date) **Migrate Data to WIN:** DT 12-10-21 (Initials/Date) **Verify Data In WIN:** _____ (Initials/Date)

RQ-2021-01-11-11
Customer: WQAP
Project ID: SMP

Collected By: Blake Spencer, Jesse Pfadenhauer
Field Report Prepared By: Blake Spencer
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: G1WA0093

Location: Richlander Creek at CR 65B

Comments:

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)
	933 EST	7.96	94.2	23.81	7.75	0.15	0.3 ☒ VOB (S)	0.3	53.4	0.02
9/20/2021										
	EST									

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 ☒ H_2SO_4*	☒ <2	1	A
	Lot #	Sa0353110	**Exp:**	1-11-22			
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 #	17347262					
	Syringe Lot #	1091364					
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 Lot #**	9.46040721TR	☒ Formalin		2	B
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)	x W-E8321-DI x WE8321-MS x W-PSNP-TQ W-CT-CL-R W-PCL-TQ-R W-CARB-AA (5 ml of MCAA** Buffer Solution)			☒ Ice		5	A
Phytoplankton/Periphyton	DTY-QN-C PKD-QN-BV			☐ Ice			

Name:
Blake Spencer
Jesse Pfadenhauer

Signature: Blake Spencer

Date: 9/20/21

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

HA: 17015

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

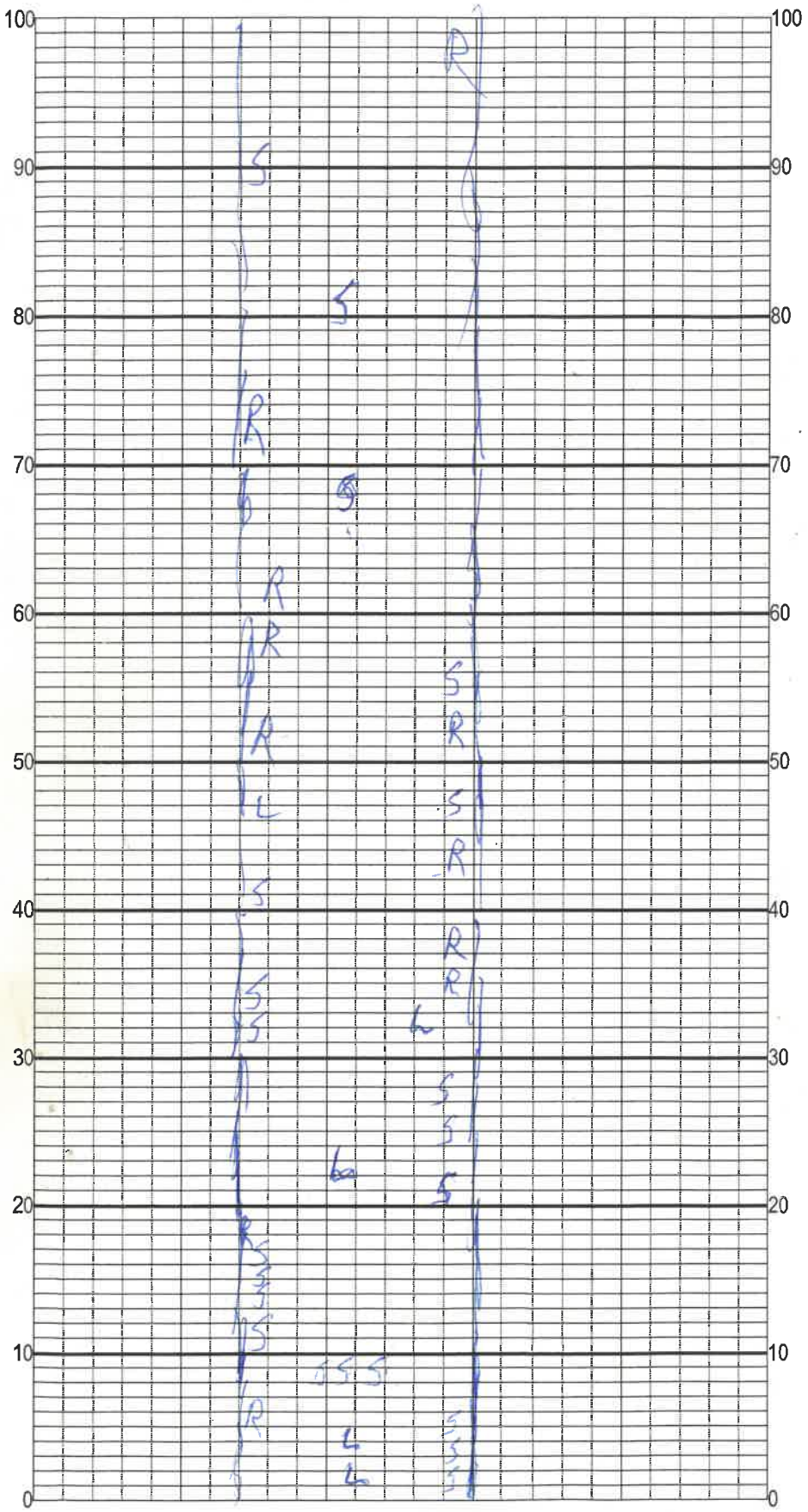
SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
FDEP		G1WA0093	9/20/21	
REMARKS:	**COUNTY:**	**LOCATION:**		**FIELD ID/NAME:**
	Gadsden	Richlander Creek @ GSB		G1WA0093

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 13	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 15	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 12 Primary Score 46	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 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 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 6 Left Bank 6 Secondary Score 66	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

~~46~~ 112 **TOTAL SCORE**

Date: 9/20/21	Analyst: Blake Spencer	Signature:

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: Richlander Creek @ CR 6SB

Date: 9/20/21

Sampler: Blake Spencer

100 m: Latitude	30.5235
Longitude	-84.5550
0 m: Latitude	30.5228
Longitude	-84.5544

Substrates: Code key, draw proportionate habitat abundance.

		%
S	Snags	30%
R	Roots/undercut banks	2%
L	Leaf Packs (or mats)	1%
M	Aquatic Macrophytes	0%
	Pools — total # observed = ____ ; # range expected = ____	

Average width ~~6~~ ____ m

Average depth 0.3 m

Velocity measured at 20 meter mark.

WQ & chemistry taken at 10 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:

600/200 .0

62-160.800, F.A.C

Revision Date: January 2017

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

SAMPLE ID 83138 (SBIO) 2276781 (LIMS) ORG ID 2/FLWRA LATITUDE 30.5228
COUNTY Gadsden STORET # 21FLWRA0093 LONGITUDE -84.55
DATE 9/20/21 TIME 0933 SAMPLING AGENCY FDEP
SITE NAME Richlander creek at CR 65B
FIELD ID/NAME 21FLWRA0093 RECEIVING BODY OF WATER

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) Reservoirs
44.65	33.57	8.86	4.06	2.84	0.76	3.43	0.22

Landscape Development Intensity Index (LDI) 1.86

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 : 7/8m Right Bank : 7/8m

Hydrologic Modification Score (per FT 3101) 3-4

High Water Mark: 1m (m) + 0.3 (present depth) = 1.3m (above bed) (above present water level)

Artificially Impounded ☐ Yes ☒ No

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

6 m wide

m/s	0.25 m/s	m/s
m deep	0.3 m deep	m deep

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

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

SUBSTRATE TYPE

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

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	3%	IIII	
Undercut Banks / Roots	2%	IIII	
Leaf Packs or Mat	1%	IIII	
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....		IIII	
Mud / Muck / Silt			
Other			
Other			

ABUNDANCE

	Not Obs.	Rare	Common	Abundant
Periphyton:	☐	☒	☐	☐
Fish:	☒	☐	☐	☐
Aquatic Plants:	☐	☒	☐	☐
Iron/Sulfur Bacteria:	☒	☐	☐	☐

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :	0.15	23.81	7.75	7.96	94.2	53.4	0.02	0.3
Mid:								☒ VOB
Bottom								TOTAL DEPTH 0.3

Meter ID: Exo #1

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: See field Exp: sheet

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 Blake Spencer, Jesse Pfadenhauer, Caryn Crabb

SIGNATURE : Blake

DATE : 9/20/21

RPS: 9779

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Richlander Creek @ CR 65B | County: Gadsden | Date: 9/20/21 | Investigators: Blake Spencer

STORET Station Number: 21WA0093

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		52
	6	N		
	7	N		
	8	N		
	9	N		
10	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		89
	6	N		
	7	N		
	8	N		
	9	N		
20	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		64
	6	N		
	7	N		
	8	N		
	9	N		
30	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		28
	6	N		
	7	N		
	8	N		
	9	N		
40	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		42
	6	N		
	7	N		
	8	N		
	9	N		
50	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		86
	6	N		
	7	N		
	8	N		
	9	N		

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		94
	6	N		
	7	N		
	8	N		
	9	N		
70	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		94
	6	N		
	7	N		
	8	N		
	9	N		
80	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		52
	6	N		
	7	N		
	8	N		
	9	N		
90	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		64
	6	N		
	7	N		
	8	N		
	9	N		
100	1	N	N	
	2	N		
	3	N		
	4	N		
	5	N		71
	6	N		
	7	N		
	8	N		
	9	N		

Secchi depth	109
Estimated?	N

# 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- 2021-01-11-11

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 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: Richlander Creek @ CR 65B	Date: 9/20/24	County: Gadsden	Storet Number: 21WRA0093
Analyst: Blake Spencer		Signature:	
Comments: 1.2 m^2			

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											
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											
Pontederia 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											

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: Exo #1 RQ- 2021-01-11-11 Project: SMP (Richlander SCI)

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 _____

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.	Blake Spencer	9/20/21	0736	21.1	756.4	8.6	9.87	99.8	—	—	(P) / F	(L) / F
ICV	Blake Spencer	9/20/21	0738	21.1	756.4	8.8	9.99	99.9	—	—	(P) F	(L) F
CCV	Blake Spencer	9/20/21	1348	23.86	756.9	8.4	9.37	99.4	—	—	(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.	Blake Spencer	9/20/21	0741	210917J	08/2022	1000	1000	(P) / F	(L) F
ICV	Blake Spencer	9/20/21	0742	4103K46	3/23	100	100.2	(P) F	(L) F
CCV	Blake Spencer	9/20/21	1341	210917J	08/22	1000	1004	(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.	Blake Spencer	9/20/21	0746	210513A	11/2022	7.02	21.6	7.02	-24.6	(P) / F	(L) F
Calibr.	Blake Spencer	9/20/21	0751	210513B	4/2023	4.00	21.6	4.00	147.6	(P) / F	(L) F
Calibr.	Blake Spencer	9/20/21	0754	201209G	5/2022	10.04	21.5	10.04	-201.3	(P) F	(L) F
ICV	Blake Spencer	9/20/21	0756	201209G	05/2022	10.04	21.5	10.04	-201.5	(P) F	(L) F
CCV	Blake Spencer	9/20/21	1358	210817B	02/2023	4.00	21.98	4.10	139.8	(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: _____
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						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

Cooler Packing Worksheet for Request: RQ-2021-01-11-11
SCI Kit # 3
Ship Cooler On: 1/7/2021
Customer/Project: WAS-SECT/SMP

Assigned To: SHAIK_A
Requester: Curtis Musson
Priority: 3

850-245-8453
2600 Blair Stone Rd

Tallahassee, FL 32399

Attn: Curtis Musson

Comments:
No preservatives needed.

Group A: Nutrients, CHLA, Metals, Tracers, Q-PSNP-TQ
Group B: SCI, Algae_ID

Packing Notes:
No FedEX Labels
No Trash Bag

Requested Analyses:

Bottle Group: A **# of Sites: 1**

Container ID: P-1L **Qty: 1** **Preservation: ICE** **Lot #** 0007845

Description: Plastic Bottle 1L

Analysis	Description
ALKALINITY	Alkalinity in aqueous matrices as mg CaCO3/L
TURBIDITY	Turbidity in aqueous matrices
W-CL-IC	Chloride in aqueous matrices
W-COLOR	True Color measured at 450 nm (not valid for NPDES monitoring)
W-F	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-SO4-IC	Sulfate in aqueous matrices
W-TDS	Total Dissolved Solids in aqueous matrices
W-TSS	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample

Container ID: BP-1L **Qty: 1** **Preservation: ICE** **Lot #** 1293137

Description: Brown Plastic Bottle 1L

Analysis	Description
CHLSUITE-W	Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry

Container ID: P-250ML-WO-THI **Qty: 1** **Preservation: ICE** **Lot #** L20975

Description: 250 ml Sterilized no tablet

Analysis	Description
ECOLI-18QT	Escherichia coli by Colilert 18 Quanti-Tray method - non-chlorinated water systems

---

Container ID: BG-500ML **Qty: 1** **Preservation: ICE** **Lot #** 078638

Description: Brown Glass Bottle 500ML Affix BLUE dot to container.

Analysis	Description
W-E8321-DI	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
W-E8321-MS	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS

Container ID: P-500ML **Qty: 1** **Preservation: HNO3** **Lot #** 078385

Description: Plastic Bottle 500 mL Affix RED nitric acid dot to container.

Analysis	Description
W-HARD	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3
W-ICP	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects
W-ICPMS	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects

---

Container ID: P-500ML **Qty: 1** **Preservation: ICE And H2SO4** **Lot #** 078385

Description: Plastic Bottle 500 mL Affix YELLOW sulfuric acid dot to container.

Analysis	Description
W-NH3	Ammonia in aqueous matrices as mg N/L
W-NO2NO3	Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Nonpurgeable Organic Carbon in aqueous matrices

Container ID: P-125ML **Qty: 1** **Preservation: FILTER-ICE** **Lot #** 076883

Description: Plastic Bottle 125 mL

Analysis	Description
W-PO4-F	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L

Container ID: BG-1L **Qty: 4** **Preservation: ICE** **Lot #** 0077672

Description: Brown Glass Bottle 1L Affix BLUE dot to container.

Analysis	Description
W-PSNP-TQ	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Bottle Group: B # of Sites: 1

Container ID: PT-50ML **Qty: 1** **Preservation: ICE** **Lot #** 0510038

Description: Plastic Tube 50 mL

Analysis	Description
ALGAL_ID	Qualitative assessment of algal taxa present without counts

---

Container ID: PJ-2L **Qty: 2** **Preservation: Formalin** **Lot #** 3101 Preserved

Description: Plastic Jar 2 L

Analysis	Description
MI-FW-QLDC	No. Taxa of FW macroinverts, qual samp, 20 dipnets.

Cooler Packed By: AJF Number of Coolers: _____ Date: _____

Kit must also include:
- X Field Sheets
- ___ Temperature Control Bottle
- X FedEx Bills, if applicable
- X Plastic Bags/Zip Ties
- X Acid Labels (sets of 24)

If Preservation Included:

ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____
ID _____	Exp _____	Lot # _____

PLEASE RETURN ALL COOLERS FOR RQ-2021-01-11-11