

Login Checklist

RQ- 2021-07-26-21

Login Station ID: #5

Shipping Method: FedEx | UPS | HD | Greyhound

Date/Time of Receipt: 7/ 29 /21 @ 9:40

*Cooler Temperature	Samples Frozen?	* All Samples in Cooler Preserved with		Number of Sample Containers in Cooler	Evidence Tape				Waybill Tracking #
					Present?		*Intact?		
	YES	HNO ₃	Formalin		Yes	No	Yes	No	
0.8				4		✓			9293 8015 2845

COOLER CHECK

*All samples received on ice unless otherwise noted. HNO3 and Formalin preserved samples do NOT have a temperature requirement.

- If the temperature of a cooler exceeds 6.0 oC (above 10.0 oC for W-1-4-DIOX and microbiology) or received without ice, identify affected samples in an NCR. NCR# _____
- DOH coolers can exceed 2.0 °C above the standard temperature (6.0 or 10.0 °C for W-1-4-DIOX) without login confirmation from customer for samples requiring ice preservation; identify affected samples in an NCR. NCR# _____
- If cooler or samples are received with a damaged Evidence Seal; identify the affected samples in an NCR. NCR# _____
- If coolers or samples are received late; identify the affected samples in an NCR. NCR# _____

Chain of Custody/ Field Sheet(s) Included?

Yes ☒ No _____

Micro-Biology Overflow Chain of Custody/ Field Sheet(s) Included?

Yes ☒ No _____

CONTAINER CHECK

Evidence Tape on Bottles?

Yes _____ No _____ NA ☒

Evidence Tape intact? Yes _____ No _____

If Criminal, photographs taken?

Yes _____ No _____

Containers intact? Yes ☒ No _____

Caps on tight?

Yes ☒ No _____

Sufficient Sample Volume:

Yes ☒ No _____

If NO is checked above, generate an NCR listing affected sample IDs in its appropriate category. NCR# _____

CHLORINE CHECK REQUIRED? (Blue dot on container)

Yes _____ No ☒ Init: HK

Chlorine detected? (One container checked per Field ID)

Yes _____ No _____ Init: _____

If chlorine is detected, generate an NCR listing affected sample IDs . NCR# _____

PRESERVATION CHECK (EXCLUDING SAMPLES SENT TO OVERFLOW LABS, "OV-")

**Acid Preserved Samples: pH < 2.0?

Yes ☒ No _____ NA _____ Init: HK

**W-1-4-DIOX (Green dot on container) preserved to pH < 4.0?

Yes _____ No _____ NA ☒ Init: HK

If samples were not preserved correctly, generate an NCR listing affected sample IDs . NCR# _____

Coolers Unpacked/Checked by: HK

Date: 7/ 29 /21

Event contains NCRs (Y/N)? N

Cross Creek bio kit

EventID: NE-DIST-2021-07-29-02 (SMP)

- Date Received: 29-JUL-2021 09:40

Login Checklist

Login Preservation Equipment

Lot # & Exp: Date

Additional Comments:

Infrared Thermometer ID:	IR TEMP GUN #5 EXP:10-28-21
pH Test Strips 0 – 6	Lot#210620 EXP:4-15-23
pH Paper 0 – 3	
pH Paper 0 – 13	Lot#210620 EXP:4-15-23
Chlorine Test Strips	Lot#0261 EXP:5-23

ENCORE SAMPLES

S-VOC-MS samples in Encores must be frozen within 48 hours of collection.

Were Encore samples received? Yes _____ Init: _____

Date and time placed in freezer _____

Were all samples placed in freezer within 48 hours of collection? Yes _____ No _____

If no, were samples shipped on dry ice? Yes _____ No _____

If S-VOC-MS samples were not preserved correctly, generate an NCR listing affected sample IDs . NCR# _____

FOR CLEAN LAB USE ONLY – Total Mercury Preservation Check(W-HG-AF;W-HG-AF-F):

Samples preserved within 48 hours? Yes _____ No _____

Date and time samples preserved: _____

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 7/28/2021
Customer: NE-DIST
RQ: RQ-2021-07-26-21

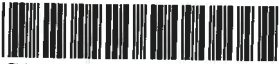
Collected By: Kelly McDonald, Brian Davis
Sampling Agency: FDEP
Project ID: SMP

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: FedEx

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

Site Location	Field ID/WIN ID
Cross Creek at end of Twin lakes Rd.	 G1NE0922

RELINQUISHED BY(SIGNATURE):

Kelly McDonald

DATE/TIME: 7/28/2021
1600EST

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By: *hkh*

Rec'd/Inspected Date: *7-29-21/0940*

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

Meter ID: 54765 RQ: 2021-07-26-21 Project: CROSS CLP & SMP

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

- 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 7/8/21

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L/9	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Brian Davis	7/28/21	746	18.8	761.8	9.3	9.3	100.2	/	1.03	P/F	L/F
ICV			747	18.7	761.7	9.4	9.37	100.3	/	1.03	P/F	L/F
CCV			1703	24.8	761.0	8.3	8.35	100.6	/	1.03	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 μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	Brian Davis	7/28/21	737	210426B	5/22	1000	1000	P/F	L/F
ICV			739	210426A	5/22	100	101.6	P/F	L/F
CCV			1704	210426B	5/22	1000	1002	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

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.	Brian Davis	7/28/21	751	2012E39	12/22	7.03	18.7	7.03	-25.5	P/F	L/F
Calibr.			754	2103659	3/23	4.00	18.6	4.00	149.7	P/F	L/F
Calibr.			757	2103F53	9/22	10.07	18.3	10.08	-196.5	P/F	L/F
ICV			800	2012E39	12/22	7.03	18.3	7.03	-25.3	P/F	L/F
CCV			1706	2103659	1/22	4.00	19.6	4.02	148.1	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 $+180 \pm 50$; mV pH 10 Range -180 ± 50 ;
 If mV are recorded: slope from 7 to 10 171, slope from 4 to 7 174.9 (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: 5/17/21

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	Brian Davis	7/28/21	802	0.00	0.00	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:

Form effective August 1, 2018



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
☒ Yes / ☐ No

WIN Station Name: Cross Creek at end of Twin lakes Rd.

Date: 7/28/2021

WIN/Field ID: G1NE0922

WBID: 2754

ENR:

Latitude: 29.495538

County: ALACHUA

Org ID: 21FLA

Longitude: -82.1644204

Receiving Body of Water: -

RQ- 2021-07-26-21

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Kelly McDonald	☒	☐	☒	☐	☐
☒	Brian Davis	☐	☒	☐	☒	☒
☐		☐	☐	☐	☐	☐
☐		☐	☐	☐	☐	☐

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Meter	
Secchi Equipment ID:	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☒ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded		Meter ID# STITCH	
Photos: NO	Flow: FLOW	Tide:	Tide Times: High: Low:
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:			
SBIO ID Numbers:			
Notes: SUNNY, RECENT RAIN			

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_DDDMMYYYY)
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-2021-07-26-21

Customer: WQAP

Project ID: SMP

Collected By: Kelly McDonald, Brian Davis

Field Report Prepared By: Kelly McDonald

Sampling Agency: FDEP

Place Label Here

Comments: Microbiology sample(s) submitted to contract laboratory

WIN ID/Field ID:



G1NE0922

Location: Cross Creek at end of Twin lakes Rd.

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 (PPT)
	1135 EST	0.45	5.7	28.1	6.22	0.3	0.8 ☐ VOB (S)	1.4	100.1	0.05
7/28/2021										
	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 Lot # Sa1105060 Exp: 4.30.22	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3*	☐ <2		
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # R0nb29490 Syringe Lot #	☒ Ice		1	A
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 #	☐ Formalin			
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-TQ-R W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			
Phytoplankton/Periphyton	DTY-QN-C PKD-QN-BV	☐ Ice			

Name:
Kelly McDonald
Brian Davis

Signature:

Kelly A. McDonald

Date:

7/29/2021

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

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

SAMPLE ID _____ ORG ID 21FLA LATITUDE 29.495538
 COUNTY Alachua STORET # 1135 LONGITUDE 82.10442
 DATE 7/28/2021 TIME 01:09:22 SAMPLING AGENCY NEROC
 SITE NAME Cross Creek @ end of Twin Lakes Rd
 FIELD ID/NAME _____ 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)

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: _____ Right Bank: _____

Hydrologic Modification Score (per FT 3101) _____

High Water Mark: _____ + _____ = _____
 (m) (above present water level) (present depth) (above bed)

Artificially Impounded ☐ Yes ☐ No

Artificially ☐ NO ☐ Mostly recovered, more sinuous ☐ Recent, severe

Channelized: ☒ Some recovery ☐ No

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

Typical Width (m) Depth (m)/Velocity (m/sec) Transect
 _____ m/s 0.03 m/s _____ m/s
 _____ m deep 1.2 m deep _____ m deep

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 # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)			
Undercut Banks / Roots			
Leaf Packs or Mat			
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	<u>0.3</u>	<u>28.1</u>	<u>6.22</u>	<u>0.45</u>	<u>5.7</u>	<u>100.1</u>	<u>0.05</u>	<u>0.8</u>
Mid								
Bottom								
Meter ID:	<u>Pro DSS Stitch</u>							<u>1.2</u>

Water Odors: Normal ☒ Petroleum ☐
 Sewage ☐ Chemical ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No
 Sample Preserved? ☒ Yes ☐ No
 Lot Number: see field exp. sheet

Water Surface Oils: Normal ☒ Sheen ☐
 Globs ☐ Slick ☐ Other ☐

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 ☐

ABUNDANCE

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

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

AMBIENT FIELD CONDITIONS / NOTES:

Sunny, thunderstorms before & after sampling

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

SAMPLING TEAM

B. Davis & K. McDonald

SIGNATURE:

Kelly McDonald

DATE:

7/28/21

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: _____ County: machua Date: 7/28/21 Investigators: K. McDonald
STORET Station Number: _____

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

Secchi depth _____
Estimated? _____

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

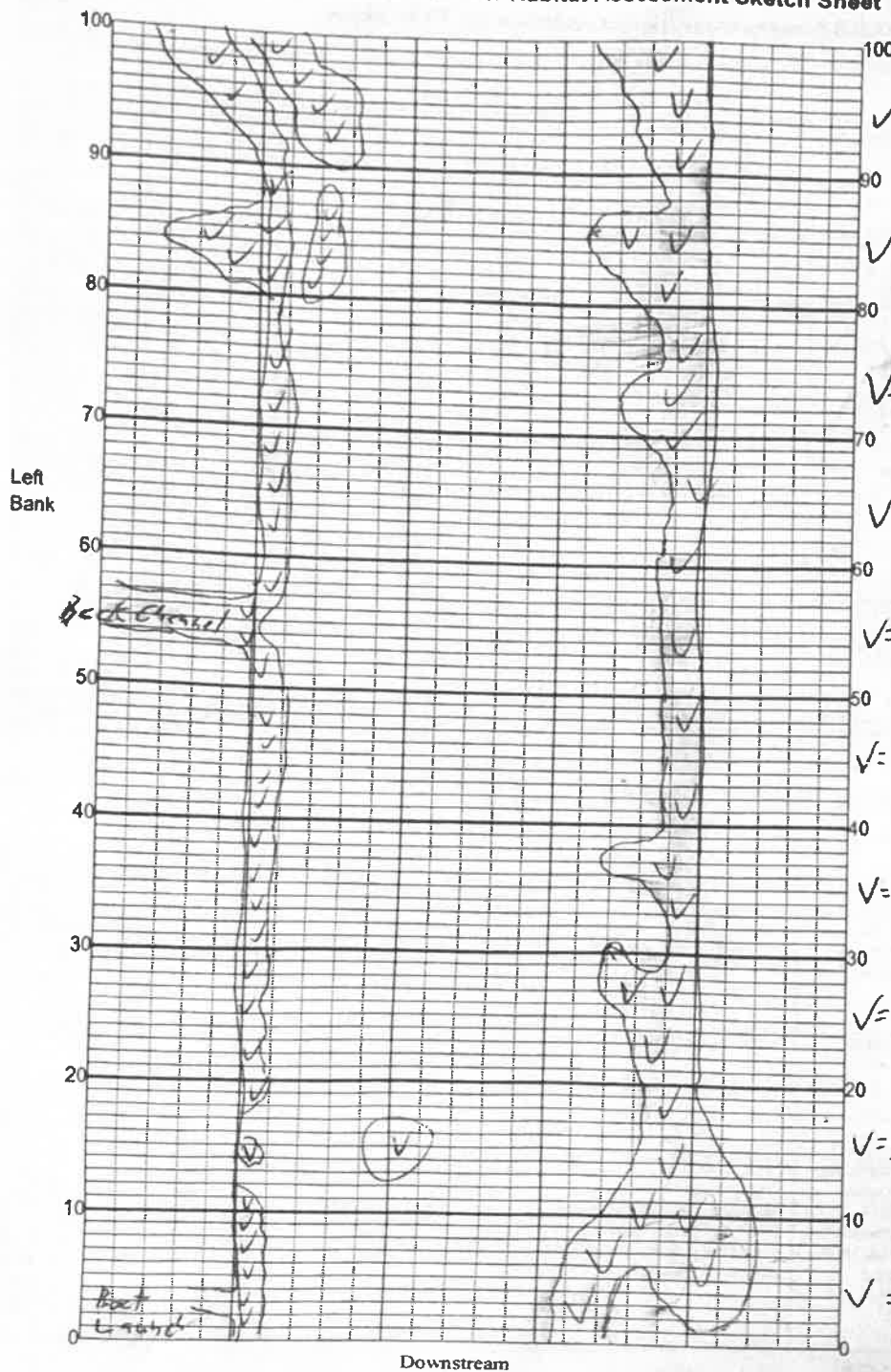
Check accompanying data collected at same site/date:
Algal mat sample _____
Linear Veg Survey _____
Habitat Assessment _____
SCI/Biorecon _____
Water sample _____

RQ- 2021-07-26-21

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 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: GIVE0922

Date: 7/28/21

Sampler: B. Davis

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

☐ Snags _____

☐ Roots/undercut banks _____

☐ Leaf Packs (or mats) _____

☒ Aquatic Macrophytes 17

☐ _____

☐ _____

☒ Pools total # observed = 0-1
range expected = 0

Average width 20 m

Average depth 1.2 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:

Vel = 340

V = 70

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

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

SAMPLING AGENCY: <u>DEAR NEROC</u>	STORET STATION NUMBER: <u>GINCO 922</u>	DATE (mm/dd/yyyy): <u>7/28/21</u>	RECEIVING BODY OF WATER: <u>Owasee Lake</u>
REMARKS:	COUNTY: <u>Alachua</u>	LOCATION: <u>Cross Creek at End of Twin Lake Rd.</u>	FIELD ID/NAME:

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>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	<u>5</u> 4 3 2 1
Substrate Availability <u>11</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 <u>11</u>	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>3</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 <u>3</u> 2 1
Habitat Smothering <u>4</u> Primary Score <u>23</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 <u>4</u> 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 <u>5</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	<u>5</u> 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 <u>7</u> Left Bank <u>7</u>	10 9	8 <u>7</u> 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>2</u>	<u>10</u> 9	8 7 6	5 4	3 <u>2</u> 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>5</u> Left Bank <u>5</u> Secondary Score <u>41</u>	10 9	8 7 6	5 4	3 2 1

64

TOTAL SCORE

Date: <u>7/28/21</u>	Analyst: <u>Brian Davis</u>	Signature: <u>B-D</u>
----------------------	-----------------------------	-----------------------

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

Waterbody: Cross Crk @ end of Date: 7/28/21 County: Alachua Storet Number: GIN0922
 Analyst: K. McDonald Signature: Kelly McDonald

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.

HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)	HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	
<i>Alternanthera philoxeroides</i>		X		X		X	X	X	X	X		<i>Micranthemum glomeratum</i>											
<i>Bacopa caroliniana</i>												<i>Micranthemum umbrosum</i>											
<i>Bacopa monnifera</i>												<i>Myriophyllum aquaticum</i>	X										
<i>Bidens bitis</i>												<i>Najas guadelupensis</i>					X						
<i>Boehmeria cylindrica</i>												<i>Nuphar luteum</i>	X	X	X	X		X	X	X	X		
<i>Centella asiatica</i>												<i>Orontium aquaticum</i>											
<i>Ceratophyllum demersum</i>												<i>Panicum hemitomon</i>	X	X	X		X	X	X	X	X		
<i>Chara</i>	X	X	X	X	X	X	X	X	X	X		<i>Panicum repens</i>											
<i>Cicuta maculata</i>												<i>Panicum rigidulum</i>											
<i>Cladium jamaicense</i>												<i>Pistia stratioides</i>	X		X	X	X		X	X			
<i>Colocasia esculenta</i>	X							X	X	X		<i>Polygonum glabra</i>	X				X						
<i>Commelina diffusa</i>												<i>Polygonum hydropiperoides</i>											
<i>Commelina virginica</i>												<i>Polygonum punctatum</i>											
<i>Crinum americanum</i>												<i>Pontederia cordata</i>	X										
<i>Diodia virginiana</i>												<i>Potamogeton illinoensis</i>											
<i>Eichhornia crassipes</i>	X	X	X	X	X	X	X	X	X	X		<i>Ruellia simplex</i>											
<i>Eleocharis (wispy viviparus)</i>												<i>Sagittaria striata</i>											
<i>Hydrilla verticillata</i>	X	X	X	X	X	X	X	X	X	X		<i>Sagittaria kurziana</i>											
<i>Hydrocotyle</i>	X	X	X	X	X	X	X	X	X	X		<i>Sagittaria lancifolia</i>	X										
<i>Hydrophila polysperma</i>												<i>Sagittaria latifolia</i>											
<i>Hymenocallis</i>												<i>Salvinia minima</i>	X	X	X	X	X	X	X	X	X		
<i>Ischnanthus caroliniana</i>												<i>Samolus parviflorus</i>											
<i>Landoltia punctata</i>												<i>Saururus cernuus</i>											
<i>Lemna</i>	X	X	X	X	X	X	X	X	X	X		<i>Sparganium americanum</i>											
<i>Limnophila sessiflora</i>												<i>Typha</i>								X			
<i>Ludwigia leptocarpa</i>												<i>Vallisneria spiralis</i>											
<i>Ludwigia palustris</i>												<i>Zizania aquatica</i>											
<i>Ludwigia peruviana</i>												<i>Taxodium</i>	X					X	X	X			
<i>Ludwigia repens</i>												<i>Scheuchzeria palustris</i>	X										
<i>Luziola fluitans</i>												<i>Peltandra</i>						X					
<i>Acer rubrum</i>	X											<i>Aster caroliniana</i>					X						
<i>Liquidambar</i>	X											<i>Camboba</i>					X						
<i>Cepha. occidentalis</i>	X	X	X	X	X	X	X	X	X	X		<i>Fraxinus americana</i>					X						
<i>Limnolobus sp</i>	X				X	X	X	X	X	X		<i>Scirpus cubensis</i>	X	X	X	X	X	X	X	X	X	X	
<i>Hibiscus sp (red)</i>												<i>Salix caroliniana</i>	X	X	X	X	X	X	X	X	X		
If no Dominant or Co-Dominant were selected, indicate with "X"												<i>Utricularia foliosa</i>	X	X	X	X	X	X	X	X	X	X	
Indicate % cover macrophytes per section												"											
0-5% Macrophyte Coverage	X	X	X	X	X	X	X	X	X	X		"	<i>inflata</i>	X	X	X	X	X	X	X	X	X	
>5 and ≤10% Macrophyte Coverage												"	<i>gibba</i>	X	X	X	X	X	X	X	X	X	
>10 and ≤25% Macrophyte Coverage																							
>25 and ≤50% Macrophyte Coverage																							
>50% Macrophyte Coverage																							



9143 Philips Highway, Suite 200 Jacksonville, FL 32256 / Ph (904) 739-2277 / FAX (904) 739-2011

ALS Contact: Mandy Sullivan

Page 1 of 1

[illegible]

Date of Request: 22-JUN-2021
 Created By: PARRISH_J On: 22-JUN-2021
 Modified By: JASROTIA_P On: 23-JUN-2021
 Customer: NE-DIST
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District: Northeast District
 Event Description: Cross Creek bio kit

Send Coolers To:

Phone: 904-256-1700
 8800 Baymeadows Way West
 Suite 100
 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Cooler Ship EMail: Jeremy.M.Parrish@dep.state.fl.us

Priority: 3
 Event Status: S
 Criminal Investigation: NO
 Chemistry Request Reviewed By: WATTS_J On: 23-JUN-2021
 Biology Request Reviewed By: JASROTIA_P On: 23-JUN-2021
 Sampling Kit Required: YES Ship on: 16-JUL-2021
 Sampling Kit Shipped: YES On: 13-JUL-2021
 Sampling Kit Packed By: MCCOY_I
 Preservatives Needed: NO
 Date to Receive Samples: 26-JUL-2021
 Logged In By:

Send Final Report To:

8800 Baymeadows Way West
 Suite 100
 Jacksonville, FL 32256
 Attn: Jeremy Parrish
 Report Notification EMail: Jeremy.M.Parrish@dep.state.fl.us

Comments: Group A: (Surf-fresh) Nutrients, Bacteria

NE-ALS-ECQ

Packing Notes:

Bottle Group A (Water) With 1 Samples:

Bottle Type: P-1L	Number of Bottles: 1	Preserved With: ICE
ALKALINITY	Template: DEFAULT	(SM 2320 B-2011) Alkalinity in aqueous matrices as mg CaCO ₃ /L
TURBIDITY	Template: DEFAULT	(EPA 180.1 Rev. 2.0) Turbidity in aqueous matrices
W-CL-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Chloride in aqueous matrices
W-COLOR	Template: DEFAULT	(SM 2120 B-2011) True Color measured at 450 nm (not valid for NPDES monitoring)
Color (true)		
W-F	Template: DEFAULT	(SM 4500 F-C-2011) Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)
W-SO ₄ -IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices
W-TDS	Template: DEFAULT	(SM 2540 C-2011) Total Dissolved Solids in aqueous matrices
W-TSS	Template: DEFAULT	(SM 2540 D-2011) Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample
Bottle Type: BP-1L	Number of Bottles: 1	Preserved With: ICE
CHLSUITE-W	Template: DEFAULT	(SM 10200 H (mod.)) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry
Bottle Type: P-250ML-WI-THI	Number of Bottles: 1	Preserved With: ICE
NE-ALS-ECQ	Template: DEFAULT	(SM 9223 B Quanti-Tray) E. coli by Colilert/QT by ALS in Jacksonville
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: ICE And H ₂ SO ₄
W-NH ₃	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
W-NO ₂ NO ₃	Template: DEFAULT	(EPA 353.2 Rev. 2.0) Nitrite/Nitrate in aqueous matrices as mg N/L
W-S-A-TP	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Total Phosphorus in aqueous matrices as mg P/L
W-TKN	Template: DEFAULT	(EPA 351.2 Rev. 2.0) Total Kjeldahl Nitrogen in aqueous matrices
W-TOC	Template: DEFAULT	(SM 5310 B-2011) Nonpurgeable Organic Carbon in aqueous matrices
Bottle Type: P-125ML	Number of Bottles: 1	Preserved With: FILTER-ICE
W-PO ₄ -F	Template: DEFAULT	(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L