

From: [Homann, Lisa](#)
To: [Ayres, Joshua](#); [Reaves, Shawn D](#)
Cc: [Sprague, Kara](#)
Subject: FW: sampling time
Date: Friday, December 4, 2020 9:06:23 AM

See below

From: Parrish, Jeremy M. <Jeremy.M.Parrish@FloridaDEP.gov>
Sent: Friday, December 4, 2020 8:20 AM
To: Homann, Lisa <Lisa.Homann@FloridaDEP.gov>
Subject: RE: sampling time

It was 1015 sample time, so the field sheet is incorrect. The tablet is making errors on our field sheet it should say 1015.

Jeremy

Sent from my Verizon, Samsung Galaxy smartphone

----- Original message -----

From: "Homann, Lisa" <Lisa.Homann@FloridaDEP.gov>
Date: 12/4/20 6:12 AM (GMT-05:00)
To: "Parrish, Jeremy M." <Jeremy.M.Parrish@FloridaDEP.gov>
Subject: sampling time

Hi Jeremy,

Can you verify the correct sampling time on the chain of custody? The submittal form says 10:15 (page 7), but the sample form (page 6) says 11:15.

Thank you!

Lisa

Login Checklist

RQ-2020-11-23-34

Login Station ID: #4

Shipping Method: FedEx | UPS | HD | Greyhound

Date/Time of Receipt: 11/24/2020 @ 9:25

*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	
0.8C				4		X			9293 8007 5578

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 ☒ STR

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: Jylup

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: Jylup

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

Yes ☐ No ☐ NA ☒ Init: Jylup

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

Coolers Unpacked/Checked by: Jylup

Date: 11/24/2020

Event contains NCRs (Y/N)? None

Event ID:

UEC makeup/bio
NE-DIST-2020-11-24-01 (SMP)

Date Received: 24-NOV-2020 09:25

Login Checklist

Login Preservation Equipment

Lot # & Exp: Date

Additional Comments:

Infrared Thermometer ID:	#4 Temp Gun EXP:10/28/2021
pH Test Strips 0 – 6	N/A
pH Paper 0 – 3	N/A
pH Paper 0 – 13	231019 EXP:11/01/2022
Chlorine Test Strips	8261 EXP:07/2021

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: 11/23/2020 Collected By: Jeremy Parrish, Kim Appleby
Customer: NE-DIST Sampling Agency: FDEP
RQ: RQ-2020-11-23-34 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

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

Site Location	Field ID/WIN ID
Red House Br @ Heffron Rd	WIN ID/Field ID:  27010076
RELINQUISHED BY(SIGNATURE): <i>Jeremy Parrish</i>	RED HOUSE BR @ HEFFERON RD DATE/TIME: 11/23/20

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

Rec'd/Inspected Date:

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:

57264

RQ:

2011-23-34

Project:

VCL 11/2/20

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

10/14/20

DO FDEP 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.	J. Parnish	11/23/20	739	22.5	763.9	8.7	8.7	100.5	-	1.03	(P) F	(L) F
ICV	↓	11/23/20	739	22.5	764	8.7	8.7	100.6	-	1.03	(P) F	(L) F
CCV	Kim Appleby	↓	1531	22.7	763.2		8.73	101.2	-	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 µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	J. Parnish	11/23/20	741	200702B	9/21	1000	1000	(P) F	(L) F
ICV	↓	↓	742	200902A	9/21	100	102.1	(P) F	(L) F
CCV	Kim Appleby	↓	1534	191025A	11/20	1413	1411	(P) F	(L) F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 5%

pH FDEP 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.	J. Parnish	11/23/20	744	2001031	1/22	7.09	23.0	7.01	-57.3	(P) F	(L) F
Calibr.	↓	↓	745	200600	5/22	4.00	23.0	4.00	121.2	(P) F	(L) F
Calibr.	↓	↓	746	2002711	8/21	10.00	22.8	10.03	222.1	(P) F	(L) F
ICV	↓	↓	747	200600	5/22	4.00	22.8	3.94	120.1	(P) F	(L) F
CCV	Kim Appleby	↓	1536	2002711	8/2021	10.00	23.3	10.04	-224.6	(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: 10/14/20

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	J. Parnish	11/23/20	750	0.00	0.00	(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:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes / No

WIN Station Name: Red House Br @ Hefferon Rd

Date: 11/23/2020

WIN/Field ID: 27010076

WBID: 2472

ENR:

Latitude: 29.927

County: ST. JOHNS

Org ID: 21FLA

Longitude: -81.3482

Receiving Body of Water: Upper East Coast

RQ- 2020-11-23-34

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Jeremy Parrish	x		x		
☒	Kimberly Applebee		x		x	x
☐						
☐						

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:			

Duplicate Sample

Time Zone: EST	Time: N/A	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID:			

Blank

Time Zone:	Time: N/A	Field ID: N/A	(Blank Type_DDMMYYYY)
DI Source: N/A	Location: N/A		
DI Type: N/A	Equipment ID: N/A		

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-2020-11-23-34

Customer: WQAP

Project ID: SMP

Collected By: Jeremy Parrish, Kimberly Applebee

Field Report Prepared By: Jeremy Parrish

Sampling Agency: FDEP

Place Label Here						Comments: Bacteria samples submitted to contract lab				
WIN ID/Field ID:  27010076										
Location: Red House Br @ Hefferson 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 (PPTH)
11/23/2020	11:15 EST	6.52	73.3	21	7.19	0.3	0.5 ☒ VOB (S)	0.5	495	0.24
Central Lab please use top row for login purposes										
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 ☒ H2SO4*		☒ <2	1	A
		Lot # Sa9354050		Exp: 12/20/20						
Metals (P-500ML)		☐ W-ICPMS ☐ W-ICP ☐ W-HARD				☐ Ice ☐ HNO3*		☐ <2		
		Lot #		Exp:						
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A
		Filter Lot # Sa1j792h5								
		Syringe Lot #								
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				
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)				☐ Ice				
						☐ Ice				
Name: Jeremy Parrish Kimberly Applebee					Signature: 					Date: 11/23/20

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

SR #

ALS Contact: Mandy Sullivan

Page 1 of 1

[illegible]

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

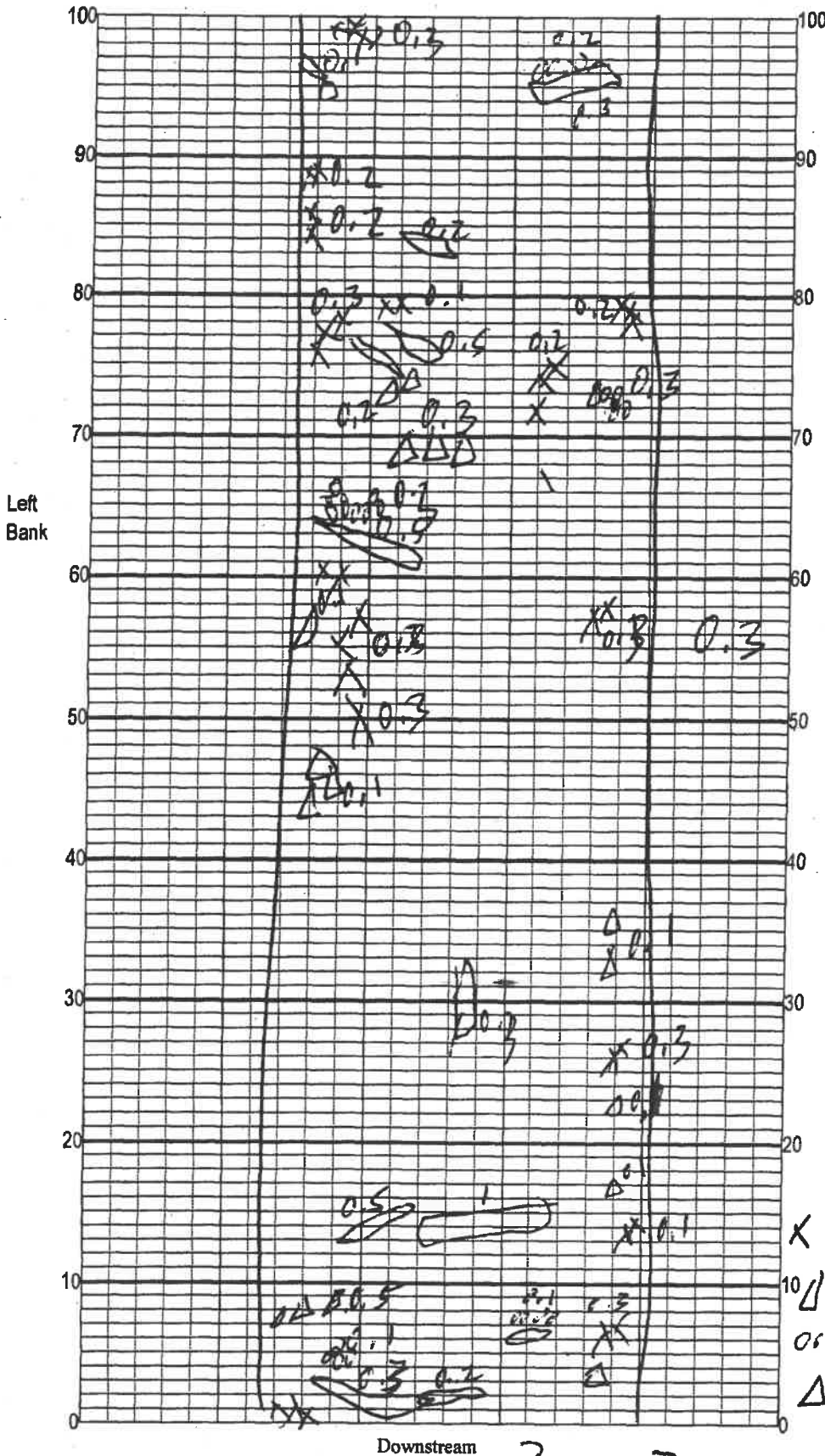
SAMPLING AGENCY: <u>FDER NE ROL</u>		STORET STATION NUMBER: <u>27010076</u>	DATE (MM/DD/YY): <u>11/23/20</u>	RECEIVING BODY OF WATER:
REMARKS:	COUNTY: <u>St Johns</u>	LOCATION: <u>Red house Hoffman Rd</u>	FIELD ID/NAME:	

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>13</u>	20 19 18 17 16	15 14 <u>13</u> 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>6</u>	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 <u>6</u>	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>18</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 <u>19</u> <u>18</u> 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>16</u> Primary Score <u>53</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 <u>16</u>	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging 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>20</u>	<u>20</u> 19 18 17 16 15 14 13 12 11	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>7</u> Left Bank <u>7</u>	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. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 <u>7</u> 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 <u>10</u> Left Bank <u>6</u>	Width of vegetation greater than 18 m <u>10</u> 9	Width of vegetation >12 to 18m 8 7 <u>6</u>	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 <u>10</u> Left Bank <u>9</u>	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 <u>9</u>	>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
Secondary Score <u>69</u> <u>122</u>	10 <u>9</u>	8 7 6	5 4	3 2 1

TOTAL SCORE

Date: <u>11/23/20</u>	Analyst: <u>Stam</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Redhouse Branch @ H. Feen

Date: 11/23/20

Sampler: _____

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

	Snags	2.5
	Roots/undercut banks	1.5
	Leaf Packs (or mats)	1
	Aquatic Macrophytes	1
	Pools	total # observed = _____ # range expected = _____

Average width 0.5 m
Average depth 0.5 m

Velocity measured at _____ meter mark.

WQ & chemistry taken at _____ 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:
 $X = 0.3 + 0.2 + 0.3 + 0.4 + 0.5 + 0.4 + 0.1$
 ≈ 2.5
 $\Delta = 0.5 + 1.5 + 0.2 + 0.5 + 0.3$
 ≈ 3
 $O = 0.2 + 0.3 + 0.3 + 0.2 \approx 1$
 $\Delta = 0.5 + 0.2 + 0.2 + 0.1 + 0.5 + 0.1$
 $\approx 2m$
 0.3m sec

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

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

SAMPLE ID _____ ORG ID 21FL6 LATITUDE _____
 COUNTY St. Johns STORET # 27010076 LONGITUDE _____
 DATE 11/23/20 TIME 1015 SAMPLING AGENCY F. DEP NE Rol
 SITE NAME Redhouse Branch @ Hatteras 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								Typical Width (m) <u>2.5</u> m wide Depth (m) <u>0.3</u> m/s Velocity (m/sec) <u>0.3</u> m/s
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>12</u> Right Bank: <u>718</u>				Hydrologic Modification Score (per FT 3101)				m/s m/s m/s
High Water Mark: <u>1</u> + <u>0.5</u> = <u>1.5</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				m deep <u>0.5</u> m deep m deep
Artificially ☒ No ☐ Mostly recovered, more sinuous Channelized: ☐ Some recovery ☐ Recent, severe				Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☒ Heavily Shaded ☐ Moderate Shaded (46-80%)				

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse			Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify): _____			Smothering of Substrates Sand Smothering: None ☒ Slight ☒ Moderate ☐ Severe ☐ Silt Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐ Algae Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐																																		
SUBSTRATE TYPE Assessment Tool: ☐ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon			WATER QUALITY <table border="1"> <thead> <tr> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top: <u>0.3</u></td> <td><u>21.0</u></td> <td><u>7.19</u></td> <td><u>6.52</u></td> <td><u>73.3</u></td> <td><u>495</u></td> <td><u>0.24</u></td> <td><u>0.5</u></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>☒ VOB</td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>TOTAL DEPTH <u>0.5</u></td> </tr> </tbody> </table>						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>21.0</u>	<u>7.19</u>	<u>6.52</u>	<u>73.3</u>	<u>495</u>	<u>0.24</u>	<u>0.5</u>	Mid:							☒ VOB	Bottom:							TOTAL DEPTH <u>0.5</u>
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>21.0</u>	<u>7.19</u>	<u>6.52</u>	<u>73.3</u>	<u>495</u>	<u>0.24</u>	<u>0.5</u>																																	
Mid:							☒ VOB																																	
Bottom:							TOTAL DEPTH <u>0.5</u>																																	
Woody Debris (Snags) <u>2.5</u> Undercut Banks / Roots <u>1.5</u> Leaf Packs or Mat <u>1</u> Aquatic Vegetation <u>1</u> Rock or Shell Rubble..... Sand..... Mud / Muck / Silt Other Other			Meter ID: <u>Sketch</u>			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____																																		
			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐																																		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☒ ☐ ☐ Fish: ☒ ☐ ☐ ☐ Aquatic Plants: ☐ ☐ ☒ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____			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 <u>Kim Appleby + Jeremy Parrish</u>					SIGNATURE: <u>[Signature]</u>		DATE: <u>11/23/20</u>																																	

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Redhouse @ H. Allen Rd</u>					County: <u>St. Johns</u>		Date: <u>11/23/20</u>		Investigators: <u>Kim Appleby & Jeremy Parrish</u>	
									STORET Station Number: <u>27010076</u>	
Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	
0	1	N			60	1	N			
	2					2				
	3					3				
	4					4				
	5			90		5				96
	6					6			✓	
	7					7			↓	
	8					8			↓	
	9					9			↓	
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5			90		5				92
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2			✓	
	3					3				
	4					4				
	5			94		5				95
	6					6				
	7					7			✓	
	8					8			↓	
	9					9			↓	
30	1	N			90	1	X			
	2					2			✓	
	3					3				
	4					4				
	5			96		5				96
	6					6				
	7					7				
	8					8			↓	
	9					9			↓	
40	1	X			100	1	N			
	2					2			✓	
	3					3				
	4					4				
	5			92		5				96
	6					6				
	7					7				
	8					8			↓	
	9					9			↓	
50	1				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%.					
	2									
	3									
	4									
	5			53						
	6			5.5						
	7									
	8									
	9									

Secchi depth 0.5
Estimated? ☒

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- 2020-11-23-34

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

Waterbody: Red River Gorge Hc/Heron	Date: 11/23/20	County: Sullivan	Storet Number: 27010076
Analyst: Jerry Brown	Signature: Jerry Brown		
Comments:			

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																	

Alternanthera philoxeroides					Micranthemum glomeratum				
Bacopa caroliniana					Micranthemum umbrosum				
Bacopa monnieri					Myriophyllum aquaticum				
Bidens bitis					Najas guadelupensis				
Boehmeria cylindrica					Nuphar luteum				
Centella asiatica					Orontium aquaticum	P P P	P P P P	P	
Ceratophyllum demersum					Panicum hemitomon				
Chara					Panicum repens				
Cicuta maculata					Panicum rigidulum				
Cladium jamaicense					Pistia stratioides				
Colocasia esculenta	P P P P	P P		P	Polygonum glabra				
Commelina diffusa					Polygonum hydropiperoides				
Commelina virginica					Polygonum punctatum				
Crinum americanum					Pontedaria cordata				
Diodia virginiana					Potamogeton illinoensis				
Eichhornia crassipes					Ruellia simplex				
Eleocharis (wispy viviparous)					Sagittaria striata				
Hydrilla verticillata					Sagittaria kurziana				
Hydrocotyle	P				Sagittaria lancifolia				
Hygrophila polysperma					Sagittaria latifolia				
Hymenocallis					Salvinia minima				
Lachnanthes caroliniana					Samolus parviflora				
Landoltia punctata					Saururus cernuus				
Lemna					Sparganium americanum				
Limnophila sessiliflora					Typha				
Ludwigia leptocarpa					Vallisneria americana				
Ludwigia palustris					Zizania aquatica				
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	X	X	X	X					X
>5 and ≤10% Macrophyte Coverage									
>10 and ≤25% Macrophyte Coverage									
>25 and ≤50% Macrophyte Coverage									
> 50% Macrophyte Coverage									

Date of Request: 06-NOV-2020
 Created By: PARRISH_J On: 06-NOV-2020
 Modified By: JASROTIA_P On: 06-NOV-2020
 Customer: NE-DIST
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District: Northeast District
 Event Description: UEC makeup/bio

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: A
 Criminal Investigation: NO
 Chemistry Request Reviewed By: WATTS_J On: 06-NOV-2020
 Biology Request Reviewed By: JASROTIA_P On: 06-NOV-2020
 Sampling Kit Required: NO Ship on:
 Sampling Kit Shipped:
 Sampling Kit Packed By:
 Preservatives Needed: NO
 Date to Receive Samples: 23-NOV-2020
 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:
 None

Bottle Group A (Water) With 2 Samples:

Bottle Type: P-1L	Number of Bottles: 2	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: 2	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: 2	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: 2	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: 2	Preserved With: FILTER-ICE

Bottle Group A (Water) With 2 Samples:

Bottle Type: P-125ML

Number of Bottles: 2

Preserved With: FILTER-ICE

W-PO4-F

Template: DEFAULT

(EPA 365.1 Rev. 2.0) Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L