

Login Checklist

RQ- 2020-12-14-15

Login Station ID: #5

Shipping Method: FedEx | UPS | HD | Greyhound

Date/Time of Receipt: 12/ 18 /20 @ 9:55

*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	
2.8				12		✓			9293 8007 5902

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: HK

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: 12/ 18 /20 Event contains NCRs (Y/N)? N

Event ID:

Nassau SCI's
NE-DIST-2020-12-18-01 (SMP)

Date Received: 18-DEC-2020 09:55

Login Checklist

Login Preservation Equipment

Lot # & Exp: Date

Additional Comments:

Infrared Thermometer ID:	Temp Gun #5 EXP:10/28/2021
pH Test Strips 0 – 6	5/15/21 LOT#213316BV
pH Paper 0 – 3	
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: 12/17/2020
Customer: NE-DIST
RQ: RQ-2020-12-14-15
Collected By: Jeremy Parrish, Kelly McDonald
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

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

Site Location	Field ID/WIN ID
Calkins Ck Trib @ Hamp Register Rd	 19010042

RELINQUISHED BY(SIGNATURE): *Kelly A McDonald*

DATE/TIME: 12/17/2020 1600

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By: *hvk*

Rec'd/Inspected Date: *12-18-20/0955*

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: DESI RQ: 2020-12-14-15 Project: SCI Calhoun

- 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 10/14/2020

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.	J. Parnish	12/17/20	742	20.2	761.4	9.1	9.07	100.3	-	1.058	P/F	L/F
ICV	J	J	743	20.3	761.4	9.1	9.08	100.3	-	1.058	P/F	L/F
CCV	J. Parnish	12/17/20	1422	20.8	762.4	9.0	9.00	100.6	-	-	P/F	L/F
CCV												

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 umhos/cm	Meter Reading umhos/cm	Pass / Fail	Lab / Field
Calibr.	J. Parnish	12/17/20	747	2014023	9/21	1000	1000	P/F	L/F
ICV	J	J	748	2014023	9/21	100	100	P/F	L/F
CCV	J. Parnish	12/17/20	1424	2009022	9/21	1413	1420	P/F	L/F
CCV									

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.	J. Parnish	12/17/20	749	2001031	1/22	7	21.8	7.00	38.6	P/F	L/F
Calibr.	J	J	750	2006006	5/22	4	21.6	4.00	142.0	P/F	L/F
Calibr.	J	J	751	2006025	12/21	10	21.9	10.0	203.90	P/F	L/F
ICV	J	J	752	2006006	5/22	4	21.7	4.01	138.70	P/F	L/F
CCV	J. Parnish	12/17/20	1426	2006006	12/21	10	21.1	10.03	207	P/F	L/F
CCV											

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 _____, 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	J. Parnish	12/17/20	759	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:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
☒ Yes / No

WIN Station Name: Calkins Ck Trib @ Hamp Register Rd

Date: 12/17/2020

WIN/Field ID: 19010042

WBID: 2274

ENR:

Latitude: 30.3305

County: BAKER

Org ID: 21FLA

Longitude: -82.2434

Receiving Body of Water: Nassau - St. Marys

RQ- 2020-12-14-15

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Check
☒	Jeremy Parrish		x		x	x
☒	Kelly McDonald		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# DESI		
Photos: YES	Flow: FLOW	Tide:	Tide Times: High: Low:
Biological Samples Collected: ☐ None ☒ HA ☒ SCI ☒ RPS ☐ Algae ID ☒ LVS ☐ LVI Other:			
SBIO ID Numbers:			
Notes: CODE R FOR RECENT RAIN. V TURBID. FLOW AND WATER LEVEL HIGHER THAN USUAL.			

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-2020-12-14-15

Customer: WQAP

Project ID: SMP

Collected By: Jeremy Parrish, Kelly McDonald

Field Report Prepared By: Jeremy Parrish

Sampling Agency: FDEP

Place Label Here						Comments: Microbiology sample(s) submitted to contract laboratory				
WIN ID/Field ID:  19010042										
Location: Calkins Ck Trib @ Hamp Register 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)
12/17/2020	1000 EST	7.44	70.6	13	5.12	0.05	0.102 ☒ VOB (S)	0.102	53.7	0.02
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 #		Sa0293040		Exp:		10.19.21		
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A
		Lot #		Na9354060		Exp:		12.20.20		
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A
		Filter Lot #		R9ba86875						
		Syringe Lot #								
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	A
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-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			3	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			1	A
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			3	A
						☐ Ice				
Name: Jeremy Parrish Kelly McDonald				Signature: <i>Kelly A McDonald</i>				Date: 12/17/2020		

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

SAMPLE ID _____ ORG ID 21FLA LATITUDE 30.3305
 COUNTY Bayer STORET # 19010042 LONGITUDE -82.2434
 DATE 12/17/2020 TIME 1000 SAMPLING AGENCY FDEP NEROX
 SITE NAME Calkins CK Trib @ Hamp Register Rd
 FIELD ID/NAME _____ RECEIVING BODY OF WATER Calkins Creek km

RIPARIAN ZONE / STREAM FEATURES

Nassau - St. Marys

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) Depth (m) Velocity (m/sec) Transect _____ m wide _____ m/s _____ m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>12-18</u> Right Bank: <u>12-18</u>				Hydrologic Modification Score (per FT 3101) ☐				
High Water Mark: <u>0.9</u> + <u>0.34</u> = <u>1.3</u> (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 ☐ 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																																										
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ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: <u>10m</u> ☒ ☒ ☐ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			System Type : Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) _____ AMBIENT FIELD CONDITIONS / NOTES : <u>< 2m² vegetation</u> <u>high water/flow due to recent rain</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																										

SAMPLING TEAM J. Parrish, K. McDonald **SIGNATURE** Kellman **DATE** 12/17/20

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 Chasmb @ Hwy 12

Date: 12/17/20

Sampler SP1KM

100 m	Latitude _____	Longitude _____
0 m	Latitude _____	Longitude _____
Substrates: Code key, draw proportionate habitat abundance		%
	Snags	5
	Roots/undercut banks	1.5
	Leaf Packs (or mats)	2
	Aquatic Macrophytes	_____
	_____	_____
	_____	_____
	Pools	_____
total # observed = _____		
# range expected = _____		
Average width	1.5 m	
Average depth	0.5 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:

10. $\text{total} = 0.10 \times 0.3 + 0.2 \times 0.2$
 $\text{total} = 0.03 + 0.04 = 0.07$
 $\text{Sm} = 0.07$

0.3 m, depth

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

SAMPLING AGENCY FDEP NEROC		STORET STATION NUMBER 19010042	DATE (MM/DD/YY) 12/17/20	RECEIVING BODY OF WATER NASSAU - St. Marys
REMARKS high water / flow due to recent rain	COUNTY Nassau	LOCATION calhoun lake Hagerman		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>8</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>8</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 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>20</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec 20 19 18 17 16	Max. observed at typical transect: > 0.1 to 0.25 m/sec 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 10 9 8 7 6	Max. observed at typical transect: < 0.05 m/sec, or spate occurring: > 1 m/sec 5 4 3 2 1
Habitat Smothering <u>8</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 4 3 2 1
Primary Score <u>44</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	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>19</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	Bankfull > 60% of bank height. Slope of bank < 50° 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 > 50°. Bankfull is below the woody root zone with raw, eroded areas.
Right Bank <u>6</u> Left Bank <u>6</u>	10 9	8 7 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>9</u> Left Bank <u>9</u>	10 9	8 7 6	5 4	3 2 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>7</u> Left Bank <u>7</u>	10 9	8 7 6	5 4	3 2 1
Secondary Score <u>61</u>	10 9	8 7 6	5 4	3 2 1

TOTAL SCORE

Date <u>12/17/20</u>	Analyst <u>[Signature]</u>	Signature <u>[Signature]</u>
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: CAIKINS cr Tribe Harold Register Rd County: Baker Date: 12/17/20 Investigators: J. Parrish, K. McDonald

STORET Station Number: 19010042

Transec 1 (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transec 1 (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			96		5			84
	6					6			
	7					7			
	8					8			
	9					9			
10	1				70	1			
	2					2			
	3					3			
	4					4			
	5			96		5			96
	6					6			
	7					7			
	8					8			
	9					9			
20	1				80	1			
	2					2			
	3					3			
	4					4			
	5			95		5			85
	6					6			
	7					7			
	8					8			
	9					9			
30	1				90	1			
	2					2			
	3					3			
	4					4			
	5			88		5			96
	6					6			
	7					7			
	8					8			
	9					9			
40	1				100	1			
	2					2			
	3					3			
	4					4			
	5			86		5			57
	6					6			
	7					7			
	8					8			
	9					9			
50	1					1			
	2					2			
	3					3			
	4					4			
	5			94		5			
	6					6			
	7					7			
	8					8			
	9					9			

Secchi depth 0.12
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 ☒
RO- 2020-12-14-15

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

sand bottom
96
39
57

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: <u>Calkins Creek</u>	Date: <u>12/17/20</u>	County: <u>Baker</u>	Store Number: <u>19010047</u>
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Analyst: K McDonald

Signature: Kellin McDonald

Comments: $< 2 \text{ m}^2$ aquatic vegetation

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.

[illegible]



CHAIN OF CUSTODY / LABORATORY ANALYSIS REQUEST FORM

9143 Phillips Highway, Suite 200 Jacksonville, FL 32256 / PO#904 719-2277 / FAX (904) 719-2011

Page 1 of 1

[illegible]

Date of Request: 19-NOV-2020
 Created By: PARRISH_J On: 19-NOV-2020
 Modified By: JASROTIA_P On: 19-NOV-2020
 Customer: NE-DIST
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District: Northeast District
 Event Description: Nassau SCI's

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: 19-NOV-2020
 Biology Request Reviewed By: JASROTIA_P On: 19-NOV-2020
 Sampling Kit Required: YES Ship on: 04-DEC-2020
 Sampling Kit Shipped: YES On: 30-NOV-2020
 Sampling Kit Packed By: SHAIK_A
 Preservatives Needed: NO
 Date to Receive Samples: 14-DEC-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: Nutrients, Metals, Tracers, Q-PSNP-TQ, Bacteria
 Group B: SCI, Algae_ID

NE-ALS-ECQ

Packing Notes:
 none

Bottle Group A (Water) With 5 Samples:

Bottle Type: P-1L	Number of Bottles: 5	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: 5	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: 5	Preserved With: ICE
NE-ALS-ECQ	Template: DEFAULT	(SM 9223 B Quanti-Tray) E. coli by Colilert/QT by ALS in Jacksonville
Bottle Type: BG-500ML	Number of Bottles: 5	Preserved With: ICE
W-E8321-DI	Template: DEFAULT	(EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
W-E8321-MS	Template: DEFAULT	(EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
Bottle Type: P-500ML	Number of Bottles: 5	Preserved With: HNO ₃
W-HARD	Template: DEFAULT	(SM 2340B) Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃
Hardness		
W-ICP	Template:	(EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects

Bottle Group A (Water) With 5 Samples:

Bottle Type: P-500ML	Number of Bottles: 5	Preserved With: HNO3
W-ICP	Template:	(EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects

Barium
Calcium
Iron
Magnesium
Potassium
Sodium
Zinc

W-ICPMS	Template:	(EPA 200.8 Rev. 5.4) Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects
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*Boron
Aluminum
Antimony
Arsenic
Beryllium
Cadmium
Chromium
Copper
Lead
Nickel
Selenium
Silver
Thallium

Bottle Type: P-500ML	Number of Bottles: 5	Preserved With: ICE And H2SO4
W-NH3	Template: DEFAULT	(EPA 350.1 Rev. 2.0) Ammonia in aqueous matrices as mg N/L
W-NO2NO3	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: 5	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

Bottle Type: BG-1L	Number of Bottles: 12	Preserved With: ICE
W-PSNP-TQ	Template: DEFAULT	(EPA 8270E) Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS

Bottle Group B (Biological) With 5 Samples:

Bottle Type: PJ-2L	Number of Bottles: 10	Preserved With: Formalin
MI-FW-QLDC	Template: DEFAULT	(SOP-IZ06) No. Taxa of FW macroinverts, qual samp, 20 dipnets.
Bottle Type: PT-50ML	Number of Bottles: 5	Preserved With: ICE
ALGAL_ID	Template: DEFAULT	(SOP-AB05) Qualitative assessment of algal taxa present without counts

* - The laboratory is not NELAP certified for this analyte/method, or certification is not applicable.