

Login Checklist

RQ- 2023-04-10-39

Login Station ID: 5

Shipping Method: FedEx | UPS | HD | Greyhound

Date/Time of Receipt: 4/13/23 @ 9:09

*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				11		X			5850 4734C 452

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 X No _____

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

Yes X No _____

CONTAINER CHECK

Evidence Tape on Bottles?

Yes _____ No _____ NA X Evidence Tape intact? Yes _____ No _____

If Criminal, photographs taken?

Yes _____ No X Containers intact? Yes X No _____

Caps on tight?

Yes X No _____

Sufficient Sample Volume:

Yes X 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 X Init: C-P

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 X No _____ NA _____ Init: C-P

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

Yes _____ No _____ NA X Init: C-P

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

Coolers Unpacked/Checked by: C-P

Date: 4/13/23 Event contains NCRs (Y/N)? N

Event ID: NW-DIST-2023-04-13-02 (SMP)
Date Received: 13-APR-2023 09:09

Login Checklist

Login Preservation Equipment

Lot # & Exp: Date

Infrared Thermometer ID:	221426058 10/17/23
pH Test Strips 0 – 6	223819AV 08/30/23
pH Paper 0 – 3	NA
pH Paper 0 – 13	210620 4/15/2023
Chlorine Test Strips	0070 03/2023

Additional Comments:

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# _____

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
CHAIN OF CUSTODY FORM

Date: 4/12/2023
Customer: NW-DIST
RQ: RQ-2023-04-10-39
Collected By: Nathan Mulkey, Myranda Butler
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
Cowdevil Creek upstream of CR-196	 G5NW0011

RELINQUISHED BY(SIGNATURE):



DATE/TIME: 4/12/2023
1600 CEN

THIS SECTION TO BE COMPLETED BY LABORATORY

Rec'd/Inspected By:

Chui P

Rec'd/Inspected

Date: 4-13-23



RQ-2023-04-10-39	Collected By: Nathan Mulkey, Myranda Butler
Customer: FDEP	Field Report Prepared by: Nathan Mulkey, Myranda Butler
Project ID: SMP	Sampling Agency: FDEP

WIN ID/Field ID: 	Comments: Microbiology sample(s) submitted to contract laboratory.
WIN ID/Field ID: G5NW0011	

Location: Cowdevil Creek upstream of CR-196

Matrix: Fresh

(Check One) ☒ Grab ☐ Composite

Date and Time {CEN}	DO (mg/L)	DO (%SAT)	Temp. °C	pH	Sample Depth (m)	Secchi Depth	Total Depth (m)	Sp COND (µmhos /cm)	Salinity (PPTH)					
4/12/2023 1000	6.07	63.4	17.5	5.32	0.1	0.2	0.2	29.2	0.01					
Parameter Suite		Parameter Methods				Preservation		pH Check		# Bottles sent to Lab	Bottle Group			
Preserved Nutrients (P-500ML)	X	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				X	Ice	X	H2SO4*	<2	1	A		
		Lot #		3013020		Exp:	01/25/24							
Metals (P-500ML)	X	W-ICPMS		X	W-ICP	X	W-HARD	X	Ice	X	HNO3*	<2	1	A
		Lot #		2230040		Exp:	09/01/23							
Filtered Nutrients (P125ML)	X	W-PO4-F		X	Field Filtered 0.45 um Filter		X	Ice			1	A		
		Filter Lot #	1234	Syringe Lot #	17460495									
BOD (BP-1L)		OV-BODUNIN					Ice							
Chlorophyll (BP-1L)	X	CHLSUITE-W				X	Ice				1	A		
Physical/Aggregate (Fresh) (P-1L)	X	Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W- TDS				X	Ice				1	A		
Physical/Aggregate (Marine) (P-1L)		Alkalinity / W-F / W-TSS / TURBIDITY					Ice							
Macroinvertebrates (PJ-2L)		MI-FW-QLDC	Formalin Lot #		1234		X	Formalin				1	B	
Periphyton (PT-50ML)		ALGAE-ID					Ice							
Microbiology (Contract Lab Bottle)	X	E Coli			F Coli		Enterococci	X			Ice	1	A	
	X	Contract Lab												
Molecular (QPCR-P-500ML)		PCR- HF183			PCR-BacR		PCR-DG3		Ice					
		PCR-GULL2			PCR-GFD									
Tracers (BG-500ML)		W-E8321-DI			W-E8321-MS			Ice						
Pesticides (BG-500ML) (BG-1L)	X	W-E8321-DI	X	W-E8321-MS		X	W-PSNP-TQ	X	Ice	MCAA Exp.	MCAA Lot#	5	A	
		W-PCL-TQ-R		W-CARB-AA (5 ml of MCAA Buffer Solution)		W-CT-CL-R								
		W-TR-SQ-R		W-PCB-TQ-R										
Phytoplankton		DTY-QN-C			PKD-QN-BV			Ice						
DOC		W-DOC		Field Filtered 0.45 um Filter			Ice		H2SO 4*	<2				
			Acid Preservative Expiration Date											
			Acid Preservative Lot Number											



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV
Yes / No

WIN Station Name:	Cowdevil Creek upstream of CR-196				Sample Date:	4/12/2023			
WIN / Field ID:	G5NW0011	ORG ID:	21FLPNS	ENR:			Latitude:	30.68098	
County:	Escambia	WBID:	345	STREAM				Longitude:	-87.35678
Receiving Body of Water:	Perdido River				RQ-	2023-04-10-39			

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

Sampling Equipment			
x	Sample Container		Carboy
	Dipper		Van Dorn
x	Syringe		Pole
Syringe Lot# 1746049 5		Filter Lot# 1234	
Secchi Equipment ID:		Secchi - 2	
Collection Method			
x	Wading	Canoe/Kayak	
	From Shore	Electric Motor	
		Gasoline Motor	
Depth Measured With		Meter	

Water Level:	Low
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	Yes
Meter ID:	155077 (ProDSS)
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
CEN	1000	0.2	0.1	6.07	63.4	17.5	5.32	0.2	29.2	0.01
VOB (s)										

Biological Samples Collected: HA LVS RPS SCI

SBIO Visit ID: 86360 HA ID: 18190 RPS ID: 10079 Macrophyte ID: 12415 LIMS Sample ID Entered Into The Macrophyte Module: 2400059

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli			ICE			
	Contract Lab	UWF					
Chlorophyll	CHLSUITE-W			ICE			
Physical/Aggregate Nutrients	ALKALINITY, TURBIDITY, W-F, W-TSS			ICE			
	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			ICE			
Filtered Nutrients	W-PO4-F	Field Filtered 0.45 µm Filter		ICE	Syringe Lot#:17460495; Filter Lot#:1234		
Acid Preserved Nutrients	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	3013020	01/25/24
Metals	W-ICPMS	W-ICP	W-HARD	ICE	HNO3**	2230040	09/01/23
Organics (LC)	W-E8321-DI	W-E8321-MS			MCAA***		
Macroinvertebrates	MI-FW-QLDC			Formalin	1234		
Organics (GC)	W-PSNP-TQ			Ice	*2.0 ml of H2SO4 Used Unless Noted Otherwise **2.0 ml of HNO3 Used Unless Noted Otherwise		
Molecular							
Periphyton							
Phytoplankton							
BOD							
DOC					SyringeLot#		FilterLot#
Other(s)							
Field Comments:	/ SCI Collection Time: 1100						
Comments on COC:	Microbiology sample(s) submitted to contract laboratory.						
Relinquish Date:	04/12/2023	Signature:					

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)

Save Field Sheets on Network: _____ (Initials/Date) Migrate Data to WIN: _____ (Initials/Date)

Site Name: Cowdevil Creek upstream of CR-195
Storet GSNW0011 Field ID GSNW0011
Visit ID 86360
RPS ID 10079
Macro ID 12415
HA ID 18190

Date: 4/12/23
Project: SMP
RQ: 2023-04-10-39
LIMS ID: 2400059
WBID: 345

☒ SCI

☐ RPS/LVS Only

☒ Sample Site Created in SBIO

☒ Phys/Chem entered in SBIO

☒ HA entered in SBIO

Initial FB, 4/18/23

☒ Date and Initial QA: 5/22/23 JS

☒ RPS entered in SBIO

Initial FB, 4/18/23

☒ Date and Initial QA: 5/22/23 JS

☒ LVS entered in SBIO

Initial FB, 4/18/23

☒ Date and Initial QA: 5/22/23 JS

☐ < 2 m² vegetation

☒ Plants getting verified

Date submitted: 4/12/23

☒ Plants verified

Date returned: 4/12/23

☒ RPS authorized in SBIO

☒ Date and Initial: 5/22/23 FB

☒ RPS score: 0.0

☒ Macro authorized in SBIO

☒ Date and Initial: 5/22/23 FB

☒ LVS Score: FLEPPC 0, Aug 6.0 5.72

☒ SCI complete: 7/05/23 P. Jago
P. Jasrotia

SCI Score: 27

☒ Add SBIO-ID, HA-ID, RPS-ID, MACROPHYTE-ID and LIMS# to field sheet in database

☐ E. coli samples shipped to Tallahassee Lab for analysis.

HA/RPS/LVS
SCI

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

SAMPLE ID 86360 ORG ID 21FLPNS LATITUDE 30.68092
 COUNTY Essex WIN ID/STORET # 65NW0011 LONGITUDE 87.35687
 DATE 4/12/23 TIME 1000 CTZ _____ SAMPLING AGENCY FL DEP - NWROC
 SITE NAME Condens Creek RQ 2023-04-10-39
 FIELD ID/NAME 65NW0011 RECEIVING BODY OF WATER Pacheco River WBID 345 Project: SMP

RIPARIAN ZONE / STREAM FEATURES

WBID: 345

LIMS ID: 2400059

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) <u>N/A</u>
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 <u>1.0</u> m wide <u>0.21</u> m/s <u>0.21</u> m/s <u>0.21</u> m/s <u>0.2</u> m deep <u>0.2</u> m deep <u>0.2</u> m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>7/8</u> Right Bank: <u>7/8</u>				Hydrologic Modification Score (per FT 3101) <u>3-4</u>				
High Water Mark: _____ + _____ = _____ (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		
Woody Debris (Snags) <u>17.5</u> <u>4</u> <u></u> Undercut Banks / Roots <u>26.0</u> <u>4</u> <u></u> Leaf Packs or Mat <u>4.9</u> <u>4</u> <u></u> Aquatic Vegetation <u>24.2</u> <u>4</u> <u></u> Rock or Shell Rubble.. <u></u> <u></u> <u></u> Sand <u>15.14</u> <u>4</u> <u></u> Mud / Muck / Silt <u></u> <u></u> <u></u> Other <u>27.4</u> <u></u> <u></u> Other <u></u> <u></u> <u></u>			Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.1</u> <u>17.5</u> <u>5.32</u> <u>6.07</u> <u>63.4</u> <u>29.2</u> <u>0.01</u> <u></u> Mid: <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> Bottom: <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> Meter ID: <u>155071</u> Water Odors Normal ☐ Petroleum ☐ Sewage ☐ Chemical ☒ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____ Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____		
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☒ ☐ ☐ Aquatic Plants: ☐ ☐ ☒ ☐ Iron/Sulfur Bacteria: ☐ ☐ ☒ ☐			Water Surface Oils Normal ☐ Sheen ☒ Globs ☒ Slick ☒ Other ☐ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity Clear ☐ Slightly Turbid ☐ Turbid ☒ Opaque ☐		
System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☐			AMBIENT FIELD CONDITIONS / NOTES: <u>Upstream Turf farms (?)</u> <u>3. It covered bedrock majority of habitat.</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.		

SAMPLING TEAM:

Nathan Mulvey / Miranda Butler

SIGNATURE:

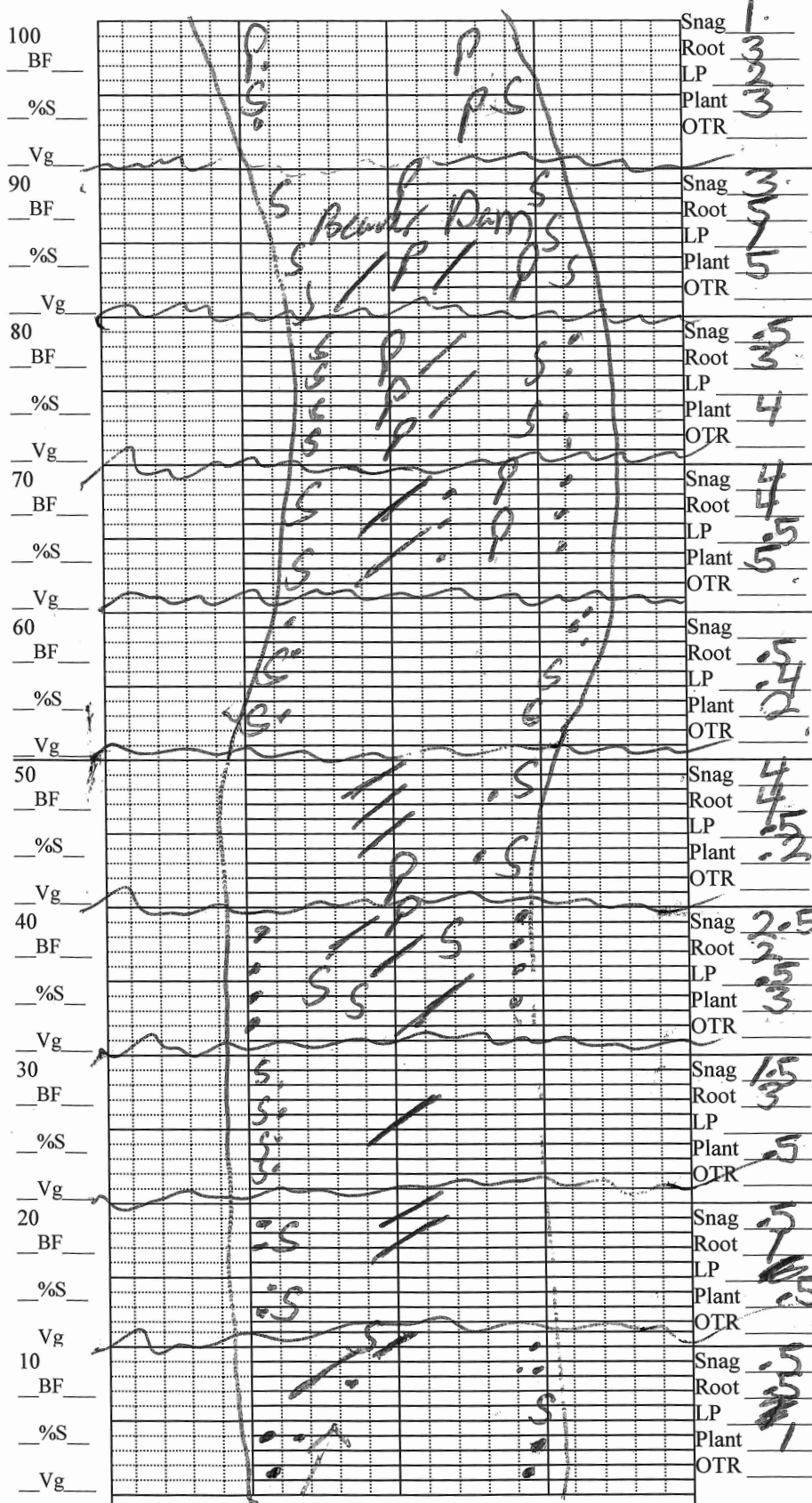
Nathan Mulvey

DATE:

4/12/23

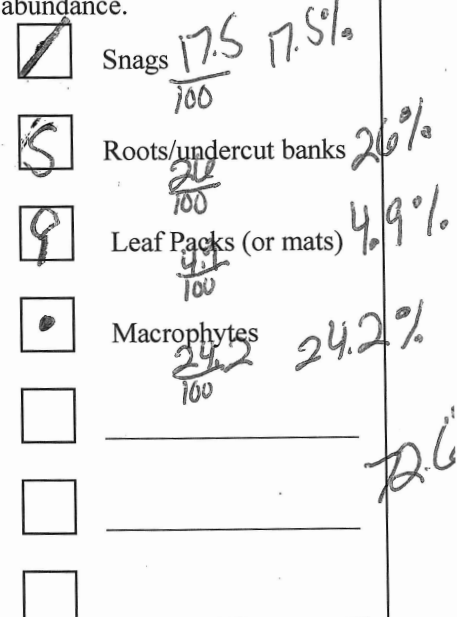
Stream/River Habitat Sketch Sheet, Form FD 9000-4 (June 1, 2001)

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



WIN ID G5NW0004

Substrates: Code key,
draw proportionate habitat
abundance.



Velocity: 1/4
Note where velocity
measures were taken 70 m

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

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

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

Average width 1.0 m

Average depth 0.2 m

WQ & chemistry taken @ 0 m

Station Name: Cowden T. Creek
upstream of CR-195

Project: SMP

Sampled By/Date: 4/12/2023

0 m Latt. 30.68092

0 m Long. 87.35687

100 m Latt. 30.68167

100 m Long. 87.35638

Left
Bank

Downstream

Iron
Sulfur
Back

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

SAMPLING AGENCY: DEAR-NWROC. 21FLPNS		STORET STATION NUMBER: <u>G5NW0011</u>	DATE (MM/DD/YY): <u>04/12/23</u>	RECEIVING BODY OF WATER: <u>Perdido River</u>
REMARKS:	COUNTY: <u>Escambia</u>	LOCATION: <u>Condovil Creek</u>	FIELD ID/NAME: <u>G5NW0011</u>	
WBID <u>345</u>				

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <u>16</u>	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 <u>16</u>	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 <u>20</u>	Greater than 30% major productive habitat present at site <u>20</u> 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>14</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 <u>14</u> 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>2</u> ----- Primary Score <u>52</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 <u>2</u> 1
Secondary Habitat Components Artificial Channelization <u>7</u>	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. 20 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 <u>7</u> 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 <u>7</u> Left Bank <u>45</u>	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. 10 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 <u>7</u> 6	Only meets 1 of the 3 requirements for optimal bank stability. <u>5</u> 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>9</u> Left Bank <u>9</u>	Width of vegetation greater than 18 m 10 <u>9</u>	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 <u>8</u> Left Bank <u>8</u> ----- Secondary Score <u>53</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 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. <u>8</u> 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

105 TOTAL SCORE

Date: <u>4/12/23</u>	Analyst: <u>Nathan Mulky</u>	Signature: <u>Nathan Mulky</u>
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SBIO ID: 86360
62-160.800, F.A.C.

HA ID: 18190

Revision Date: March 1, 2014

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Cowardin Creek County: Essex Date: 4/12/23 Investigators: Nathan Milken

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	No	45	60	1	N	No	65
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
10	1	N	No	67	70	1	N	No	60
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
20	1	N	No	55	80	1	N	No	76
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
30	1	N	No	60	90	1	N	No	70
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
40	1	N	No	55	100	1	N	No	76
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
50	1	N	No	55		1	N	No	
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								

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%.

STORET Station Number:

GSNW0011

Secchi depth 0.2
Estimated?

points ranked 4-6 4
total points assessed 44
% points ranked 4-6 9

Check accompanying data collected at same site/date.

Algal mat sample ☒
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☒
Water sample ☒

RQ-2023-04-10-39

Algal Thickness Rank

N	rough, no algae, slimy, algae up to 1mm
3	>1mm - 6mm
4	>6mm - 20mm
5	>20mm - 10 cm
6	>10 cm

SBIO Visit ID. 86360

RPS ID. 10079

RPS Score 0.0

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET			
Waterbody: <u>Cowdrey Creek</u>	Date: <u>4/12/23</u>	County: <u>Essex</u>	Storet Number: <u>65M0011</u>
Analyst: <u>Myranda Butler</u>	Signature: <u>Myranda Butler</u>		
Comments: <u>taxa taken back to office for ID</u>			

[illegible]

VPDB ID 12415

FLEPPC 0%, Avg CofC 5.72

page 1 of 2

Date of Request: 16-MAR-2023
 Created By: SLADE_C On: 16-MAR-2023
 Modified By: JASROTIA_P On: 22-MAR-2023
 Customer: NW-DIST
 Project: SMP
 Division: Division of Environmental Assessment and Restoration
 District: Northwest District NWROC
 Event Description: SCI

Send Coolers To:

Phone: 850-595-0567
 160 W Government Street
 Suite 208
 Pensacola, FL 32502-5794
 Attn: Stopher Slade
 Cooler Ship EMail: christopher.slade@dep.state.fl.us

Priority: 3
 Event Status: S
 Criminal Investigation: NO
 Chemistry Request Reviewed By: AYRES_J On: 22-MAR-2023
 Biology Request Reviewed By: JASROTIA_P On: 22-MAR-2023
 Sampling Kit Required: YES Ship on: 31-MAR-2023
 Sampling Kit Shipped: YES On: 27-MAR-2023
 Sampling Kit Packed By: PENDLETO_C
 Preservatives Needed: NO
 Date to Receive Samples: 10-APR-2023
 Logged In By:

Send Final Report To:

160 W Government Street
 Suite 208
 Pensacola, FL 32502-5794
 Attn: Myranda Butler
 Report Notification EMail:
 Christopher.slade@floridaDEP.gov;myranda.k.butler@floridaDEP.gov

Comments: Group A: Nutrients w/ PO4, Metals, Tracers, Limited Pest, Contract Lab Bacteria
 Group B: SCI, Algae_ID

Packing comments:

Fedex Labels

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 CaCO3/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	(DEP SOP: NU-094-1) 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-SO4-IC	Template: DEFAULT	(EPA 300.0 Rev. 2.1) Sulfate in aqueous matrices
W-TDS	Template: DEFAULT	(SM 2540 C-2015) Total Dissolved Solids in aqueous matrices
W-TSS	Template: DEFAULT	(SM 2540 D-2015) 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 10150 B) Phytoplankton chlorophyll-a corrected, uncorrected, and phaeophytin by spectrophotometry
Bottle Type: TEST HAS NO	Number of Bottles: 1	Preserved With: ICE
NW-UWF-ECQ	Template: DEFAULT	(SM 9223 B Quanti-Tray) E. coli by Colilert-18/QT by UWF in Pensacola
Bottle Type: BG-500ML	Number of Bottles: 1	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: SMP	(EPA 8321B) Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS
Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: HNO3
W-HARD	Template: DEFAULT	(SM 2340 B-2011) Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3
Hardness		
W-ICP	Template: SMP-FRESH	(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 1 Samples:

Bottle Type: P-500ML	Number of Bottles: 1	Preserved With: HNO3
W-ICP	Template: SMP-FRESH	(EPA 200.7 Rev. 4.4) Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects

Calcium
Iron
Magnesium
Potassium
Sodium
Strontium
Tin
Titanium
Vanadium
Zinc

W-ICPMS	Template: DEFAULT	(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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Aluminum
Antimony
Arsenic
Barium
Beryllium
Boron
Cadmium
Chromium
Cobalt
Copper
Lead
Manganese
Molybdenum
Nickel
Selenium
Silver
Thallium

Bottle Type: P-500ML	Number of Bottles: 1	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: 1	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-500ML	Number of Bottles: 4	Preserved With: ICE
W-PSNP-TQ	Template: DEFAULT	(EPA 8270E) Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS
W-TR-SQ-R	Template: DEFAULT	(EPA 8270E) Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM

Bottle Group B (Biological) With 1 Samples:

Bottle Type: PJ-2L	Number of Bottles: 2	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: 1	Preserved With: ICE
ALGAL_ID	Template: DEFAULT	(SOP-AB18) Qualitative assessment of algal taxa present without counts

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