



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes ☒ No ☐

WIN Station Name: Little Rocky Creek upstream of Eglin Rd 200

Date: 10/29/18
(mm/dd/yyyy)

WIN/ Field ID: G3NW0104

WBID: 476

Latitude: 30.577123

(Decimal Degrees)

County: Okaloosa

ORG ID: 21FLPNS

Longitude: -86.388189

(Decimal Degrees)

Receiving Body of Water: Rocky Creek

RQ-2018- 05-28- 24

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
Frank Butera					☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole
Mike King					☒	☒	☒	☒	☒	☐ Carboy	☒ Syringe	
										☐ Dipper	☐ Other	
										Depth Measured with <u>NYS DIPNET</u>		
										Equipment ID		
										Collection Method		
										☒ Wading	☐ Canoe/Kayak	
										☐ From Shore	☐ Electric Motor	
										☐ Other	☐ Gasoline Motor	

Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded					Meter ID# <u>113529</u>		Matrix: <u>Fresh</u> Marine/ DI			
Photos: <u>Yes</u> No		Flow: No Flow / Intestinal / <u>Flowing</u> / NA		Tide: Rising/ Falling/ Slack/ <u>NA</u>		Tide Times: High Low				
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1130	0.6	0.3	VOB	8.89	94.9	7.54	0.01	15	18.46
<u>CEN</u>										

Biological Samples Collected: None HA SCI RPS Algae LVS LVI Other:

SBIO ID Numbers: SBIO-ID: 78961 HA-ID: 15431 RPS-ID: 9118 Macrophyte-ID: 1116 LIMS#: 2037256

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☐ H2SO4	SA7341020	12/07/2018	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☐ Ice	16570048		
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Notes:

Ref: 10/30/18 Date: 21 May 18 SHIPPING: 0.00
Dep: 10:15 ETZ Wgt: 10.00 LBS SPECIAL: 0.00
DV: 0.00 HANDLING: 0.00
TOTAL: 0.00

Field/WIN ID

G3NW0104

Location

Little Rocky Creek upstream of Eglin Rd 200

Signature: [Signature]

Date: 10/29/2018

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: _____
Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data In WIN: _____
(Initials/Date) (Initials/Date) (Initials/Date)

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

SAMPLE ID 78961 ORG ID 21FLPNS LATITUDE 30.577123
 COUNTY Okealoosa WIN ID/STORET # G3NW0104 LONGITUDE -86.388189
 DATE 10/29/18 TIME 1130 CTZ SAMPLING AGENCY FL DEP - NWROC
 SITE NAME Little Rocky Creek above Eglin Rd. 200 RQ-2018-05-28-24
 FIELD ID/NAME G3NW0104 RECEIVING BODY OF WATER Rocky Creek WBID 476 Project SMP- TMDL Studies

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) <u>NAS MILITARY</u>							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>0.5</u> Depth (m)/Velocity (m/sec) <u>0.5</u> Transect <u>8</u> m wide
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>>18</u> Right Bank: <u>>18</u>			Hydrologic Modification Score (per FT 3101) <u>123</u>		0.5 m/s 0.5 m/s 0.5 m/s		
High Water Mark: <u>1.0</u> + <u>1.5</u> = <u>2.5</u> (m) (above present water level) (present depth) (above bed)			Artificially Impounded ☐ Yes ☒ No		0.4 m deep 0.5 m deep 0.6 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

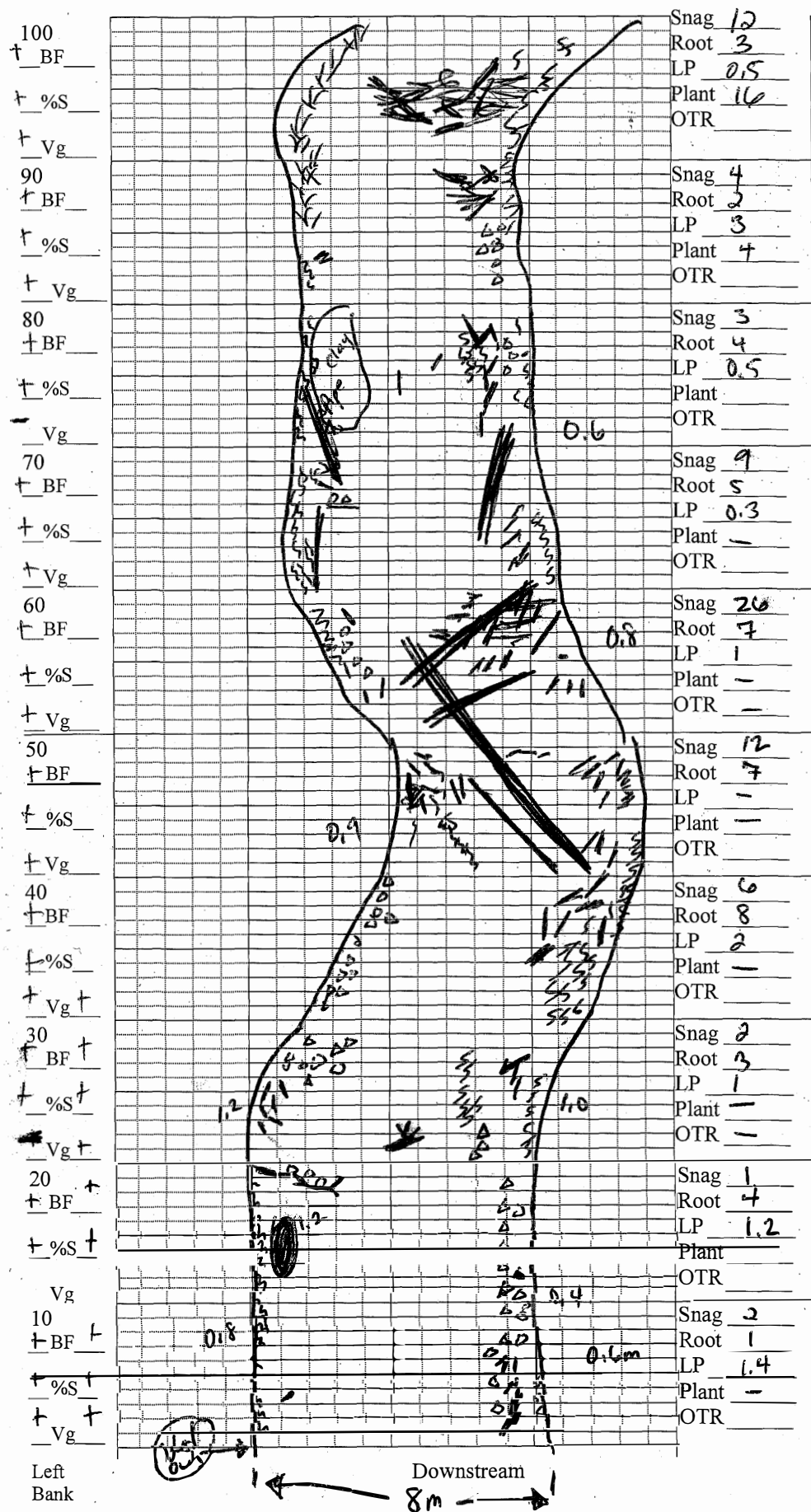
Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse	Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify):	Smothering of Substrates Sand Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐ Silt Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐ Algae Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐
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SUBSTRATE TYPE Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon				WATER QUALITY							
Invert ☐ PERI ☐ % Coverage # Times Sampled # Times Sampled				Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Woody Debris (Snags)	<u>8.5</u>	<u>4</u>		Top: <u>0.3</u>	<u>18.46</u>	<u>7.54</u>	<u>8.89</u>	<u>94.9</u>	<u>15</u>	<u>0.01</u>	
Undercut Banks / Roots	<u>4.9</u>	<u>4</u>		Mid:							☒ VOB
Leaf Packs or Mat	<u>1.2</u>	<u>4</u>		Bottom:							
Aquatic Vegetation	<u>2.2</u>	<u>4</u>		Meter ID: <u>113529</u>				13	<u>11.2</u>		
Rock or Shell Rubble..				Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐				Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐			
Sand.....	<u>83.2</u>	<u>4</u>		Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA 7341020</u> Exp: <u>12/07/18</u>				Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐			
Mud / Muck / Silt				Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____				Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐			
Other				System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐							

ABUNDANCE Not Obs. Rare Common Abundant				AMBIENT FIELD CONDITIONS / NOTES: <u>MD 80's Full sun</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.	
Periphyton:	☐	☒	☐	☐	<u>DIAPYCNES PRESENT</u>
Fish:	☐	☐	☒	☐	
Aquatic Plants:	☐	☐	☒	☐	
Iron/Sulfur Bacteria:	☐	☐	☒	☐	
SAMPLING TEAM: Frank Butera, Mike King				SIGNATURE: _____ DATE: <u>10/29/18</u>	

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 G3NW0104

Substrates: Code key, draw proportionate habitat abundance.



Snags

77/9

8.5



Roots/undercut banks

44/9

4.9



Leaf Packs (or mats)

10.9/9

1.2



Macrophytes

20/9

2.2

Velocity:

Note where velocity measures were taken. ϕ_m mk

Habitat Smothering:

Note areas (on map) where sand or silt is something 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.

Average width 7 m

Average depth 0.8 m

WQ & chemistry taken @ 0 m

Little Rocky Creek upstream

Eglin Rd 200 SB10 ID 78961

Project. TMDL Studies

Sampled By/Date: 10/29/2018

FB/MK

0 m Latt. 30.57718

0 m Long. 86.38826

100 m Latt. 30.57795

100 m Long. 86.38854

poles HHH 11

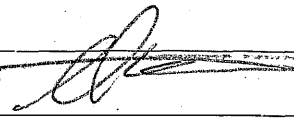
DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

SAMPLING AGENCY: 21FLPNS		STORET STATION NUMBER: G3NW0104	DATE (MM/DD/YY): 10/29/18	RECEIVING BODY OF WATER: Rocky Creek
REMARKS: WBID 476	COUNTY: Okaloosa	LOCATION: Little Rocky Creek above Eglin Rd. 200		FIELD ID/NAME: G3NW0104

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>17</u>	20 19 18 <u>17</u> 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>4</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>19</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec Some scouring 0.5 m/s ≥0.33 0.31 0.29 0.27 >0.25 20 <u>19</u> 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>13</u> Primary Score <u>60</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 <u>13</u> 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 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 <u>19</u> 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability Right Bank <u>9</u> Left Bank <u>9</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 <u>9</u>	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank <u>10</u> Left Bank <u>10</u>	Width of vegetation greater than 18 m <u>10</u> 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank <u>10</u> Left Bank <u>9</u> Secondary Score <u>76</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. <u>10</u> <u>9</u> signs of old clearing	>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

136

TOTAL SCORE

Date: 10/29/18	Analyst: MIKE KING	Signature: 
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SBIO ID: 78961 HA ID: 15431

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Little Rocky Creek upstram of Eglin 200

County:
Okaloosa

Date: 10/29/18

Investigators: F. Butera

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	86	60	1	N	N	84
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
10	1	N		80	70	1	N		68
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
20	1	N		64	80	1	N		72
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
30	1	N		68	90	1	N		76
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
40	1	N		60	100	1	N		76
	2								
	3								
	4								
	5								
	6								
	7								
	8								
	9								
50	1	N		72	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								
	6								
	7								
	8								
	9								

STORET Station Number:
G3NW0104

Secchi depth >1.5
Estimated? Y

points ranked 4-6 1
total points assessed 99
% points ranked 4-6 1

Check accompanying data collected at same site/date.

Algal mat sample
Linear Veg Survey
Habitat Assessment
SC/Biorecon
Water sample

RQ-2018-05-28-24

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. 78961

RPS ID
9118

[illegible]