



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

Location/STORET Station Name: Rocky Creek @ 200/201 (also, 32010022)

Date: 03/28/2018
(mm/dd/yyyy)

WIN ID G3NW0059

WBID: 361

Latitude: 30.61353

County: Walton

RQ - 2018-03-26-19

ORG ID: 21FLPNS

Longitude: 86.34263
(Decimal Degrees)

Receiving Body of Water: Choctawhatchee Bay Field ID: G3NW0059
(Decimal Degrees)

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
<u>MM</u> <u>JP</u>				☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole	
									☐ Carboy	☒ Syringe		
									☐ Dipper	☐ Other		
				Equipment ID					Collection Method			
									☒ Wading	☐ Canoe/Kayak		
									☐ From Shore	☐ Electric Motor		
									☐ Other	☐ Gasoline Motor		
Water Level: Dry / Low / <u>Normal</u> / Above Normal / Flooded				Meter ID# <u>11309</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 (umhos/cm)	Temp. (C°)		
EST	<u>1030</u>	<u>0.7</u>	<u>0.3</u>	<u>0.7</u>	<u>9.25</u>	<u>97.6</u>	<u>6.19</u>	<u>0.00</u>	<u>13</u>	<u>17.9</u>		
CEN				<u>15</u>								

Biological Samples Collected:		None	<u>HA</u>	<u>SCI</u>	<u>RPS</u>	Algae ID	LVS	LVI	Other:
SBIO ID Numbers:		SBIO-ID:	HA-ID:	RPS-ID:	Macrophyte-ID:	LIMS#:			
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	<u>7233030</u>	<u>8/21/18</u>	☐ <2				
Metals	☐ W-JCPMS ☐ W-JCP	☐ Ice ☐ HNO3			☐ <2				
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter	☒ Ice							
Chlorophyll	☒ CHLSUITE-W	☒ Ice							
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-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	☐ Ice							
	☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Other							

Notes:	Field/WIN ID	
	Location:	G3NW0059
	Rocky Creek @ 200/201 (also, 32010022)	
Signature: <u>[Signature]</u>	Date: <u>3/28/18</u>	

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: _____
(Initials/Date) (Initials/Date)
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 78325 ORG ID 21 FLPNS LATITUDE 30.6135
 COUNTY Walton STORET # 631W0059 LONGITUDE 86.34290
 DATE 3/28/18 TIME 1030 SAMPLING AGENCY FDEP NWROC
 SITE NAME Rock Creek @ 200/201
 FIELD ID/NAME 631W0059 RECEIVING BODY OF WATER Choctawhatchee Bay

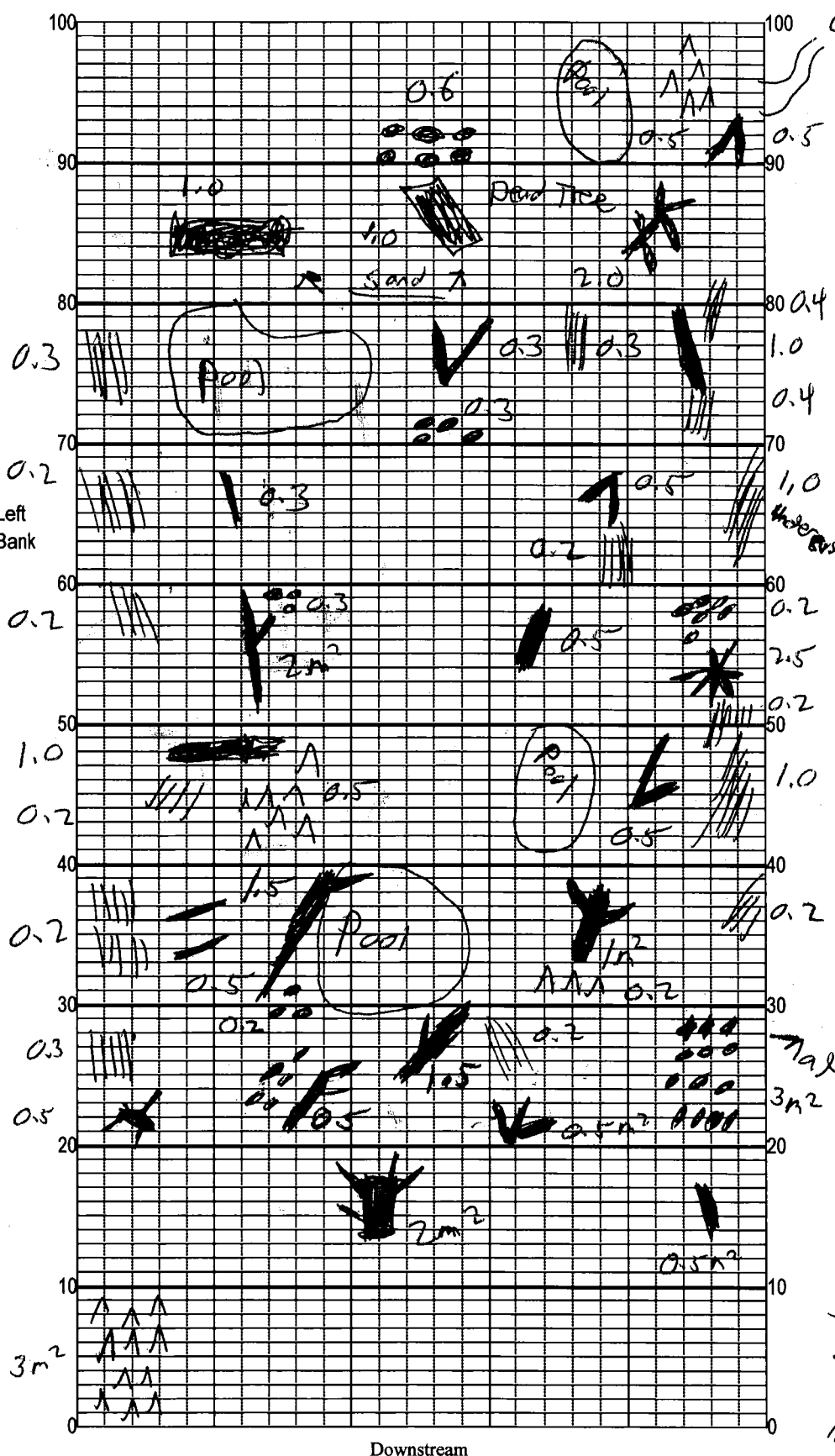
RIPARIAN ZONE / STREAM FEATURES

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) Depth (m)/Velocity (m/sec) Transect m wide
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: Right Bank:				Hydrologic Modification Score (per FT 3101)			m/s m/s m/s
High Water Mark: + = (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No			m deep 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></th> <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:</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Mid:</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> <tr> <td>Bottom:</td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> <td> </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:									Mid:									Bottom:								
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Bottom:																																									
Woody Debris (Snags) Undercut Banks / Roots Leaf Packs or Mat Aquatic Vegetation Rock or Shell Rubble.. Sand..... Mud / Muck / Silt Other Other		Meter ID: Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA7275010</u> Exp: <u>10/18</u> Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____																																							
ABUNDANCE <table border="1"> <thead> <tr> <th></th> <th>Not Obs.</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Fish:</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Aquatic Plants:</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Iron/Sulfur Bacteria:</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>			Not Obs.	Rare	Common	Abundant	Periphyton:	☒	☐	☐	☐	Fish:	☐	☐	☒	☐	Aquatic Plants:	☐	☐	☒	☐	Iron/Sulfur Bacteria:	☒	☐	☐	☐	Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐														
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Periphyton:	☒	☐	☐	☐																																					
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Aquatic Plants:	☐	☐	☒	☐																																					
Iron/Sulfur Bacteria:	☒	☐	☐	☐																																					
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>Nathan Melky / Jim Pitts</u>		SIGNATURE: <u>Nathan Melky</u>		DATE: <u>3/28/18</u>																																					

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: Rock Creek @ 200/201
 Date: 3/28/18
 Sampler: Jimmy Pitts

100 m: Latitude _____
 Longitude _____
 0 m: Latitude 30.61375
 Longitude -86.34290

Substrates: Code key, draw proportionate habitat abundance. %

	Snags	<u>9.1</u>
	Roots/undercut banks	<u>3.1</u>
	Leaf Packs (or mats)	<u>0.7</u>
	Aquatic Macrophytes	<u>0.7</u>
	Pools	total # observed = <u>4</u> # range expected = <u>1-3</u>

Average width 7 m
 Average depth 0.7 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:

veg total: 5.0 m²
 snag: 21.6 m²
 leaf pack: 4.8 m²
 root: 6.1 m²

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

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

SAMPLING AGENCY: FDEP NWROC		STORET STATION NUMBER: G3NW0059	DATE (MM/DD/YY): 08/28/18	RECEIVING BODY OF WATER: Chopt Bay
REMARKS: SB1020-78325	COUNTY: Walton	LOCATION: Rocky Creek @ 200/201	FIELD ID/NAME: G3NW0059	

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>19</u>	20 <u>19</u> 18 17 16	15 14 13 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>20</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 <u>20</u> 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>18</u> ----- <u>63</u> Primary Score <u>18</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 <u>18</u> 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
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>18</u>	20 19 <u>18</u> 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>8</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. <u>8</u> 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>8</u> Left Bank <u>9</u> ----- Secondary Score <u>72</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. <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

135

TOTAL SCORE

HA ID 15499

Date: 8/28/18	Analyst: Nathan Mulky	Signature: Nathan Mulky
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Rocky Creek @ 200/201</u>					County: <u>Walton</u>		Date: <u>3/28/18</u>		Investigators: <u>Jim Pitts</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	N	78	60	1	N	N	68	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
10	1	N	N	84	70	1	N	N	88	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
20	1	N	N	82	80	1	N	N	70	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
30	1	N	N	78	90	1	N	N	89	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
40	1	N	N	70	100	1	N	N	16	
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
50	1	N	N	60	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:

G31W0059

Secchi depth 0.7
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 ☒

RQ-2018-03-26-19

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

SB10 ID 78325
RPS ID 8965

Rocky Creek @ 200/201

Storet G3NW0059

Sample Date 03/28/2018

Field ID G3NW0059

Sampled by: N. Mulkey, J. Pitts

Variable Name	Rep 1	Rep 2
AmphipodPct	0.64	0
ChironPct	23.08	26.14
ChironTaxa	14	8
ClingerTaxa	14	13
ColeopteraPct	7.69	9.8
DecapodaPct	0.64	0
DipteraPct	26.92	30.07
Dominant Taxa	Hydropsyche	Rheotanytarsus exiguus grp.
DominantPct	11.54	16.34
EphemPct	6.41	5.23
EphemTaxa	6	4
EPTTaxa	17	15
FFBrowGrazPct	0.32	0
FFEpiColDepPct	27.56	25.49
FFParasitePct	0	0
FFPIPIercePct	5.77	2.61
FFPredCarnPct	16.35	18.63
FFScavPct	0.32	0
FFScrapePct	11.54	12.42
FFShredPct	5.77	5.23
FFSubColDepPct	0.64	0
FFSuspFiltPct	31.73	35.62
FFUnknownPct	0	0
GastropodaPct	0	0.65
IsopodaPct	0	0
LongLivedTaxa	3	4
OdonataPct	0.64	1.96
OligocPct	0.64	0
OligocTaxa	1	0
PelecypodaPct	0.64	0
PlecopPct	10.9	11.11
PolychaetePct	0	0
PolychaeteTaxa	0	0
SCI_2012_Rep	93.79383474	87.98510766
SensitiveTaxa	17	14
TanytarsiniPct	10.26	16.34
TotalDBar	8.85	8.97
TotalDensity	0	0
TotalNind	156	153
TotalTaxa	43	33
TrichopPct	44.23	39.22
TrichopTaxa	9	9
TrombidPct	0.64	0.65
VeryTolerantPct	0	0

SCI Average	90.8894712
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