



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

Location/STORET Station Name: Huckleberry Creek

Date: 05/23/18
(mm/dd/yyyy)

WIN ID G3NW0135

WBID: 246

Latitude: 30.808769

County: Walton

RQ - 2018-0521-45 ORG ID: 21FLPNS

Longitude: -86.089558

(Decimal Degrees)

(Decimal Degrees)

Receiving Body of Water: Sandy Creek

Field ID: G3NW0135

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
<u>MM</u> <u>SS</u>									

Sampling Equipment		
☒ 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 / <u>Low</u> / Normal / Above Normal / Flooded				Meter ID# <u>113529</u>		Matrix: <u>fresh</u> / Marine / DI				
Photos: Yes / <u>No</u>		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	<u>1100</u>	<u>0.6</u>	<u>0.3</u>	<u>UoB</u>	<u>6.96</u>	<u>80.6</u>	<u>6.08</u> <u>6.96</u>	<u>0.01</u>	<u>31</u>	<u>22.76</u>
<u>CEN</u>										

Biological Samples Collected:		None	<u>HA</u>	<u>SCI</u>	<u>RPS</u>	Algae ID	<u>NA</u> 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>1275010</u>	<u>10/2/18</u>	☐ <2	
Metals	☐ W-ICPMS ☐ W-ICP			☐ Ice ☐ HNO3			☐ <2	
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter			☒ Ice				
Chlorophyll	☒ CHLSUITE-W			☒ Ice				
Physical/Aggregate (Fresh)	☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CH-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 Coll ☐ F Coll ☐ 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				

Place Preservative Sticker(s) Here
(If Available)

Notes: A/M/HA/SCI/RPS/LVS

Ref:	Date: <u>07May18</u>	SHIPPING:	0.00
Dep:	Wgt: <u>15.00 LBS</u>	SPECIAL:	0.00
	DV: <u>0.00</u>	HANDLING:	0.00
		TOTAL:	0.00

Signature: [Signature]

Master 4385 5029 1893
TRK: 4385 5029 1893

Field/WIN ID

G3NW0135

Location:

HUCKLEBERRY CREEK

Date: 5/23/18

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 78417 ORG ID 21ELPMS LATITUDE 30.80867
 COUNTY Walton STORET # G31NW0135 LONGITUDE 86.08955
 DATE 5/23/18 TIME 1100 SAMPLING AGENCY FDOP NW/ROC
 SITE NAME Hickory Creek
 FIELD ID/NAME G31NW0135 RECEIVING BODY OF WATER Sandy Creek

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 2.5 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) ☐			1/3 m/s 1/3 m/s 1/3 m/s
High Water Mark: ☐ + ☐ = ☐ (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No			0.6 m deep 0.6 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 ☐	
SUBSTRATE TYPE Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon INVERT PERI % # Times # Times Coverage Sampled Sampled			WATER QUALITY 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>27.6</u> <u>6.08</u> <u>6.96</u> <u>80.6</u> <u>31</u> <u>001</u> Mid: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☒ VOB Bottom: ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ TOTAL DEPTH Meter ID: <u>113529</u> <u>0.6</u>		
Woody Debris (Snags) <u>27.4</u> <u>5</u> Undercut Banks / Roots <u>25</u> <u>5</u> Leaf Packs or Mat <u>2.3</u> <u>5</u> Aquatic Vegetation ☐ ☐ Rock or Shell Rubble ☐ ☐ Sand ☐ <u>5</u> Mud / Muck / Silt ☐ ☐ Other ☐ ☐ Other ☐ ☐			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>225070</u> Exp: <u>10/2/18</u> 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 ☒ Globbs ☐ 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: ☒ The antecedent hydrologic conditions have been met to my best knowledge.		
SAMPLING TEAM <u>Nathan Mulkey / Stephen Stadel</u>			SIGNATURE: <u>[Signature]</u> DATE: <u>5/23/18</u>		

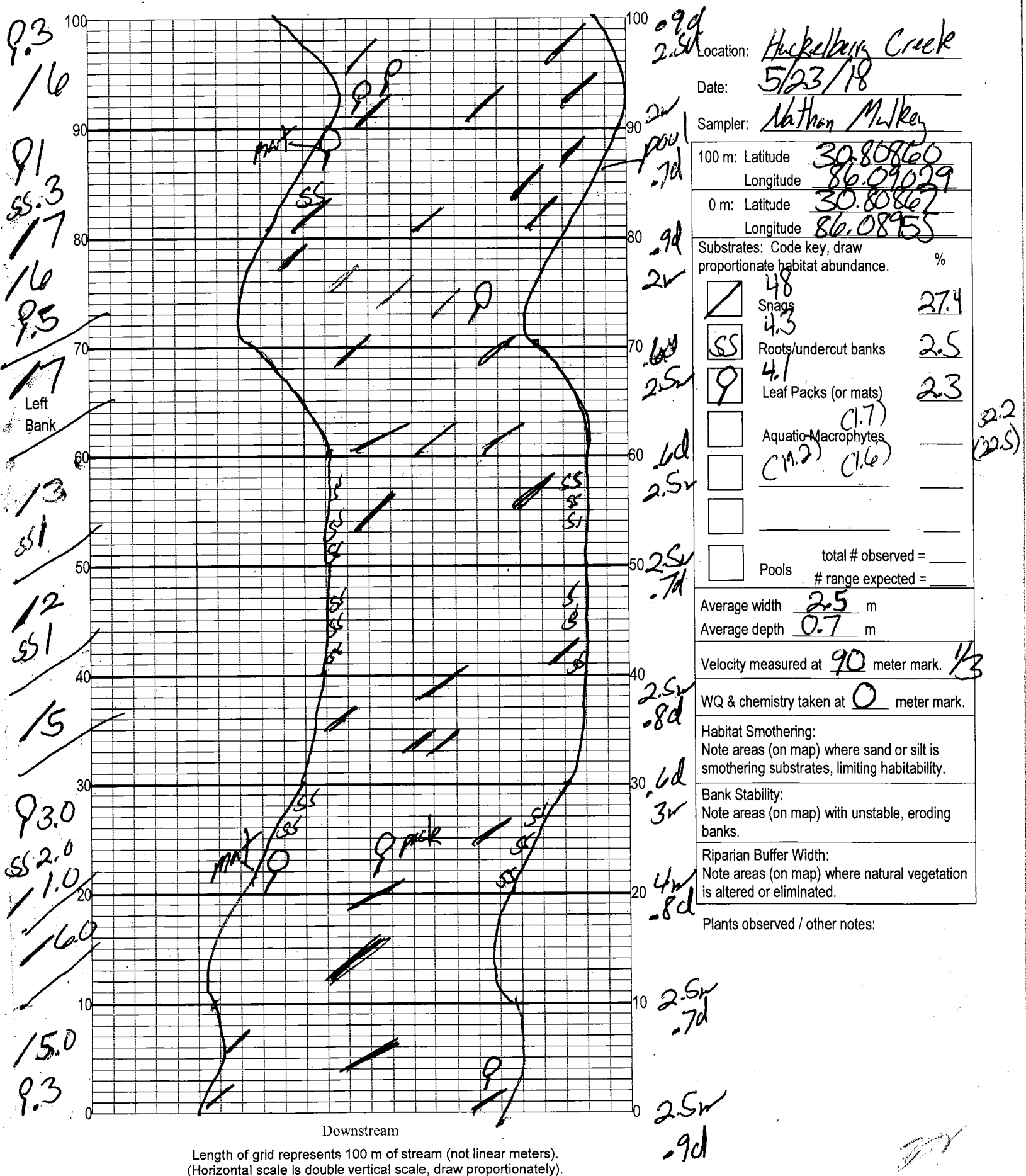
DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

SAMPLING AGENCY: <i>FDOP NW/ROC</i>		STORET STATION NUMBER: <i>G3NW0135</i>	DATE (MM/DD/YY): <i>05/23/18</i>	RECEIVING BODY OF WATER: <i>Sandy Creek</i>
REMARKS:	COUNTY: <i>Walton</i>	LOCATION: <i>Huckabay Creek</i>	FIELD ID/NAME: <i>G3NW0135</i>	

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 <i>15</i>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Substrate Availability <i>16</i>	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 <i>20</i>	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 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 <i>18</i> ----- Primary Score <i>69</i>	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
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 <i>18</i>	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 ≤ 60° 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 > 60°. Bankfull is below the woody root zone with raw, eroded areas.
Right Bank <i>9</i> Left Bank <i>9</i>	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 <i>9</i> Left Bank <i>8</i>	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 <i>8</i> Left Bank <i>8</i> ----- Secondary Score <i>69</i>	10 9	8 7 6	5 4	3 2 1

TOTAL SCORE

Date: <i>5/23/18</i>	Analyst: <i>Nathan Mulkey</i>	Signature: <i>Nathan Mulkey</i>
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Huckleburg Creek County: Walton Date: 5/23/18 Investigator: Nathan Mulkey

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	N	✓			2	N		
	3	N	✓			3	N		
	4	N	✓			4	N		
	5	N	✓	92		5	N	✓	90
	6	N	✓			6	N	✓	
	7	N	✓			7	N		
	8	N	✓			8	N		
	9	N	✓			9	N	✓	
10	1	N	✓		70	1	N		
	2	N	✓			2	N		
	3	N	✓			3	N		
	4	N	✓			4	N		
	5	N	✓	76		5	N		72
	6	N	✓			6	N		
	7	N	✓			7	N		
	8	N	✓			8	N		
	9	N	✓			9	N	✓	
20	1	N	✓		80	1	N	✓	
	2	N	✓			2	N		
	3	N	✓			3	N		
	4	N	✓			4	N		
	5	N	✓	76		5	N		68
	6	N	✓			6	N		
	7	N	✓			7	N		
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	
30	1	N	✓		90	1	N		
	2	N	✓			2	N		
	3	N	✓			3	N		
	4	N	✓			4	N		
	5	N	✓	66		5	N		72
	6	N	✓			6	N		
	7	N	✓			7	N		
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	
40	1	N	✓		100	1	N	✓	
	2	N	✓			2	N		
	3	N	✓			3	N		
	4	N	✓			4	N		
	5	N	✓	52		5	N		86
	6	N	✓			6	N		
	7	N	✓			7	N		
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	
50	1	N	✓			1	N	✓	
	2	N	✓			2	N		
	3	N	✓			3	N		
	4	N	✓			4	N		
	5	N	✓	60		5	N		
	6	N	✓			6	N		
	7	N	✓			7	N		
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	

STORET Station Number: G3NW0135

Secchi depth 0.6 m
 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 X
 Habitat Assessment X
 SCI/Biorecon X
 Water sample X
 RQ: 2018-05-21-45

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

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%.