



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: L-61W **Date:** 12/16/2020
WIN/Field ID: G4SD0194 **WBID:** 3227 **ENR:** **Latitude:** 26.9657
County: GLADES **Org ID:** 21FLFTM **Longitude:** -81.1367
Receiving Body of Water: Fisheating Creek **RQ:** 2020-12-14-47

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Nicole Reistad	x		x		x
☒	Chris Hormuth		x		x	
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: DEEP BLUE	
Collection Method	
☐ Wading	☒ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# PRO MOVE							
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:													

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: _____ **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)



RQ-2020-12-14-47

Customer: WQAP

Project ID: SMP

Collected By: Nicole Reistad, Chris Hormuth

Field Report Prepared By: Nicole Reistad

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4SD0194

Location: L-61W

Comments: Microbiology sample(s) submitted to contract laboratory

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 (PPTH)
12/16/2020	1125 EST	2.88	31.4	19.4	7.16	0.3	0.5 ☐ VOB (S)	3	337	0.16

Central Lab please use top row for login purposes

	1127 EST	1.66	17.2	17.1	7.13	2.5			359.5	0.17
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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 Lot # SA0038110 Exp: 02/17/21	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD Lot # NA0038050 Exp: 02/07/21	☒ Ice ☒ HNO3*	☐ <2	1	A
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 17148934 Syringe Lot # 0118593	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-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			
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			
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			
		☐ Ice			

Name:
Nicole Reistad
Chris Hormuth

Signature:

Date:

12/16/2020

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP-SOP-001/01: Form FD 9000-5
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
STREAM/RIVER HABITAT ASSESSMENT FIELD SHEET

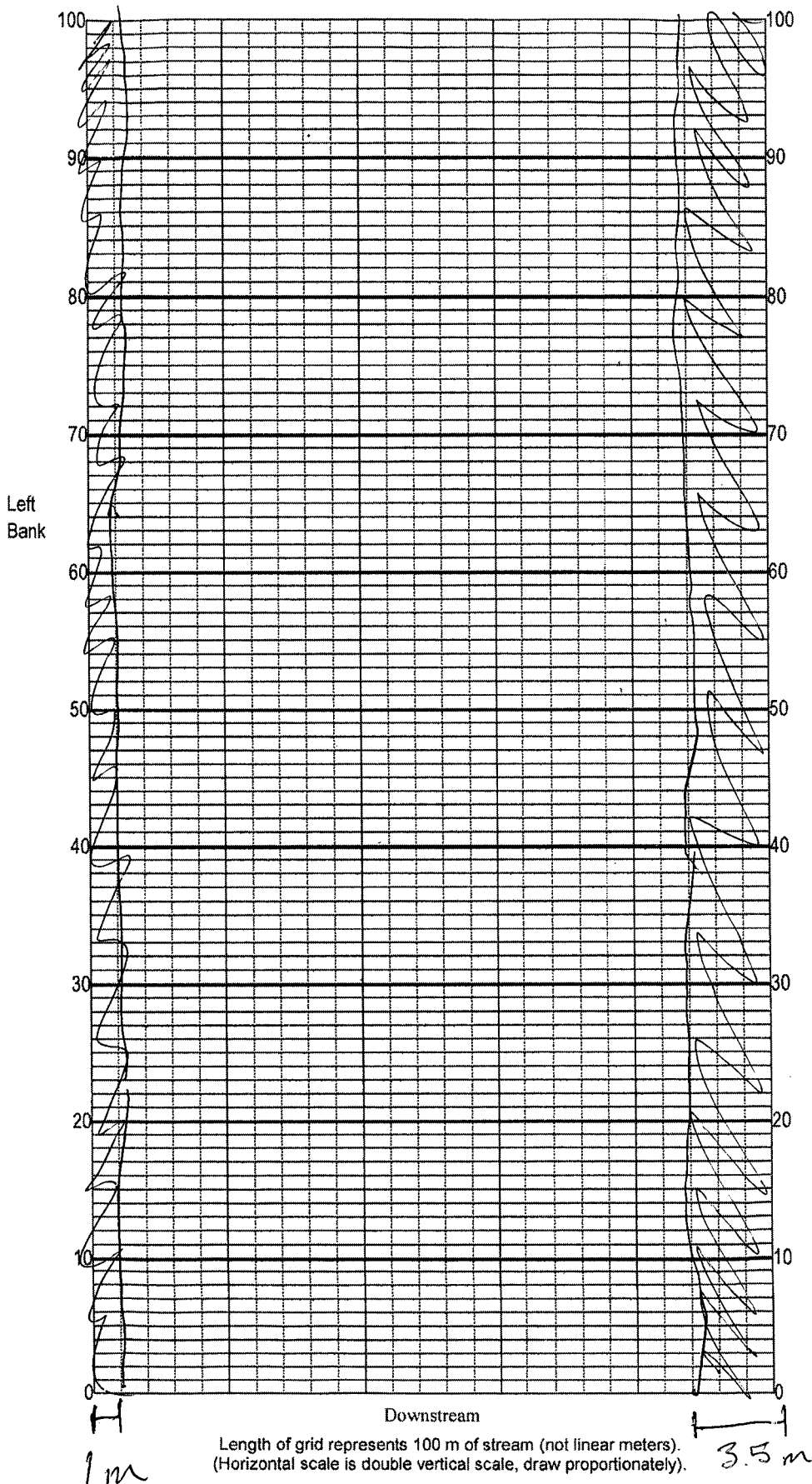
SUBMITTING AGENCY CODE: _____		STORET STATION NUMBER: <u>GASDC094</u>	DATE (MM/DD/YY): <u>12/16/20</u>	RECEIVING BODY OF WATER: <u>Lake Okeechobee</u>
SUBMITTING AGENCY NAME: _____				
REMARKS: _____	COUNTY: <u>Glades</u>	LOCATION: <u>661-W</u>	FIELD ID/NAME: _____	

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>3</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 <u>3</u> 2 1
Substrate Availability <u>7</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 <u>7</u> 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>1</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 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 <u><0.01</u> 5 4 3 2 1
Habitat Smothering <u>3</u> ----- Primary Score <u>14</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 <u>3</u> 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>1</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 <u>1</u>
Bank Stability Right Bank <u>9</u> Left Bank <u>6</u> <u>++</u> <u>+++</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 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>2</u> Left Bank <u>2</u>	Width of vegetation greater than 18 m 10 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>2</u> Left Bank <u>2</u> ----- Secondary Score <u>24</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. 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

36
TOTAL SCORE

Date: <u>12/16/20</u>	Analyst: <u>Chris Harmuth, Nicole Reistad</u>	Signature: <u>[Signature]</u>
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DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Location: L-61W
 Date: 12/16/20
 Sampler: Chris Hermuth

100 m: Latitude 26.9659494
 Longitude -81.1379499
 0 m: Latitude 26.9660483
 Longitude -81.1369246

Substrates: Code key, draw proportionate habitat abundance. %

☐	Snags	_____
☐	Roots/undercut banks	_____
☐	Leaf Packs (or mats)	_____
☒	Aquatic Macrophytes	<u>11.25</u>
☐		_____
☐		_____
☐	Pools	total # observed = <u>0</u> # range expected = <u>1</u>

Average width 40 m
 Average depth 3 m

Velocity measured at 25 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:

450 m² veg
4000 m² total
.1125

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

SAMPLE ID: _____ ORG ID: 21F2FTM LATITUDE: 26.9657
 COUNTY: GLADES STORET #: GASD0194 LONGITUDE: -81.1367
 DATE: 12-6-11 TIME: 1125 SAMPLING AGENCY: FDEP SOROC
 FIELD ID/NAME: GASD0194 RECEIVING BODY OF WATER: FISHEATING CREEK

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural: <u>20</u> Silviculture: <u> </u> Field/Pasture: <u>40</u> Agricultural: <u>20</u> Residential: <u>20</u> Commercial: <u> </u> Industry: <u> </u> Other (Specify): <u> </u>							Landscape Development Intensity Index (LDI) <u> </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>40</u> m wide
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>5</u> Right Bank: <u>5</u>				Hydrologic Modification Score (per FT 3101) <u> </u>		<u>0.01</u> m/s <u>0.01</u> m/s <u>0.01</u> m/s	
High Water Mark: <u> </u> + <u> </u> = <u> </u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☒ Yes ☐ No		<u>3</u> m deep <u>3</u> m deep <u>3</u> 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): <u> </u>	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							
	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>19.4</u>	<u>7.16</u>	<u>2.88</u>	<u>31.4</u>	<u>337</u>	<u>0.16</u>	<u>0.5</u>		
Mid:									☐ VOB	
Bottom:	<u>2.5</u>	<u>17.1</u>	<u>7.13</u>	<u>1.66</u>	<u>17.2</u>	<u>359.5</u>	<u>0.17</u>		TOTAL DEPTH	
									<u>3.0</u>	
Meter ID: <u>PRO MOVE</u>										
Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐							
Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA0038110</u> Exp: <u>2/17/21</u>			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐							
Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u> </u> Exp: <u> </u>			Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐							

ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☒ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☒ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐	System Type: Stream ☐ Lake ☐ Wetland ☐ Estuary ☐ Other (Specify) ☒ <u>CANAL</u>
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.	

SAMPLING TEAM CHRIS HORMUTH NICOLE REISTAD **SIGNATURE:** Chris Hormuth **DATE:** 4/5/21

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>L61-W</u>					County: <u>Glades</u>		Date: <u>12/15/20</u>		Investigators: <u>Nicole Reistad</u>											
									STORET Station Number: <u>G4SD0194</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	✓		60	1	N	✓		Secchi depth <u>0.5</u> Estimated? <u></u>										
	2					2														
	3					3														
	4					4														
	5					5														
	6					6														
	7					7														
	8					8														
	9					9														
10	1	N	✓		70	1	N	✓		# points ranked 4-6 <u>0</u> total points assessed <u>99</u> % points ranked 4-6 <u>0</u>										
	2					2														
	3					3														
	4					4														
	5					5														
	6					6														
	7					7														
	8					8														
	9					9														
20	1	N	✓		80	1	N	✓		Check accompanying data collected at same site/date: Algal mat sample <u></u> Linear Veg Survey <u>✓</u> Habitat Assessment <u>✓</u> SCI/Biorecon <u></u> Water sample <u>✓</u> RQ- <u>2020-12-14-47</u>										
	2					2														
	3					3														
	4					4														
	5					5														
	6					6														
	7					7														
	8					8														
	9					9														
30	1	N	✓		90	1	N	✓		Algal Thickness Rank										
	2					2														
	3					3														
	4					4														
	5					5														
	6					6														
	7					7														
	8					8														
	9					9														
40	1	N	✓		100	1	N	✓		<table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>N</td><td>rough, no algae, slimy, algae up to 1mm</td></tr> <tr><td>3</td><td>>1mm - 6mm</td></tr> <tr><td>4</td><td>>6mm - 20mm</td></tr> <tr><td>5</td><td>>20mm - 10 cm</td></tr> <tr><td>6</td><td>>10 cm</td></tr> </table>	N	rough, no algae, slimy, algae up to 1mm	3	>1mm - 6mm	4	>6mm - 20mm	5	>20mm - 10 cm	6	>10 cm
	N	rough, no algae, slimy, algae up to 1mm																		
	3	>1mm - 6mm																		
	4	>6mm - 20mm																		
	5	>20mm - 10 cm																		
	6	>10 cm																		
	2					2														
	3					3														
	4					4														
5				5																
6				6																
7				7																
8				8																
9				9																
50	1	N	✓		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.															
	2																			
	3				Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank.															
	4																			
	5				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.															
	6																			
	7				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%.															
	8																			
	9																			

[illegible]