FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

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Data Qualified? Yes / No

STORET Station Name: Little Jones Creek @ DS of Loop Trail Rd Bridge Date: 06/23/2016 (mm/dd/yyyy)

STORET Station ID: G4CE0024 Latitude: 28.8426 (Decimal Degrees)

WBID: 1344 RQ - 2016-06-20-36 ORG ID: 21FLCEN Longitude: -82.1304 (Decimal Degrees)

Receiving Body of Water: _____ Field ID: G4CE0024 County: Sumter

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Mike Linger	✓		✓		
Terry Riorden		✓		✓	✓
Leif Boman					

Sampling Equipment

- [x] Sample Container
- [ ] Carboy
- [ ] Dipper
- [ ] Van Dorn
- [ ] Syringe
- [ ] Other _____
- [ ] Pole

Equipment ID _____

Collection Method

- [x] Wading
- [ ] From Shore
- [ ] Other (note below)

Via Boat
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [ ] Gasoline Motor

Water Level: Dry / (Low) / Normal / High / Flooded

Matrix: (Fresh) / Marine / DI

Meter ID# Betty 67 **Photos:** Yes / (No)

Tide Falling: Yes / No / (NA)

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
(EST)	12:35	0.3	0.7	5.3	65	7.5	0.18	0.7 (S)	374	25.6
CEN										

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

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[x] Ice [x] H_2SO_4	525090 20	9/16/16	[x] <2
Metals	[ ] W-ICPMS [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
BOD	[ ] BOD-UNIN	[ ] Ice			
Physical/Aggregate (Kit A/C)	[x] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[x] Ice			
Physical/Aggregate (Kit B/D)	[ ] Alkalinity / W-F / W-TSS / TURBIDITY	[ ] Ice			
Macroinvertebrates	[x] MI-FW-QLDC	[x] Formalin			
Microbiology	[ ] E Coli [ ] F Coli [ ] Entero [ ] QPCR	[ ] Ice			
Periphyton	[ ] ALGAE-ID	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-AHERB-AA [ ] W-PYR-AA-R [ ] W-PC-AA-SF [ ] W-UHERB-AA [ ] W-GLYPH	[ ] Ice [ ] Other			

Place Preservative Sticker(s) Here (If Available)

Notes: Look "ADA" 9-3-24

Little Jones Creek @ DS of Loop Trail Rd. bridge

Date: 06/23/16
RQ-2016-06-20-36

G4CE0024
Field ID ↑
STORET ↓
G4CE0024

Signature: _____ **Date:** 6/23/16

Field Parameters Entered into LIMS: _____ (Initials/Date) Field Parameters QC in LIMS: _____ (Initials/Date)

Date Migrated to STORET: _____ (Initials/Date) Field Sheets Scanned/Saved: _____ (Initials/Date)

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

SAMPLE ID 76318 ORG ID 21FLCEN LATITUDE
COUNTY Sumter STORET # G4CE0024 LONGITUDE
DATE 6/23/16 TIME 1200 SAMPLING AGENCY FDEP CE-ROC
SITE NAME Little Jones Creek @ DS of Loop Trail Rd Bridge
FIELD ID/NAME G4CE0024 RECEIVING BODY OF WATER Lake Dan

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)
100							

Landscape Development Intensity Index (LDI):

Local Watershed Erosion (select one): ☑ None ☐ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution: ☐ No evidence ☑ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side: Left Bank: >18 Right Bank: >18

Hydrologic Modification Score (per FT 3101):

High Water Mark: ~~1.0~~ 0.3 (m) + 0.4 (above present water level) = 0.7 (present depth) (above bed)

Artificially Impounded: ☐ Yes ☑ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect: 3 m wide

m/s	0.14 m/s	m/s
	7 sec	
m deep	0.4 m deep	m deep

Artificially Channelized: ☑ No ☐ Mostly recovered, more sinuous ☐ 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): Vinegar

Smothering of Substrates

	None	Slight	Moderate	Severe
Sand Smothering:	☐	☑	☐	☐
Silt Smothering:	☐	☐	☐	☑
Algae Smothering:	☐	☑	☐	☐

SUBSTRATE TYPE

Assessment Tool: ☑ SCI ☑ RPS ☑ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)		5	
Undercut Banks / Roots		5	
Leaf Packs or Mat		1	
Aquatic Vegetation		5	
Rock or Shell Rubble..		1	
Sand.....		2	
Mud / Muck / Silt		1	
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top:	0.3	25.6	7.5	5.3	65	374	0.18	0.7
Mid:								☑ VOB
Bottom								TOTAL DEPTH
Meter ID:	Betty 167							0.7

Water Odors Normal ☑ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☑ Sheen ☐ Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☑ Yes ☐ No
Sample Preserved? ☐ Yes ☐ No
Lot Number: Exp:

Color Tannic ☑ Green (Algae) ☐ Clear ☐ Other (Specify) ☐

Algae Sample Taken? ☐ Yes ☑ No
Sample Preserved? ☐ Yes ☐ No
Lot Number: Exp:

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) ☐

AMBIENT FIELD CONDITIONS / NOTES:
90's clear

☑ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM: Mike Ligor, Leif Boman, Terry Riordan

SIGNATURE:

DATE: 6/23/16

62-160.800, F.A.C.

Revision Date: March 1, 2014

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

SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
FDEP CE-ROC		G4CE0024	06/23/2016	Lake Pan
REMARKS:	COUNTY: SUMTER	LOCATION: Little Jones Creek		FIELD ID/NAME: G4CE0024

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 14	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	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 13	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 13	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 8 Primary Score 48	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 **Artificial Channelization** 20	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 7 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 9 Left Bank 9	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful 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 12 Left Bank 10	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 10 Left Bank 10 Secondary Score 78	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

126 **TOTAL SCORE**

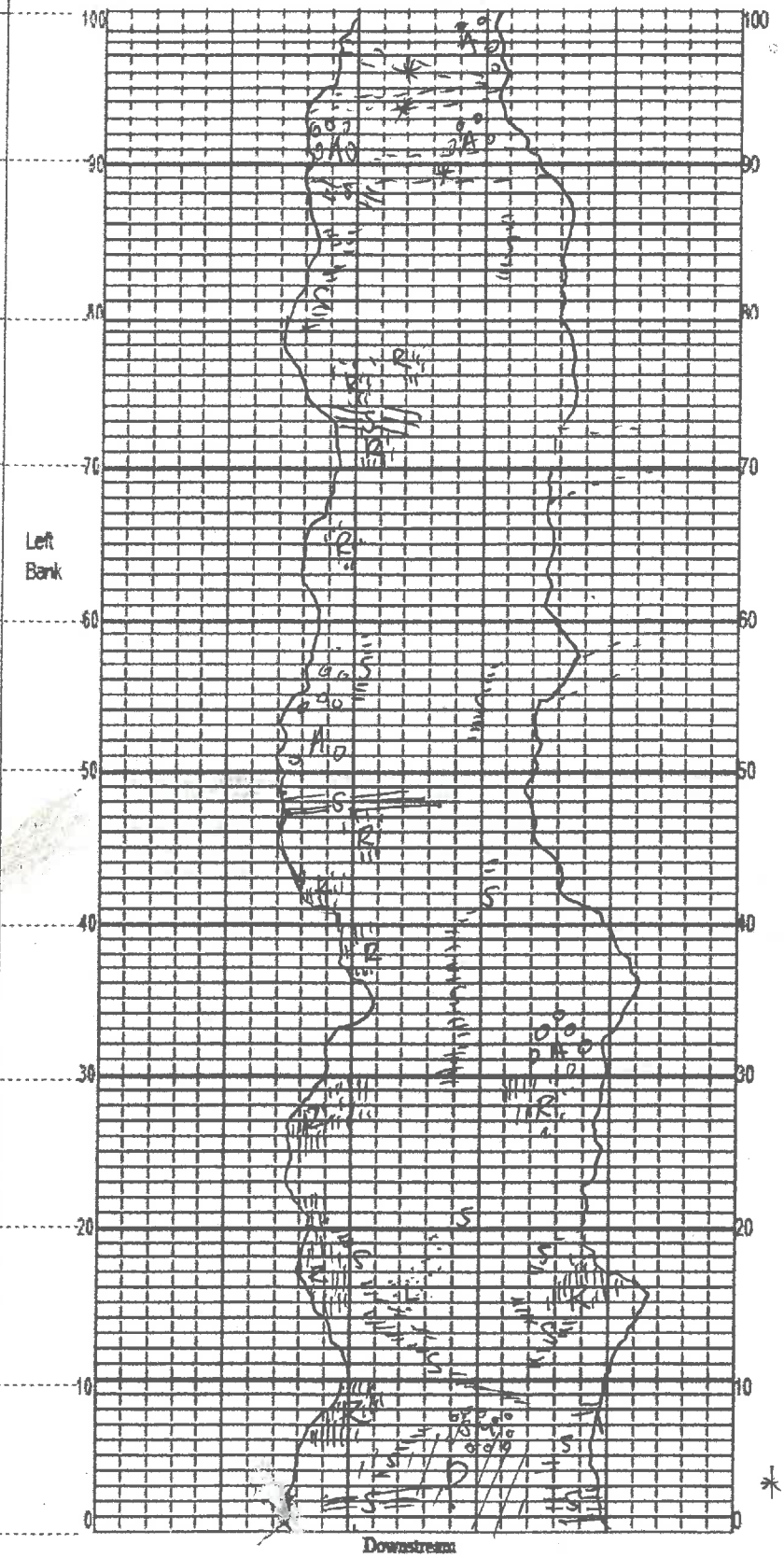
Date:	Analyst:	Signature:
6/23/16	Mike Linger Leif Boman	

62-160.800, F.A.C.

Revision Date: March 1, 2014

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

S	R	L	A	SM
			2	
.8				
.3	1.1			
	.2			
.5			.4	
.8	.8			
1.2	.2		.2	
	7 1.1 LB			
1.5	.8	.3		
R .4 HB 1.2				.7
5.5 6.3	4.6 3.8 LB	.3	2.6	.7



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

62-160.800, F.A.C

Location: Little Jones Creek

Date: 06/23/10

Sampler: L. Bonan, M. Linger, T. Riordan

100 m: Latitude
Longitude

0 m: Latitude
Longitude

Substrates: Code key, draw proportionate habitat abundance %

I	Snags	2.1%
SSS	Roots/undercut banks	1.5%
△	Leaf Packs (or mats)	0.1%
	Aquatic Macrophytes	0.9%
SM	SHELL MOUND	0.2%
P	Pools	total # observed = 1
		# range expected =

Average width 3 m
Average depth .4 m

Velocity measured at 50 meter mark.

WQ & chemistry taken at 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:

* partially submerged fallen trees

7 seconds @ 50m mark

SWEEPS

S R A M

Revision Date: March 1, 2014

DEP FORM FD 9000-32: LINEAR VEGETATION SURVEY FIELD SHEET

Waterbody: Little Jones Creek @ DS of | Date: 6/23/16 | County: Sumter | Storet Number: 64 CEC024

Analyst: Terry Riordan | Loop Trail Rd Bridge | Signature: Terry Riordan

Comments:

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m^2 of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Alternanthera philoxeroides											
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Ceratophyllum demersum											
Chara											
Cicuta maculata									X		
Cladium jamaicense											
Colocasia esculenta											
Commelina diffusa											
Commelina virginica											
Crinum americanum											
Diodia virginiana											
Eichhornia crassipes			✓						X	X	
Eleocharis (wispy viviparous)											
Hydrilla verticillata											
Hydrocotle											
Hygrophila polysperma											
Hymenocallis											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna	X		X	X		X		X	X	X	
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with "X"	X	X	X	X	X	X	X	X	X		
Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage	X	X	X	X	X	X	X	X	X		
>5 and ≤10% Macrophyte Coverage											
>10 and ≤25% Macrophyte Coverage										X	
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Micranthemum glomeratum											
Micranthemum umbrosum											
Myriophyllum aquaticum											
Najas guadelupensis											
Nuphar luteum											
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum											
Pontedaria cordata				X	X				X	X	
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salvinia minima											
Samolus parviflora											
Saururus cernuus					X	X	X		D		
Sparganium americanum											
Typha											
Vallisneria americana											
Zizania aquatica											
Nasturium floridanum			X					X	X	X	
Iris hexagona				X	X	X					
Ilex cassine								X			
Rhynchospora										X	
Nyssa sylvatica		X		X				X			
Taxodium			X								
Itea Virginia	X										

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Little Jones Creek @ OS 4 Loop Trail Rd Bridge | County: Sumter | Date: 6/23/16 | Investigators: Mike Linger

STORET Station Number: G4CE0024

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	3		
	2	3		
	3	N		
	4	N		
	5	N		76
	6	N		
	7	4		
	8	N		
	9	N		
10	1	N		
	2	4		
	3	N		
	4	3		
	5	3		84
	6	N		
	7	N		
	8	N		
	9	N		
20	1	3		
	2	N		
	3	N		
	4	N		
	5	N		80
	6	3		
	7	N		
	8	N		
	9	N		
30	1	N		
	2	3		
	3	4		
	4	N		
	5	N		88
	6	N		
	7	N		
	8	N		
	9	N		
40	1	N		
	2	N		
	3	N		
	4	N		
	5	N		84
	6	N		
	7	N		
	8	N		
	9	N		
50	1	3		
	2	3		
	3	3		
	4	N		
	5	N		80
	6	N		
	7	N		
	8	N		
	9	N		

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N		
	2	N		
	3	N		
	4	N		
	5	N		80
	6	N		
	7	N		
	8	N		
	9	N		
70	1	N		
	2	N		
	3	N		
	4	N		
	5	N		76
	6	N		
	7	N		
	8	N		
	9	N		
80	1	N		
	2	N		
	3	3		
	4	3		
	5	N		72
	6	N		
	7	N		
	8	N		
	9	N		
90	1	3		
	2	3		
	3	N		
	4	N		
	5	N		76
	6	N		
	7	N		
	8	N		
	9	N		
100	1	3		
	2	4		
	3	3		
	4	N		
	5	N		68
	6	N		
	7	N		
	8	3		
	9	3		

Secchi depth	0.7 (s)
Estimated?	

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

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	/
Habitat Assessment	/
SCI/Biorecon	/
Water sample	/

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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%.