



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
☒ Yes / ☐ No

WIN Station Name: Johns Lake @ conservation area dock **Date:** 2/17/2021
WIN/Field ID: G1CE0111 **WBID:** 2873 **ENR:** - **Latitude:** 28.531
County: ORANGE **Org ID:** 21FLCEN **Longitude:** -81.6129
Receiving Body of Water: Ocklawaha **RQ:** 2021-02-15-09

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Leif Boman		x		x	
☒	Victoria Schwartz	x		x		
☐						
☐						

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

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded		Meter ID# SHRIMP TRAP	
Photos: NO	Flow: FLOW	Tide:	Tide Times: High: Low:
Biological Samples Collected: ☐ None ☒ HA ☐ SCI ☒ RPS ☐ Algae ID ☒ LVS ☐ LVI Other:			
SBIO ID Numbers: SBIO 82010 MACROPHYTE 11793 RPS 9695			LIMS 2225862
Notes:			

Duplicate Sample

Time Zone: EST	Time:	Field ID: N/A (WIN ID_DUP)
WIN DMT Activity ID:		

Blank

Time Zone:	Time:	Field ID: (Blank Type_DDDMMYYY)
DI Source:	Location:	
DI Type:	Equipment ID:	
DI Container (Name/ID):		DI Container Type:

LIMS EVENT ID: CEN-DIST-2021-02-18-01 WIN Import ID: 24925
Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 4/12/21 QC Station ID, Field Parameters In LIMS DMT: TR 4/13/2021
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets KWM 4/15/21 Migrate Data to WIN: KWM 4/15/21 Verify Data In WIN: (Initials/Date)
(Initials/Date) (Initials/Date)



RQ-2021-02-15-09

Customer: WQAP

Project ID: SMP

Collected By: Leif Boman, Victoria Schwartz

Field Report Prepared By: Leif Boman

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G1CE0111

Location: Johns Lake @ conservation area dock

Comments:

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)
2/17/2021	1120 EST	7.81	87.7	21	7.6	0.3	0.5 ☐ VOB (S)	2.2	217.2	0.1
	1123 EST	7.44	83.1	20.9	7.28	1.7	Central Lab please use top row for login purposes		217.6	0.1

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 # SA0293040 Exp: 10/19/21	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3*	☐ <2		
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 17135566 Syringe Lot # 0079900	☒ 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) ☐ W-DIELDRIN	☐ Ice			
Phytoplankton/Periphyton	DTM-QL-C ☐ PEN-QL-C ☐ DTY-QN-C ☐ PKD-QN-C DTM-QN-C ☐ PRN-QN-C ☐ PKD-QN-BV	☐ Ice			

Name:
Leif Boman
Victoria Schwartz

Signature:

Victoria Schwartz

Date:

2/17/21

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

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

SAMPLE ID	ORG ID	LATITUDE
COUNTY <u>Orange</u>	STORET #	LONGITUDE <u>-81.6129</u>
DATE <u>2/17/21</u>	TIME <u>11:20</u>	SAMPLING AGENCY <u>31 FLEEN</u>
SITE NAME <u>Johns Lake @ Conservation area dock</u>		
FIELD ID/NAME <u>GICE0111</u>	RECEIVING BODY OF WATER <u>Ocklawaha</u>	

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural <u>40</u> Silviculture <u>5</u> Field/Pasture <u>50</u> Agricultural <u>5</u> Residential <u>5</u> Commercial <u>5</u> Industry <u>5</u> Other (Specify) <u>5</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>24</u> m wide <u>0.11</u> m/s <u>0.11</u> m/s <u>0.11</u> m/s <u> </u> m deep <u>2.2</u> m deep <u> </u> m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>11</u> Right Bank: <u>>18</u> Hydrologic Modification Score (per FT 3101) <u> </u>		
High Water Mark: <u> </u> + <u>2.2</u> = <u> </u> (m) (above present water level) (present depth) (above bed)		Artificially Impounded ☐ Yes ☒ No
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

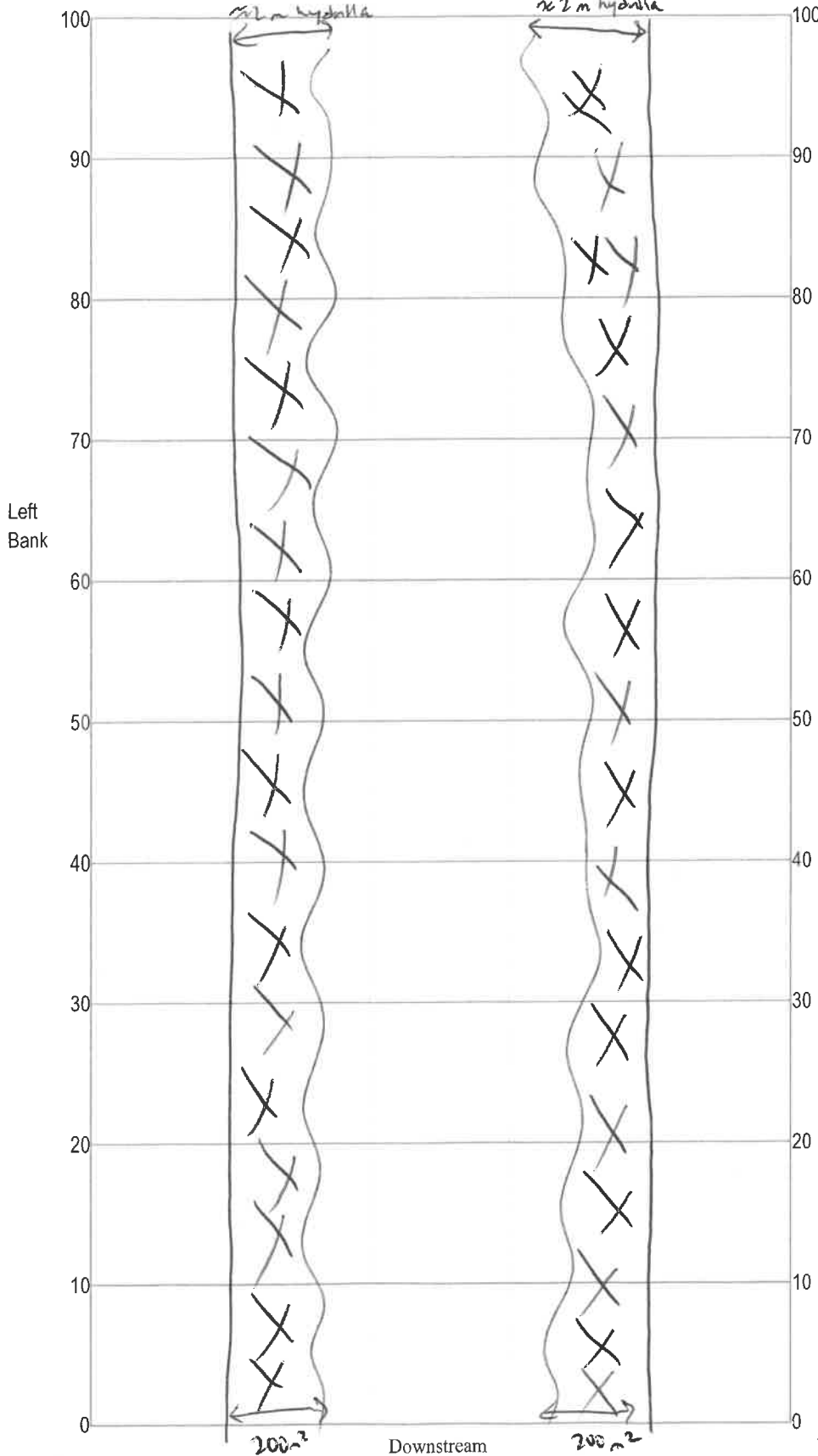
Sediment Oils <u>N/A</u> ☐ Absent ☐ Slight ☐ Moderate ☐ Profuse		Sediment Odors <u>N/A</u> ☐ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify): <u> </u>		Smothering of Substrates Sand Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐ Silt Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐ Algae Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐	
SUBSTRATE TYPE Assessment Tool: ☐ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon % Coverage <u> </u> INVERT # Times Sampled <u> </u> PERI # Times Sampled <u> </u>			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>21.0</u> <u>7.6</u> <u>7.81</u> <u>87.7</u> <u>217.2</u> <u>0.1</u> <u>0.5</u> Mid: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> Bottom: <u>1.7</u> <u>20.9</u> <u>7.28</u> <u>7.44</u> <u>83.1</u> <u>217.6</u> <u>0.1</u> <u> </u> Meter ID: <u>Shrimp Trap</u> TOTAL DEPTH <u>2.2</u>		
Woody Debris (Snags) <u> </u> <u> </u> <u> </u> Undercut Banks / Roots <u> </u> <u> </u> <u> </u> Leaf Packs or Mat <u> </u> <u> </u> <u> </u> Aquatic Vegetation <u>17</u> <u> </u> <u> </u> Rock or Shell Rubble <u> </u> <u> </u> <u> </u> Sand <u> </u> <u> </u> <u> </u> Mud / Muck / Silt <u> </u> <u> </u> <u> </u> Other <u> </u> <u> </u> <u> </u> Other <u> </u> <u> </u> <u> </u>			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA0293040</u> Exp: <u>10/19/21</u>		
			Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐		
			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u> </u> Exp: <u> </u>		
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: <u>Overcast / light rain</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.					
SAMPLING TEAM <u>Leif Boman / Victoria Schwartz</u>			SIGNATURE: <u> </u> <u> </u>		DATE: <u>2/17/21</u>

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

Johns Lake @ Conservation area dock

WBID: 2873

Station: 4ICE0111



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

Location: Johns Lake

Date: 2/17/21

Sampler: Leif Boman + Victoria Schmidt

100 m: Latitude 28.53151
Longitude -81.61378

0 m: Latitude 28.531
Longitude -81.6129

Substrates: Code key, draw proportionate habitat abundance. %

☐	Snags	_____
☐	Roots/undercut banks	_____
☐	Leaf Packs (or mats)	_____
☒	Aquatic Macrophytes	<u>17</u>
☐	_____	_____
☐	_____	_____
☐	Pools	total # observed = _____ # range expected = _____

Average width 24 m
Average depth 2.2 m

Velocity measured at 0.50/100 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:

metat
Duck

10-sec-
↑ sec.

$$2400 \text{ m}^2 / 100$$

$$\text{veg} = 400 \text{ m}^2 / 2400 \text{ m}^2 = \approx 17\%$$

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

SAMPLING AGENCY: <u>21FLCEN</u>		STORET STATION NUMBER:	DATE (MM/DD/YY): <u>02/17/21</u>	RECEIVING BODY OF WATER: <u>OK Ocklawaha</u>
REMARKS:	COUNTY: <u>Orange</u>	LOCATION: <u>Johns Lake @</u>		FIELD ID/NAME: <u>GICE011</u>

Conservation area dock

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>4</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 <u>4</u> 3 2 1
Substrate Availability <u>13</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 <u>13</u> 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 <u>11</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 <u>11</u>	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 <u>10</u> 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>7</u> Primary Score <u>35</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 <u>7</u> 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 <u>9</u>	20 19 18 17 16	15 14 13 12 11	10 <u>9</u> 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 <u>10</u> Left Bank <u>9</u>	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 <u>10</u> Left Bank <u>4</u>	10 9	8 7 6	5 <u>4</u>	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 <u>3</u> Left Bank <u>3</u> Secondary Score <u>48</u>	10 9	8 7 6	5 4	<u>3</u> 2 1

83

TOTAL SCORE

Date: <u>2/17/21</u>	Analyst: <u>Leif Boman/Victoria Schwartz</u>	Signature: <u>[Signature]</u> / <u>Vik B</u>
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[illegible]

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Johns Lake @ Conservation area dock County: Orange Date: 2/17/21 Investigators: Leif Boman / Victoria Silvach

Transect (m) Point 1=right 9=left Algal Thickness Rank (N-6, X) Estimated Canopy Cover

STORET Station Number: GICE011

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	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		
10	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		
20	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		
30	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	3		
	9	3		
40	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		
50	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		
60	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	3		
	9	3		
70	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		
80	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		
90	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		
100	1	3		
	2	3		
	3	N	✓	
	4	N	✓	
	5	N	✓	0
	6	N	✓	
	7	N	✓	
	8	N		
	9	3		

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%.

Secchi depth 0.5
Estimated? ☐

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-2021-02-15-09

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