

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

Visit # 79156
HA 15594

SAMPLING AGENCY: <u>21FWPB</u>		STORET STATION NUMBER: <u>GISE0004</u>	DATE (MM/DD/YY): <u>1/24/18</u>	RECEIVING BODY OF WATER: <u>L-63</u>
REMARKS:	COUNTY: <u>Olechna</u>	LOCATION: <u>Nb.1 St. Louis</u>	FIELD ID/NAME: <u>GISE0004</u>	

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>1</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 <u>1</u>
Substrate Availability <u>20</u>	Greater than 30% major productive habitat present at site <u>20</u> 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 <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 <0.01 5 4 3 2 <u>1</u>
Habitat Smothering <u>3</u> Primary Score <u>25</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 3 2 <u>1</u>
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>2</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 <u>2</u> 1
Bank Stability	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.	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 root zone with raw, eroded areas.
Right Bank <u>1</u> Left Bank <u>2</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>4</u> Left Bank <u>1</u>	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 <u>3</u> Left Bank <u>2</u> Secondary Score <u>14</u>	10 9	8 7 6	5 4	3 2 1

39 TOTAL SCORE

Date: <u>1/24/18</u>	Analyst: <u>Sewell</u>	Signature: <u>[Signature]</u>
----------------------	------------------------	-------------------------------

visit 79156
RPS # 9192

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Nathan Slavin

County:

Date: 12/18

Investigators: Seul II

STORET Station Number:

GISE0004

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	X	N	
	2	Y	Y	
	3			
	4			
	5			40
	6			
	7			
	8	Y	Y	
	9	X	N	
10	1	X	N	
	2	Y	Y	
	3			
	4			
	5			56
	6			
	7			
	8	X	Y	
	9	X	N	
20	1	X	N	
	2	X	Y	
	3			
	4			
	5			44
	6			
	7			
	8	N	Y	
	9	X	N	
30	1	X	N	
	2	X	Y	
	3			
	4			
	5			48
	6			
	7			
	8	N	Y	
	9	X	N	
40	1	X	N	
	2	X	Y	
	3			
	4			
	5			44
	6			
	7			
	8	N	Y	
	9	X	N	
50	1	X	N	
	2	X	Y	
	3			
	4			
	5			30
	6			
	7			
	8	N	Y	
	9	X	N	

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	X	N	
	2	N	X	
	3			
	4			
	5			58
	6			
	7			
	8	Y	Y	
	9	X	N	
70	1	X	N	
	2	X	Y	
	3			
	4			
	5			62
	6			
	7			
	8	X	Y	
	9	X	N	
80	1	X	N	
	2	N	Y	
	3			
	4			
	5			40
	6			
	7			
	8	N	Y	
	9	X	N	
90	1	X	N	
	2	N	Y	
	3			
	4			
	5			78
	6			
	7			
	8	N	Y	
	9	X	N	
100	1	X	N	
	2	N	Y	
	3			
	4			
	5			56
	6			
	7			
	8	N	Y	
	9	X	N	

Secchi depth
Estimated? 0.5

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- ☐

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 densimeter 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%.

The graph is plotted on a grid with the x-axis labeled 'Downstream' and the y-axis ranging from 0 to 100. The y-axis has major grid lines every 10 units and minor grid lines every 2 units. There are approximately 15 curved lines drawn on the graph, all trending upwards from left to right. A blue horizontal line is drawn at the y=10 level. On the right side of the graph, a dashed line is circled, and a small blue line segment is visible near the bottom right corner.

Revision Date: January 2017

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

Waterbody: Oldham Slough Date: 10/18 County: Oxford Storet Number: GISEADW
 Analyst: Gene C Signature: Gene C
 Comments: overgrown with veg, water body removed to vegetation by FUMD

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² 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										Specimen collected (check)	HERBACEOUS SPECIES	Meter Mark										Specimen collected (check)	
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100			0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100		
<i>Alternanthera philoxeroides</i>	/	/										<i>Micranthemum glomeratum</i>												
<i>Bacopa caroliniana</i>												<i>Micranthemum umbrosum</i>												
<i>Bacopa monnieri</i>												<i>Myriophyllum aquaticum</i>												
<i>Bidens mitis</i>												<i>Najas guadelupensis</i>												
<i>Boehmeria cylindrica</i>												<i>Nuphar luteum</i>												
<i>Centella asiatica</i>												<i>Orontium aquaticum</i>												
<i>Ceratophyllum demersum</i>												<i>Panicum hemitomon</i>												
<i>Chara</i>												<i>Panicum repens</i>												
<i>Cicuta maculata</i>												<i>Panicum rigidulum</i>												
<i>Cladium jamaicense</i>												<i>Pistia stratioides</i>												
<i>Colocasia esculenta</i>												<i>Polygonum glabra</i>												
<i>Commelina diffusa</i>												<i>Polygonum hydropiperoides</i>												
<i>Commelina virginica</i>												<i>Polygonum punctatum</i>												
<i>Crinum americanum</i>												<i>Pontedaria cordata</i>												
<i>Diodia virginiana</i>												<i>Potamogeton illinoensis</i>												
<i>Eichhornia crassipes</i>												<i>Ruellia simplex</i>												
<i>Eleocharis (wispy viviparous)</i>												<i>Sacciolepis striata</i>												
<i>Hydrilla verticillata</i>												<i>Sagittaria kurziana</i>												
<i>Hydrocotyle</i>	P				PP			PP				<i>Sagittaria lancifolia</i>												
<i>Hygrophila polysperma</i>												<i>Sagittaria latifolia</i>												
<i>Hymenocallis</i>												<i>Salvinia minima</i>												
<i>Lachnanthes caroliniana</i>												<i>Samolus parviflora</i>												
<i>Landoltia punctata</i>												<i>Saururus cernuus</i>												
<i>Lemna</i>												<i>Sparganium americanum</i>												
<i>Limnophila sessiflora</i>												<i>Typha</i>												
<i>Ludwigia leptocarpa</i>												<i>Vallisneria americana</i>												
<i>Ludwigia palustris</i>												<i>Zizania aquatica</i>												
<i>Ludwigia peruviana</i>												<u>Shms 7</u>												
<i>Ludwigia repens</i>																								
<i>Luziola fluitans</i>																								
If no Dominant or Co-Dominant were selected, indicate with "X"																								
Indicate % cover macrophytes per section																								
0-5% Macrophyte Coverage																								
>5 and ≤10% Macrophyte Coverage																								
>10 and ≤25% Macrophyte Coverage																								
>25 and ≤50% Macrophyte Coverage																								
> 50% Macrophyte Coverage	/	/	/	/	/	/	/	/	/	/	/													



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?
Yes / No

WIN Station Name: Site in Nubbin Slough
WIN/ Field ID: G1SE0002 G1SE0002
County: Okeechobee
Receiving Body of Water:
WBID: 3203A
ORG ID: 21FLWPB
Latitude: 27.205556
Longitude: -80.741667
Date: 1/24/18
RQ-2018- 01-15-46

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
	Sample Equipment ☒ Sample Container ☐ Van Dorm ☒ Pole ☐ Carboy ☐ Syringe ☐ Dipper ☐ Other Depth Measured with <u>YST</u> Equipment ID <u> </u>				
Collection Method ☐ Wading ☐ Canoe/Kayak ☒ From Shore ☐ Electric Motor ☐ Other ☐ Gasoline Motor					

Cratick Sewell Miranda																							
Water Level: Dry/ Pooled/ Low / Normal/ High / Flooded										Meter ID# AE		Matrix: Fresh Marine / DI											
Photos: Yes / No		Flow: NO FLOW / Intertidal / Flowing / NA		Tide: Rising/ Falling/ Slack/ N/A										Tide Times: High M/A Low									
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTn)	Sp COND (umhos/cm)	Temp. (C°)	☐ Wading ☒ From Shore ☐ Other ☐ Canoe/Kayak ☐ Electric Motor ☐ Gasoline Motor												
EST	13:30	1.5	0.3	0.5	2.91	32	6.48	0.19	399	20.22													
CEN			1.0		2.40	27	6.47	.21	444	19.62													

Biological Samples Collected: None HA SCI RPS 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 ☒ H ₂ SO ₄	SA7233030	8/24/18	☒ <2
Metals	☒ W-CPMs ☒ W-ICP			☐ Ice ☒ HNO ₃	7261120	9/18/18	☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter			☐ Ice			
Chlorophyll	☒ CHL-SUTE-W			☐ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-C / W-COLOR / W-SO4-IC / W-TDS			☐ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY			☐ Ice			
Macroinvertebrates	☐ MI-FW-Q-LDC			☐ Formalin			
Periphyton	☐ ALGAE-ID			☐ Ice			
Microbiology	☒ E Coil ☐ F Coil ☐ Enterococci			☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD			☐ Ice			
Tracers	☒ W-SUC-AA-R ☒ W-L-HERB-AA ☒ W-A-HERB-AA			☐ Ice			
Pesticides	☒ W-PSNP-TQ ☒ W-L-HERB-AA ☒ W-A-HERB-AA ☒ W-SUC-AA-R ☐ W-PCL-SQ-R ☐ W-GLYPH ☐ W-SUC-AA-R			☒ Ice ☐ Other			

Notes: E Place Label Here

Signature: [Signature] Date: 1/24/18

Enter Field Parameters, Verify Station ID in LIMS DMT: AM 04/12/18 QC Station ID, Field Parameters in LIMS DMT:
Scan/Save Field Sheets AM Migrate Data to WIN: Verify Data in WIN: