



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	Seven Runs upstream of Hwy 81				Sample Date:	12/19/2022	
WIN / Field ID:	G3NW0116	ORG ID:	21FLPNS	ENR:			
County:	Walton	WBID:	570	STREAM	3F		
Receiving Body of Water:	Choctawhatchee River				RQ-	2022-12-12-18	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Nathan Mulkey	x		x		
Hannah Henning		x		x	

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	Pole	
Syringe Lot#		Filter Lot#	
Secchi Equipment ID:			
Collection Method			
x	Wading	Canoe/Kayak	
	From Shore	Electric Motor	
		Gasoline Motor	
Depth Measured With <i>Meter</i>			

Water Level:	Low
Flow:	Flowing
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	Yes
Meter ID:	154179 (ProDSS)
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
CEN	1130	0.6	0.3	10.93	96.4	10	4.81	0.6	19.4	0.01
								VOB (s)		

Biological Samples Collected:	HA LVS RPS SCI		
SBIO Visit ID: 85928	HA ID: 18083	RPS ID: 10030	Macrophyte ID: N/A
LIMS Sample ID Entered Into The Macrophyte Module:			2377025

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology	E. coli			ICE			
Chlorophyll	CHLSUITE-W			ICE			
Physical/Aggregate Nutrients	ALKALINITY, TURBIDITY, W-F, W-TSS			ICE			
	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			ICE			
Filtered Nutrients	W-PO4-F	Field Filtered 0.45 µm Filter		ICE	Syringe Lot#; Filter Lot#:		
Acid Preserved Nutrients	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	2145160	6/23
Metals	W-ICPMS	W-ICP	W-HARD	ICE	HNO3**	2126030	6/23
Organics (LC)	W-E8321-DI	W-E8321-MS			MCAA***		
Macroinvertebrates	MI-FW-QLDC			Formalin	8280122		
Organics (GC)	W-PSNP-TQ				*2.0 ml of H2SO4 Used Unless Noted Otherwise **2.0 ml of HNO3 Used Unless Noted Otherwise		
Molecular							
Periphyton							
Phytoplankton							
BOD							
DOC							
Other(s)					SyringeLot#	FilterLot#	
Field Comments:	/ SCI Collection Time: 1100						
Comments on COC:							
Relinquish Date:	12/19/2022	Signature:					

LIMS EVENT ID: _____ WIN Import ID: _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ (Initials/Date) QC Station ID, Field Parameters In LIMS DMT: _____ (Initials/Date)

Save Field Sheets on Network: _____ (Initials/Date) Migrate Data to WIN: _____ (Initials/Date)

Site Name: Seven Runs Upstream Hwy 81
Storet 63NW0116 Field ID 63NW0116
Visit ID 85928
RPS ID 14034
Macro ID N/A
HA ID 18083

Date: 12/19/22
Project: GMP / TMDL Studies
RQ: 2022-12-12-18
LIMS ID: 2377025
WBID: 570

☒ SCI

☐ RPS/LVS Only

☒ Sample Site Created in SBIO

☒ Phys/Chem entered in SBIO

☒ HA entered in SBIO

Initial FR 1/4/23 ☒ Date and Initial QA: 1/23/23 NM

☒ RPS entered in SBIO

Initial FR 1/4/23 ☒ Date and Initial QA: 1/23/23 NM

☐ LVS entered in SBIO

Initial _____ ☐ Date and Initial QA: _____

☒ < 2 m² vegetation

☐ Plants getting verified

Date submitted: _____

☐ Plants verified

Date returned: _____

☒ RPS authorized in SBIO

☒ Date and Initial: 1/23/23 FR

☒ RPS score: 0.0

☐ Macro authorized in SBIO

☐ Date and Initial: _____

☐ LVS Score: _____

☒ SCI complete: 3/15/23 MHein

SCI Score: 86

☒ Add SBIO-ID, HA-ID, RPS-ID, MACROPHYTE-ID and LIMS# to field sheet in database

☒ E. coli samples shipped to Tallahassee Lab for analysis.

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

SAMPLE ID 85928 ORG ID 21FLPNS LATITUDE 30.53923
 COUNTY Walton WIN ID/STORE # 63110116 LONGITUDE 85.92062
 DATE 12/19/22 TIME 1:30 CTZ _____ SAMPLING AGENCY FL DEP - NWROC
 SITE NAME Seven Pines westward of Hwy 81 RC 2022-12-18
 FIELD ID/NAME 63110116 RECEIVING BODY OF WATER Chaptankhatchee River WBID 570 Project: SNP

RIPARIAN ZONE / STREAM FEATURES

WBID: 570

LIMS ID: 2377025

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) <u>N/A</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>4.0</u> m wide <u>.25</u> m/s <u>.25</u> m/s <u>.25</u> m/s <u>.5</u> m deep <u>.5</u> m deep <u>.5</u> m deep
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) <u>1-2</u>			
High Water Mark: <u>0.6</u> + <u>.5</u> = <u>1.1</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 ☒ 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			WATER QUALITY					
Woody Debris (Snags) <u>11.1</u> <u>5</u> <u></u> Undercut Banks / Roots <u>11.8</u> <u>5</u> <u></u> Leaf Packs or Mat <u>1.9</u> <u>5</u> <u></u> Aquatic Vegetation <u></u> <u></u> <u></u> Rock or Shell Rubble.. <u></u> <u></u> <u></u> Sand..... <u>75.2</u> <u>5</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>			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>10.0</u> <u>4.81</u> <u>10.23</u> <u>96.4</u> <u>19.4</u> <u>0.01</u> <u>0.6</u> Mid: <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> Bottom: <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> <u></u> Meter ID: <u>154179</u> <u>0.6</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: _____ Exp: _____ Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☒ No Lot Number: _____ Exp: _____ Color Tannic ☐ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ 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: ☒ The antecedent hydrologic conditions have been met to my best knowledge.					

SAMPLING TEAM:

Nathan Miley / Hannah Keating

SIGNATURE:

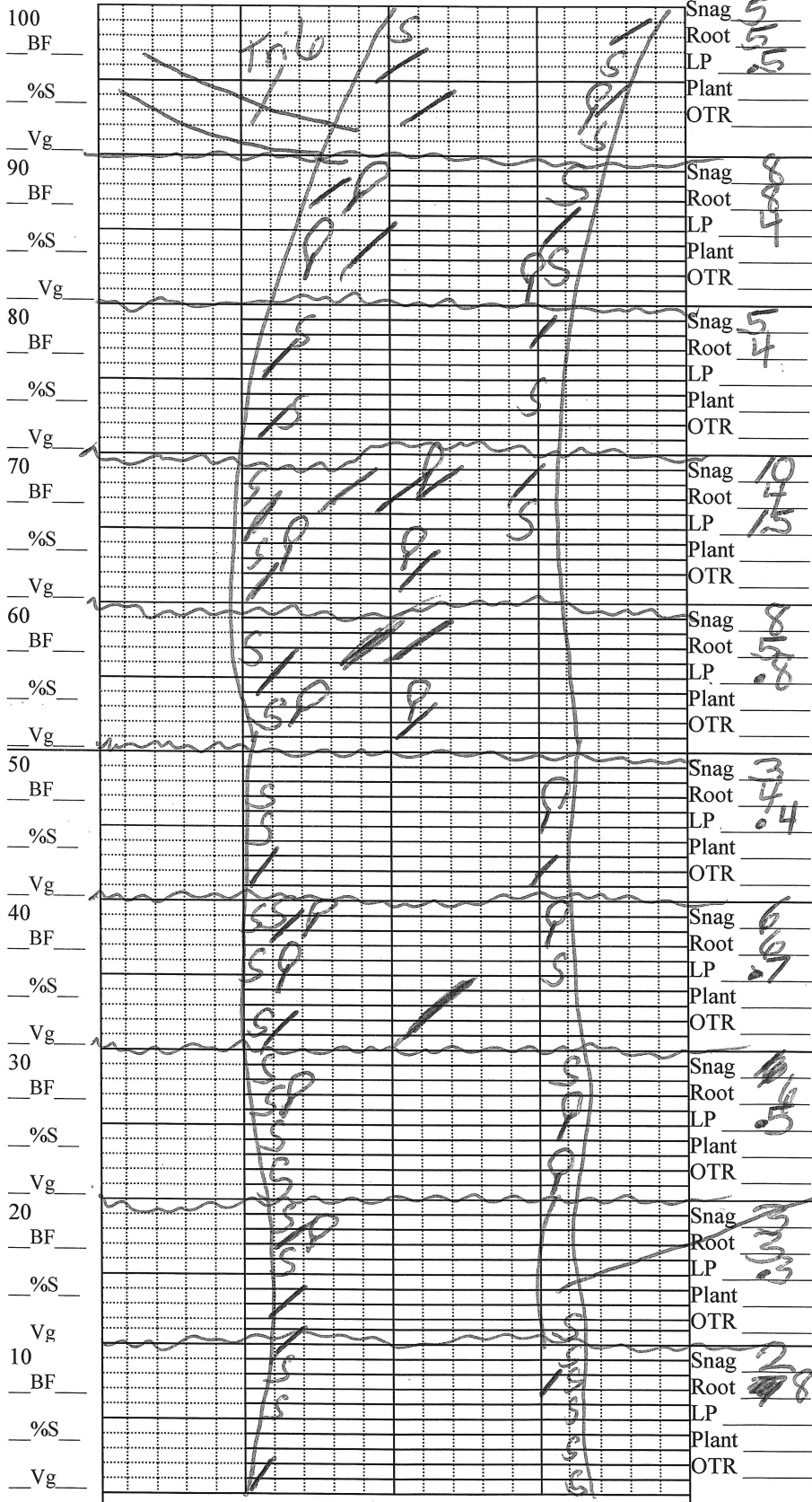
Nathan Miley

DATE:

12/19/22

Stream/River Habitat Sketch Sheet, Form FD 9000-4 (June 1, 2001)

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



WIN ID G3NW0116

Substrates: Code key,
draw proportionate habitat
abundance.



Snags $\frac{50}{450}$ 11.1%



Roots/undercut banks $\frac{55}{450}$ 11.8%



Leaf Packs (or mats) $\frac{8}{450}$ 1.9%



Macrophytes



Velocity: $0.25 \frac{m}{s}$ $\frac{1}{4}$
Note where velocity
measures were taken. 100 m

Habitat Smothering:
Note areas (on map) where
sand or silt is something
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.

Average width 4.5 m

Average depth 0.5 m

WQ & chemistry taken @ 0 m

Station Name: Seven Runs

Project: SMP

Sampled By/Date: 12/19/2022

0 m Latt. 30.53925

0 m Long. 85.92069

100 m Latt. 30.53983

100 m Long. 85.92143

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

SAMPLING AGENCY: DEAR-NWROC. 21FLPNS <i>DEP NWROC</i>		STORET STATION NUMBER: <i>GNW0116</i>	DATE (MM/DD/YY): <i>12/19/22</i>	RECEIVING BODY OF WATER: <i>Choct. River</i>
REMARKS: WBID <i>570</i>	COUNTY: <i>Walton</i>	LOCATION: <i>Swan Run upstream of Hwy 81</i>	FIELD ID/NAME: <i>GNW0116</i>	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <i>14</i>	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 <i>14</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>15</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>16</i> ----- Primary Score <i>59</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 Artificial Channelization <i>18</i>	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 <i>10</i> Left Bank <i>10</i>	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 <i>9</i> Left Bank <i>9</i>	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 <i>8</i> Left Bank <i>8</i> ----- Secondary Score <i>72</i>	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

131

TOTAL SCORE

Date: <i>12/19/22</i>	Analyst: <i>Nathan McKelvey</i>	Signature: <i>Nathan McKelvey</i>
-----------------------	---------------------------------	-----------------------------------

SBIO ID: *85928*
62-160.800, F.A.C.

HA ID: *1843-18083*

Revision Date: March 1, 2014

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: <u>Seven Runs upstream Hwy 81</u>	County: <u>Walton</u>	Date: <u>12/11/22</u>	Investigators: <u>Nathan Miller</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			
	2					2				
	3					3				
	4					4				
	5			70		5				70
	6					6				
	7					7				
	8					8				
	9	X				9	N			
10	1	X			70	1	N			
	2					2				
	3					3				
	4					4				
	5			68		5				74
	6					6				
	7					7				
	8					8				
	9	N				9	N			
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4				
	5			76		5				76
	6					6				
	7					7				
	8					8				
	9	X				9	X			
30	1	X			90	1	N			
	2					2				
	3					3				
	4					4				
	5			74		5				74
	6					6				
	7					7				
	8					8				
	9	X				9	X			
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5			74		5				72
	6					6				
	7					7				
	8					8				
	9	X				9	X			
50	1	X				1				
	2					2				
	3					3				
	4					4				
	5			70		5				
	6					6				
	7					7				
	8					8				
	9	X				9	X			

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%.

STORET Station Number:

03110116

Secchi depth 0.6
Estimated?

points ranked 4-6 9
total points assessed 9
% points ranked 4-6 100

Check accompanying data collected at same site/date:

Algal mat sample ☒
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☒
Water sample ☒

RQ-2022-12-12-18

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

SBIO Visit ID. 85923

RPS ID. 10034

*High water
-6 @ 100m*

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

Waterbody: <u>Seven Runs</u>	Date: <u>12/19/22</u>	County: <u>Walton</u>	Storet Number: <u>631M0116</u>
Analyst: <u>Nathan Mully</u>	Signature: <u>Nathan Mully</u>		
Comments: <u>L20-2, 04V</u>			

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.

[illegible]

Field ID: G3NW0116

RPS ID 14434

SBIO ID 859 28

VPDB ID
micro N/A

LIMS ID 2377025