

LVI

Site Name Lake Otting Sample Date 7/13/20
WBID 1329K WIN ID G4CE0174 RQ 2020-07-13-41

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	Kwm 7/17/20	TR 8/24/2020
Create SBIO station visit	Kwm 7/20/20	n/a
Vascular Entry (add LIMS ID)	Kwm 8/14/20	TR 9/30/2020
Lake Observation Sheet Entry	Kwm 8/14/20	TR 9/30/2020
Authorize SBIO data	TR 9/30/20	n/a
Scan all sheets to 21FLCEN folder	KWM 10/2/20	n/a
LIMS/WIN migration	KWM 10/2/20	n/a
File in cabinet		n/a

Comments/notes:

waiting on Lake Observation sheet ✓

Little Lake Weir water chemistry w/ this RQ



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes / No

07/13/2020

Date: 07/09/2020 vs
(mm/dd/yyyy)

WIN Station Name: Lake Otting @ Center of Lake

WIN/ Field ID: G4CE0176

WBID: 1329K

Latitude: 29.072953

(Decimal Degrees)

County: Marion

ORG ID: 21FLCEN

Longitude: -82.342083

(Decimal Degrees)

Receiving Body of Water:

RQ-2020- 07-13-41

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Leif Boman		✓		✓	✓
Victoria Schwartz	✓		✓		

Sampling Equipment	
☒ Sample Container	☐ Van Dorn
☒ Syringe	☐ Pole
☐ Dipper	☐ Other
Depth Measured with <u>SECH</u>	
Equipment ID <u>KNOTHEAD</u>	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☒ Electric Motor
☐ Other	☐ Gasoline Motor

Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded		Meter ID# <u>SHRIMP TRAP</u>	
Photos: <u>Yes</u> / No	Flow: No Flow / Flowing <u>NA</u>	Tide: Rising/ Falling/ Slack <u>NA</u>	Tide Times: High Low
Biological Samples Collected: None HA SCI RPS Algae ID LVS <u>LVI</u> Other:			
SBIO ID Numbers:	SBIO-ID: <u>61206</u>	HA-ID: <u>—</u>	RPS-ID: <u>—</u>
Macrophyte-ID: <u>11696</u>		LIMS#: <u>2182834</u>	
Notes: <u>LVI (2,5,8,11)</u>			
Sampler Notes: launch @ 29°04'20.7"N, 82°20'31.7"W			

Duplicate Sample

Time Zone: EST CEN Time: <u>N/A</u>	Field ID: <u>N/A</u> (WIN ID_DUP)
WIN DMT Activity ID: <u>N/A</u>	

Blank

Time Zone: EST CEN Time: <u>N/A</u>	Field ID: <u>N/A</u> (Blank Type_DDMMYY)
DI Source: <u>N/A</u>	Location: <u>N/A</u>
☐ Field Blank	Equipment ID: <u>N/A</u>
☐ Equipment Blank	
☐ Field Cleaned Equipment Blank	

LIMS EVENT ID: CEN-DIST-2020-07-4-01 WIN Import ID: 22180 Enter Field

Parameters, Verify Station ID In LIMS DMT: KWM 7/17/20 QC Station ID, Field Parameters In LIMS DMT: TR 8/24/20
(Initials/Date) (Initials/Date)

Scan/Save Field Sheets KWM 10/2/20 Migrate Data to WIN: KWM 10/2/20 Verify Data In WIN: —
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2020- 07-13-41

Customer: CEN-DIST

Project ID: SMP

Collected By: Leif Boman / Victoria Schwartz

Field Report Prepared By: Victoria Schwartz

Sampling Agency: FDEP CEN-ROC

WIN ID / Field ID →

Lake Otting @ Center
of Lake

G4CE0176

Comments:

Matrix: Fresh / Marine

(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 (PPT)
7/13/20	12:36 EST CST	7.84	107.7	32.1	8.21	^{VS} 103.3 0.327	1.0 ✓ VOB (S)	1.0	103.3	0.05

Central Lab please use top row for login purposes

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 # H2S04 LOT# SA9354050 EXP: 12/20/2020 Exp:	☒ 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 # 16930280 Syringe Lot # 9149785	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-C / 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			
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐ See Notes	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ W-E8321-MS ☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			

Name:

Victoria Schwartz

Signature:

Victoria Schwartz

Date:

07/13/20

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

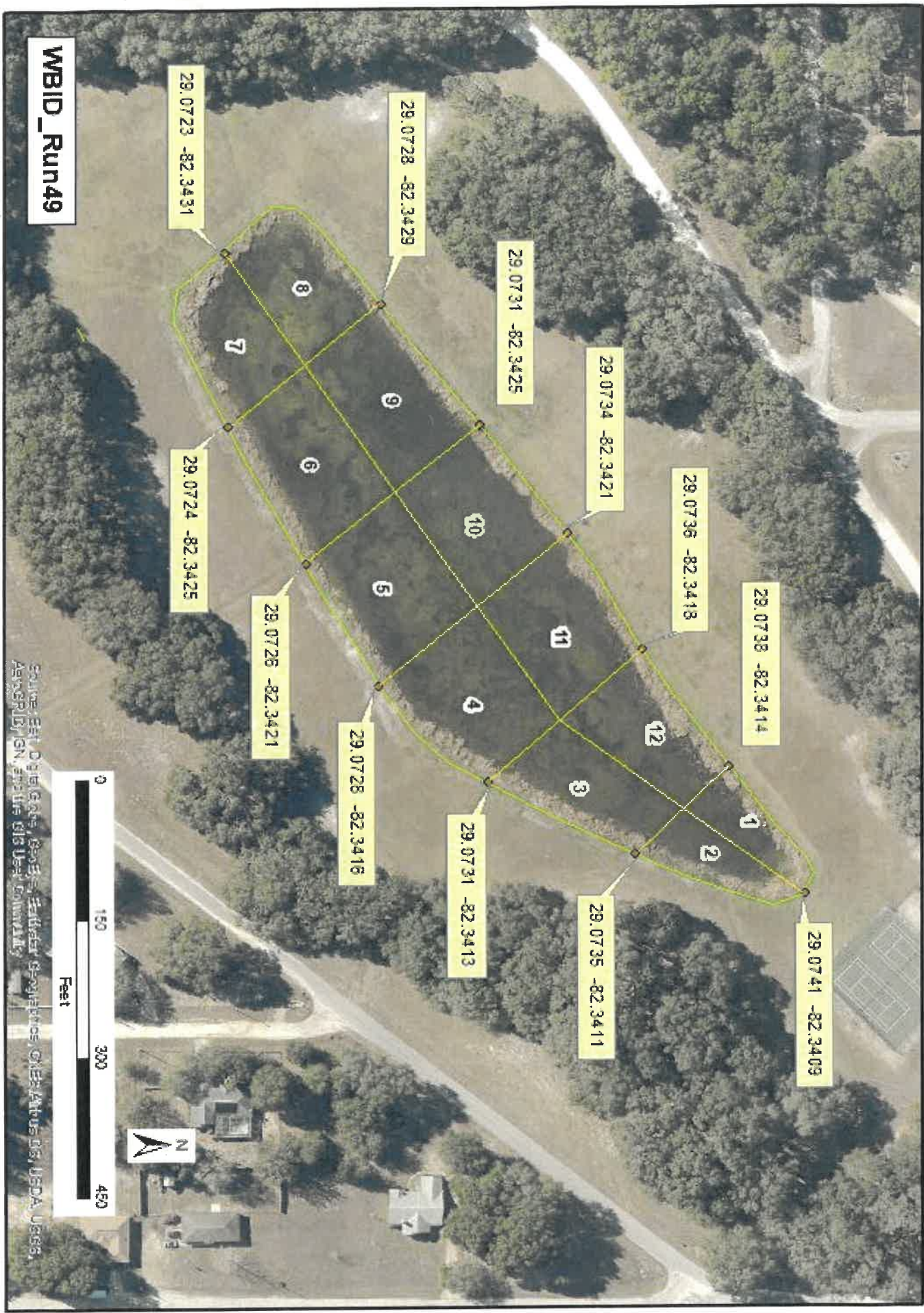
Waterbody: <u>Lake Otting</u>		County: <u>Marion</u>		Date: <u>07/13/2020</u>							
Analyst: <u>Leif Boman/Victoria Schwartz</u>		Signature: <u>[Signature]</u>		STORET:							
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold = FLEPPC invasive exotic. It is important to note dominant or co-dominant taxa (by areal extent) for each unit. Use "D" to denote dominant taxon, or "C" for the 2 co-dominant taxa.				Lake units sampled (circle one group): 1, 4, 7, 10 <u>2, 5, 8, 11</u> 3, 6, 9, 12							
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	Collected? (✓)
Acer rubrum						Fraxinus					
Alternanthera philoxeroides						Fuirena scirpoidea					
Amaranthus australis						Gordonia lasianthus					
Andropogon sp.						Habenaria repens					
Azolla filiculoides (A. caroliniana)						Hibiscus coccineus					
Baccharis sp.						Hibiscus grandiflorus					
Bacopa caroliniana						Hydrilla verticillata					
Bacopa monnieri						Hydrocotyle sp.					
Bidens alba						Hygrophila polysperma					
Bidens laevis						Hymenocallis sp.					
Bidens mitis						*Hypericum fasciculatum					
Boehmeria cylindrica						*Hypericum hypericoides					
Brasenia schreberi						*Hypericum myrtifolium					
Cabomba caroliniana						Ilex cassine					
Canna sp.						Ipomoea aquatica					
Centella asiatica						Ipomoea sagittata					
Cephalanthus occidentalis						Itea virginica					
Ceratophyllum demersum						Juncus effusus					
Chara sp.						*Juncus marginatus					
Cicuta maculata						*Juncus megacephalus					
Cinnamomum camphora						Juncus repens					
Cladium jamaicense						*Juncus scirpoides					
Colocasia esculenta						Lachnanthes caroliniana					
*Commelina						Leersia hexandra					
Crinum americanum						Landoltia punctata (Spirodela punctata)					
Cyperus articulatus						Lemna sp.					
Cyperus blepharoleptos (Scirpus cubensis)						Leucothoe racemosa (Eubotrys racemosa)					
Cyperus haspan						Limnium spongia					
*Cyperus involucratus						Limnophila sessiliflora					
*Cyperus lecontei						Liquidambar styraciflua					
*Cyperus odoratus						*Ludwigia arcuata					
*Cyperus polystachyos						*Ludwigia grandiflora					
*Cyperus surinamensis						*Ludwigia hexapetala					
Cyrtilla racemiflora						*Ludwigia leptocarpa					
Decodon verticillatus						Ludwigia (native)					
Diodia virginiana						*Ludwigia octovalvis					
*Echinochloa crus-galli						*Ludwigia peruviana					
*Echinochloa muricata						*Ludwigia repens					
Echinochloa walteri						Ludwigia suffruticosa					
Eclipta prostrata						Luziola fluitans (Hydrochloa carolinensis)					
Eichhornia crassipes						Magnolia virginiana					
*Eleocharis						Mayaca fluviatilis					
Eleocharis cellulosa						Melaleuca quinquenervia					
*Eleocharis elongata						Micranthemum glomeratum					
Eleocharis equisetoides						Micranthemum umbrosum					
Eleocharis interstincta						Mikania scandens					
Eleocharis vivipara (submersed)						Mimosa pigra					
*Eriocaulon compressum						Myrica cerifera					
*Eriocaulon decangulare											
Eupatorium capillifolium											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Lake Otting</u>		Date: <u>07/13/2020</u>			
SPECIES	25811	Collected? (✓)	SPECIES	25811	Collected? (✓)
Myriophyllum aquaticum			<i>Salix caroliniana</i>		
* <i>Myriophyllum heterophyllum</i>			Salvinia minima		
* <i>Myriophyllum laxum</i>			<i>Sambucus canadensis</i>		
* <i>Myriophyllum pinnatum</i>			Sapium sebiferum		
Myriophyllum spicatum			<i>Saururus cernuus</i>		
* <i>Najas filifolia</i>			Schinus terebinthifolius		
* <i>Najas guadalupensis</i>	<u>✓✓✓✓</u>		* <i>Schoenoplectus californicus</i>		
* <i>Najas minor</i>			* <i>Schoenoplectus pungens</i>		
<i>Nelumbo lutea</i>			* <i>Schoenoplectus tabernaemontani</i>		
<i>Nitella</i> spp.					
<i>Nuphar</i> sp.			<i>Scirpus cyperinus</i>		
<i>Nymphaea mexicana</i>			* <i>Sesbania</i>		
<i>Nymphaea odorata</i>			<i>Solidago</i> sp.		
<i>Nymphoides aquatica</i>			<i>Sparganium americanum</i>		
<i>Nyssa sylvatica</i> var. <i>biflora</i>			<i>Spartina bakeri</i>		
<i>Orontium aquaticum</i>			<i>Spirodela polyrhiza</i>		
<i>Osmunda cinnamomea</i>			<i>Taxodium</i> sp.		
<i>Osmunda regalis</i>			<i>Thalia geniculata</i>		
<i>Panicum hemitomon</i>	<u>✓✓✓</u>		<i>Thelypteris interrupta</i>		
Panicum repens			<i>Thelypteris palustris</i>		
<i>Paspalidium geminatum</i>			<i>Triadenum virginicum</i>		
* <i>Paspalum repens</i>			<i>Typha</i> sp.		
<i>Paspalum urvillei</i>			Urochloa mutica (Brachiaria mutica)		
<i>Peltandra</i> sp.			* <i>Utricularia gibba</i> (U. <i>biflora</i>)	<u>✓✓✓✓</u>	
<i>Persea</i> sp.			* <i>Utricularia foliosa</i>		
* <i>Persicaria glabra</i> (<i>densiflora</i>)			* <i>Utricularia inflata</i>		
<i>Persicaria hirsuta</i>			* <i>Utricularia purpurea</i>		
* <i>Persicaria hydropiperoides</i>			* <i>Utricularia radiata</i>		
* <i>Persicaria punctata</i>			* <i>Utricularia resupinata</i>		
* <i>Persicaria</i>			<i>Vallisneria americana</i>		
Pennisetum purpureum			<i>Vitis</i> sp.		
<i>Phragmites australis</i>			* <i>Websteria confervoides</i>		
<i>Pinus elliotii</i>			Wedelia trilobata (Sphagneticola trilobata)		
Pistia stratiotes			<i>Wolffiella</i> spp.		
<i>Pluchea</i> sp.			<i>Woodwardia virginica</i>		
<i>Pontederia cordata</i>			<i>Xyris</i> sp.		
* <i>Potamogeton diversifolius</i>			<i>Zizania aquatica</i>		
* <i>Potamogeton illinoensis</i>			<i>Zizaniopsis milacea</i>		
* <i>Potamogeton pusillus</i>					
* <i>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)					
<i>Proserpinaca pectinata</i>			<i>Telmatoblechnum serrulatum</i>		
* <i>Rhexia</i>					
* <i>Rhynchospora corniculata</i>					
* <i>Rhynchospora inundata</i>					
<i>Rhynchospora nitens</i>					
<i>Ricciocarpus natans</i>					
<i>Sabal palmetto</i>					
<i>Sacciolepis striata</i>					
* <i>Sagittaria filiformis</i>	<u>✓✓✓✓</u>				
* <i>Sagittaria graminea</i>					
* <i>Sagittaria isoetiformis</i>					
<i>Sagittaria lancifolia</i>					
<i>Sagittaria latifolia</i>					

Leaf + Victoria
7/13/20

LVI Map for Lake Otting, WBID 1329K



DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ **MACROPHYTE ID:** _____ **LATITUDE:** _____
COUNTY: Marion **STORET #:** 64650176 **LONGITUDE:** _____
DATE: _____ **TIME:** _____ **SAMPLING AGENCY:** _____
SITE NAME: Lake Oting **WBID:** 1329K
FIELD ID/NAME: _____ **LAKE SIZE:** _____ **RQ:** 2020-07-13-41

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) :				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)																
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)	LDI:												
				<u>100</u>																
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy				Artificially Impounded		Land Use Source & Year:														
Local Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy				☐ Yes ☒ No																
STORMWATER INPUTS	Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation		Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place		Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place		Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place													
<u>14</u>	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
LAKESIDE ALTERATIONS	Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected)		Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected)		Many structures, roads or other human disturbance visible (50%-70% lakeside affected)		Highly developed or disturbed (>70% of lakeside affected)													
<u>11</u>	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
BUFFER ZONE	Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer		89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer		50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer		< 29% of shoreline with >18m buffer													
<u>12</u>	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # _____ Exp. Date: _____ Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High				Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____			
Meter Readings: Top: <u>0.327</u> <u>32.1</u> <u>8.21</u> <u>7.84</u> <u>107.7</u> <u>103.3</u> <u>0.05</u> Mid-Depth: _____ Bottom: _____				Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____			
Meter ID: _____				Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid			
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____				Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic			
Biological Communities: LVI Conducted? ☒ Yes ☐ No Phytoplankton Sample Taken? ☐ Yes ☐ No Sample Preserved? ☐ Yes ☐ No Lot #: _____ Exp Date: _____ Algal Bloom/Algal ID Sample Taken? ☐ Yes ☐ No Active Vegetation Mgmt? ☐ Yes ☐ No ☒ Don't Know				Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☐ ☒ ☒ ☐ Submersed Plants ☐ ☐ ☒ ☐ Exotic Apple Snails ☒ ☐ ☐ ☐			
Weather Conditions: <u>overcast</u>				Additional Notes:			
SAMPLING TEAM: <u>Reggie Boman</u>				SIGNATURE: <u>Reggie Boman</u>		DATE: <u>7/13/20</u>	