

LVI

Site Name Lake Minnie

Sample Date 8/21/19

WBID 2942C

WIN ID G2UE0106

RO 2019-08-19-54

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	KWM SEP 12 2019	LB 09/13/19
Create SBIO station visit	KWM SEP 13 2019	n/a
Vascular Entry (add LIMS ID)	KWM SEP 13 2019	LB 09/13/19
Lake Observation Sheet Entry	KWM SEP 13 2019	LB 09/13/19
Authorize SBIO data	LB 09/13/2019	n/a
Scan all sheets to 21FLCEN folder	LB 09/13/2019	n/a
LIMS/WIN migration	LM 9/23/19	n/a
File in cabinet		n/a

Comments/notes:

834

14755



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?
Yes / No

WIN Station Name: Lake Minnie @ Center

Date: 08/21/2019

WIN/ Field ID: G2CE0108

WBID: 2962C

Latitude: 28.754161

(mm/dd/yyyy)

County: Seminole

ORG ID: 21FLCEN

Longitude: -81.291729

(Decimal Degrees)

Receiving Body of Water: _____

RQ-2019- 08-19-54

(Decimal Degrees)

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Leif Boman									
Katie March									

Sampling Equipment									
☒ Sample Container	☐ Van Dorn	☐ Pole							
☐ Carboy	☒ Syringe								
☐ Dipper	☐ Other								
Depth Measured with Secchi Disk Line / <u>Meter</u>									
Equipment ID <u>Leadfoot, Knothead, Grassy/Bucket / Trap</u>									

Collection Method									
☐ Wading	☒ Canoe/Kayak								
☐ From Shore	☒ Electric Motor								
☐ Other	☐ Gasoline Motor								

Water Level: <u>Dry</u> / Pooled / Low / Normal / High / Flooded					Motor ID# <u>Craw Daddy</u>					Matrix: <u>Fresh</u> / Marine / DI	
Photos: Yes / No		Flow: <u>No Flow</u> / Intestinal / Flowing <u>NA</u>			Tide: <u>Rising</u> / Falling / Slack <u>NA</u>			Tide Times: High / Low			
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTH)	Sp COND (µmhos/cm)	Temp. (C°)	
EST	1115	3.1	0.3	0.5	8.28	110.6	6.94	0.09	184.1	30.3	
CEN			2.4		0.11	1.4	6.26	0.13	273.0	26.5	

Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS <u>LVI</u> Other:									
SBIO ID Numbers: SBIO-ID: <u>60237</u> HA-ID: RPS-ID: Macrophyte ID: <u>11478</u> LIMS#: <u>2113646</u>									

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4			☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	13615055		
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CHC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ ME-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ W-E8321-MS ☐ W-CARB-AA	☐ Ice ☐ Other			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Notes: Park/Launch at apartment complex: 28.752505, -81.294028		WIN ID / Field ID → Lake Minnie @ Center
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Signature: <u>K March</u>	Date: <u>8/21/19</u>
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LIMS EVENT ID: <u>CENT-DIST-2019-08-22-02</u>	QC Station ID, Field Parameters In LIMS DMT: <u>10 09/13/2019</u>
Enter Field Parameters, Verify Station ID In LIMS DMT: <u>KWM SEP 12 2019</u>	Verify Data In WIN: <u>10 09/13/2019</u>
Scan/Save Field Sheets <u>LB 09/13/2019</u>	Migrate Data to WIN: <u>LND 8/23/19</u>



G2CE0108

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
 COUNTY: _____ STORET #: G2UE0108 LONGITUDE: _____
 DATE: _____ TIME: _____ SAMPLING AGENCY: _____
 SITE NAME: Lake Minnie WBID: 2962C
 FIELD ID/NAME: _____ LAKE SIZE: _____ RQ: 2019-08-19-54

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)														
<u>5</u>				<u>70</u>	<u>25</u>																
Local Watershed Erosion (select one): ☐ None ☐ Slight ☐ Moderate ☐ Heavy										Artificially Impounded ☐ Yes ☒ No											
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☐ Moderate ☐ Heavy																					
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>2</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>5</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>6</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 _____ Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Meter Readings: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>30.3</u> <u>6.94</u> <u>8.28</u> <u>110.6</u> <u>164.1</u> <u>0.09</u> Mid-Depth: _____ Bottom: <u>2.6</u> <u>26.5</u> <u>6.26</u> <u>0.11</u> <u>1.4</u> <u>273.0</u> <u>0.13</u> Meter ID: <u>Craw Dally</u>										Clarity: ☐ Clear ☒ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green SECCHI (M) <u>0.5</u> Total Station Depth (M) <u>3.1</u> VOB ☐									
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____ Sample Taken? ☐ Yes ☒ No										Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____									
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 ☐ ☐ ☒ ☐									
Additional Notes: <u>Much direct input of stormwater from stormwater ponds/ditches.</u>																			
Weather Conditions: <u>hot, sunny</u>																			
SAMPLING TEAM: <u>Kwm, LGB</u>										SIGNATURE: <u>Kmarch</u>					DATE: <u>8/21/19</u>				

Waterbody: <u>Lake Minnie</u>	County: <u>Seminole</u>	Date: <u>08/21/19</u>									
Analyst: <u>March, Roman</u>	Signature: <u>March</u>	STORET: <u>G2CE0106</u>									
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold = FLEPPC invasive exotic.		Lake units sampled (circle one group): 1, 4, 7, 10 2, 5, 8, 11 <u>3, 6, 9, 12</u>									
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.											
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Acer rubrum	/	/	/	/		Fraxinus					
Alternanthera philoxeroides	/	/	/	/		Fuirena scirpoides					
Amaranthus australis						Gordonia lasianthus					
Andropogon sp.						Habenaria repens					
Azolla filiculoides (A. caroliniana)						Hibiscus coccineus					
Baccharis sp.						Hibiscus grandiflora					
Bacopa caroliniana						Hydrilla verticillata					
Bacopa monnieri						Hydrocotyle sp.		/	/		
Bidens alba						Hygrophila polysperma					
Bidens laevis						Hymenocallis sp.					
Bidens mitis						*Hypericum fasciculatum					
Blechnum serrulatum						*Hypericum hypericoides					
Boehmeria cylindrica		/				*Hypericum myrtifolium					
Brasenia schreberi						Ilex cassine					
Cabomba caroliniana						Ipomoea aquatica					
Canna						Ipomoea sagittata					
Centella asiatica						Itea virginica					
Cephalanthus occidentalis	/	/	/	/		Juncus effusus					
Ceratophyllum demersum	/	/	/	/		*Juncus marginatus					
Chara sp.						*Juncus megacephalus					
Cicuta maculata						Juncus repens					
Cinnamomum camphora			/			*Juncus scirpoides					
Cladium jamaicense						Lachnanthes caroliniana					
Colocasia esculenta	/	/	/	/		Leersia hexandra					
*Commelina	/	/	/	/		Landoltia punctata (Spirodela punctata)					
Crinum americanum						Lemna sp.					
* Cyperus alternifolius (C. involucratus)						Leucothoe racemosa (Eubotrys racemosa)					
Cyperus articulatus						Limnobia spongia					
Cyperus haspan						Limnophila sessiliflora					
*Cyperus lecontei						Liquidambar styraciflua	/	/			
*Cyperus polystachyos						*Ludwigia arcuata					
*Cyperus odoratus	/	/				*Ludwigia grandiflora					
*Cyperus surinamensis						*Ludwigia hexapetala					
Cyrilla racemiflora						*Ludwigia leptocarpa				/	
Decodon verticillatus						Ludwigia (native)					
Diodia virginiana						*Ludwigia octovalvis		/			
*Echinochloa crus-galli						*Ludwigia peruviana					
*Echinochloa muricatum						*Ludwigia repens					
Echinochloa walteri						Ludwigia suffruticosa					
Eclipta prostrata (E. alba)						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 submersed viviparus						Mimosa pigra					
*Eriocaulon compressum						Myrica cerifera	/	/			
*Eriocaulon decangulare											
Eupatorium capillifolium											

Site:					Date:						
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Myriophyllum aquaticum						Salix caroliniana					
*Myriophyllum heterophyllum						Salvinia minima	/	/	/	/	
*Myriophyllum laxum						Sambucus canadensis					
*Myriophyllum pinnatum						Sapium sebiferum				/	
Myriophyllum spicatum						Saururus cernuus					
*Najas filifolia						Schinus terebinthifolius					
*Najas guadalupensis						*Schoenoplectus californicus					
*Najas minor						*Schoenoplectus pungens					
Nelumbo lutea						*Schoenoplectus tabernaemontani (Scirpus validus)					
Nitella spp.						Scirpus cubensis (Oxycaryon cubense)				/	
Nuphar sp.						Scirpus cyperinus					
Nymphaea mexicana						*Sesbania					
Nymphaea odorata						Solidago sp.					
Nymphoides aquatica						Sparganium americanum					
Nyssa sylvatica var. biflora						Spartina bakeri					
Orontium aquaticum						Spirodela polyrhiza	/	/	/	/	
Osmunda cinnamomea						Taxodium sp.	/	/	/	/	
Osmunda regalis		/	/	/		Thalia geniculata					
Panicum hemitomon		/	/	/		Thelypteris interrupta					
Panicum repens		/	/	/		Thelypteris palustris					
Paspalidium geminatum						Triadenum virginicum					
*Paspalum repens						Typha sp.		/	/	/	
Paspalum urvillei						Urochloa mutica (Brachiaria mutica)					
Peltandra sp.						*Utricularia gibba (U. biflora)					
Persea sp.						*Utricularia foliosa					
Pennisetum purpureum						*Utricularia inflata					
Phragmites australis						*Utricularia purpurea					
Pinus elliotii						*Utricularia radiata					
Pistia stratioides						*Utricularia resupinata					
Pluchea sp.						Vallisneria americana					
*Polygonum glabrum (densiflorum)						Vitis sp.					
Polygonum hirsutum						*Websteria confervoides					
*Polygonum hydropiperoides						Wedelia trilobata (Sphagneticola trilobata)		/	/	/	
*Polygonum punctatum						Wolffiella spp.					
*Polygonum						Woodwardia virginica					
Pontederia cordata		/	/	/		Xyris sp.					
*Potamogeton diversifolius						Zizania aquatica					
*Potamogeton illinoensis						Zizaniopsis milacea					
*Potamogeton pusillus											
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora nitens											
Ricciocarpus natans											
Sabal palmetto		/	/	/							
Sacciolepis striata		/	/	/							
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											