

LVI

Site Name Minor Lake Sample Date 5/2/18

WBID 28008A WIN ID G1CE0041 RQ 2018-04-30-36

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	KWM MAY 04 2018	JK 6/21/18
Create SBIO station visit	KWM MAY 07 2018	n/a
Vascular Entry (add LIMS ID)	KWM MAY 11 2018	LO 6/12/18
Lake Observation Sheet Entry	KWM MAY 11 2018	LO 6/12/18
Authorize SBIO data	KWM MAY 11 2018	LO n/a 6/12/18
Scan all sheets to 21FLCEN folder		n/a
LIMS/WIN migration		n/a
File in cabinet		n/a

Comments/notes:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?
Yes ☒ No ☐

WIN Station Name: Mirror Lake @ Center of North Lobe Date: 5/2/18
(mm/dd/yyyy)

WIN/ Field ID: G1CE0041 WBID: 2868A Latitude: 28.563657
(Decimal Degrees)

County: Lake ORG ID: 21 FL CEN Longitude: -81.700351
(Decimal Degrees)

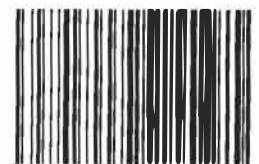
Receiving Body of Water: _____ RQ-2018- 04-30-36

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
<u>Leif Bonanno</u> <u>Katie March</u>					☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole		
										☐ Carboy	☒ Syringe			
										☐ Dipper	☐ Other			
										Depth Measured with <u>[Secchi Disk Line]</u> / Meter				
										Equipment ID <u>[KNOTHEAD (67)]</u> / <u>[LEADFOOT (N2N)]</u>				
										Collection Method				
										☐ Wading	☐ Canoe/Kayak			
										☐ From Shore	☒ Electric Motor			
										☐ Other	☐ Gasoline Motor			
Water Level: <u>Dr/</u> Pooled/ Low / Normal / High / Flooded					Meter ID# <u>Boop-Nu</u>					Matrix: Fresh / Marine / DI				
Photos: Yes ☒ No ☐ Flow: No Flow / Intestinal / Flowing / NA					Tide: Rising/ Falling/ Slack NA					Tide Times: High / Low				
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)				
EST	1146	8.5	0.3	3.4	8.18	100.9	7.76	0.07	159	25.99				
CEN			6.0		0.33	3.8	6.48	0.08	164	18.96				
Biological Samples Collected: None HA SCI SBIO RPS Algae ID LVS <u>LVI</u> Other:														
ID Numbers: SBIO-ID: <u>74312</u> HA-ID: <u>15134</u> RPS-ID: <u>N/A</u> Macrophyte-ID: <u>10913</u> LIMS#: <u>1989752</u>														
Parameter Suite	Parameter Methods					Preservation	Lot#	Expiration	pH Check					
Preserved Nutrients	☒ W-NH3 / W-NO2/NO3 / W-TKN / W-TOC / W-S-A-TP					☒ Ice ☒ H2SO4	SA7275010	12/1/18	☒ <2					
Metals	☐ W-ICPMS ☐ W-ICP					☐ Ice ☐ HNO3			☐ <2					
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter					☒ Ice	13615055							
Chlorophyll	☒ CHLSUITE-W					☒ Ice								
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS					☒ Ice								
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY					☐ Ice								
Macroinvertebrates	☐ MI-FWQLDC					☐ Formalin								
Periphyton	☐ ALGAE-ID					☐ Ice								
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci					☒ Ice								
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD					☐ Ice								
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA					☐ Ice								
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA					☐ Ice								
	☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R					☐ Other								

Notes:

WIN ID / Field ID →

Mirror Lake @ Center of
North Lobe (2868A)



G1CE0041

Signature: K March

Date: 5/2/18

Enter Field Parameters, Verify Station ID In LIMS DMT: K March 5/4/18 QC Station ID, Field Parameters In LIMS DMT: 72 6/21/18

Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data In WIN: _____

(Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
COUNTY: Lake STORET #: 61CE0041 LONGITUDE: _____
DATE: 5/2/18 TIME: _____ SAMPLING AGENCY: _____
SITE NAME: Minor Lake WBID: 2868A LAKE SIZE: Small RQ: 2018-04-30-36
FIELD ID/NAME: _____

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)														
☐	☐	☐	☐	☐	☐	☐	☐														
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>7</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>9</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>8</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>0.3</u> <u>25.99</u> <u>7.76</u> <u>8.18</u> <u>100.9</u> <u>159</u> <u>0.07</u> Mid-Depth: _____ Bottom: <u>8.0</u> <u>18.98</u> <u>6.48</u> <u>0.33</u> <u>3.8</u> <u>164</u> <u>0.08</u> Meter ID: <u>Boop-New</u>										Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☒ Vegetated ☒ Sand/Silt ☒ Organic smooth (muck) ☐ Other (Specify): _____										Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green SECCHI (M) <u>3.4</u> Total Station Depth (M) <u>8.5</u> VOB ☐									
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>Warm, Sunny</u>																			
SAMPLING TEAM: <u>LGB, KWM</u>										SIGNATURE: <u>KMach</u>					DATE: <u>5/2/18</u>				

Waterbody: <u>Minor Lake</u>		County: <u>Lake</u>		Date: <u>5/2/18</u>							
Analyst: <u>L. Boman, K. March</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 2, 5, 8, 11 <u>3, 6, 9, 12</u>							
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)					
Elchhornia crassipes						Magnolia virginiana					
*Eleocharis						Mayaca fluviatilis					
Eleocharis cellulosa						Melaleuca quinquenervia					
*Eleocharis elongata						Micranthemum glomeratum					
Eleocharis equisetoides						Micranthemum umbrosum					
Eleocharis interstincta						Mikania scandens					
Eleocharis submersed viviparous						Mimosa pigra					
*Eriocaulon compressum						Myrica cerifera					
*Eriocaulon decangulare											
Eupatorium capillifolium											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site:					Date:				
SPECIES	3	6	9	12	Collected? (✓)	SPECIES			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									