



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

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Data Qualified?
Yes / No

Location/STORET Station Name: Mirror Lake @ Center of North Lobe

Date: 08/15/2017
(mm/dd/yyyy)

STORET # G1CE0041

WBID: 2868A

Latitude: 28.563657

(Decimal Degrees)

County: Lake

RQ - 2017-08-14-49

ORG ID: 21FLCEN

Longitude: -81.700351

(Decimal Degrees)

Receiving Body of Water:

Field ID: G1CE0041

Sampling Team Members

Mike Linger

Mike Drennan

WQ Measurements
Sample Collection
Documentation
Preservation
Preservation Check

Sampling Equipment

☒ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☒ Syringe
☐ Dipper ☐ Other

Equipment ID

Collection Method

☐ Wading ☒ Via Boat
☐ From Shore ☒ Canoe/Kayak
☐ Other (note below) ☒ Electric Motor
☐ Gasoline Motor

Water Level: Dry / Pooled / Low / Normal / High / Flooded

Meter ID# Boop / Non

Photos: Yes / No

Matrix: Fresh / Marine / DI

Tide Falling: Yes / No / NA

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
<u>EST</u>	<u>1110</u>	<u>0.3</u>	<u>7.5</u>	<u>7.9</u>	<u>108</u>	<u>7.6</u>	<u>0.1</u>	<u>3.4</u>	<u>158</u>	<u>31.9</u>
CEN										

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other

SBIO ID Numbers: SBIO-ID: 77820 RPS-ID: 10583 Macrophyte-ID: 10583 LIMS#: 1921676

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	<u>7093010</u>	<u>4/3/18</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-JCP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4 IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Notes:

* No bottom reading - severe weather approaching
28.56511
-81.69855
MKL

Mirror Lake @ Center
of North Lobe

Date: 08/15/2017
RQ-2017-08-14-49

G1CE0041

Field ID ↑
STORET ↓

G1CE0041

Signature: [Signature]

Date: 8/15/17

Field Parameters Entered into LIMS: L4D 8/16/17

(Initials/Date)

Field Parameters QC in LIMS: MKL 8/15/17

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 77820 MACROPHYTE ID: 10583 LATITUDE: 28.563657
COUNTY: Lake STORET #: 61CE0041 LONGITUDE: -81.700351
DATE: 8/15/17 TIME: 1110 SAMPLING AGENCY: FDEP CE-ROC
SITE NAME: Mirror Lake @ Center of North Lake WBID: 2868A
FIELD ID/NAME: 61CE0041 LAKE SIZE: _____ RQ: 2017-08-14-49

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>50.35</u>	<u>15</u>	<u>15</u>		<u>15</u>			<u>20</u>													
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy							LDI: _____ Land Use Source & Year: _____													
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy																				
STORMWATER INPUTS <u>8</u>	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													
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
LAKESIDE ALTERATIONS <u>11</u>	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)													
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
BUFFER ZONE <u>12</u>	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													
	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>31.9</u> <u>7.6</u> <u>7.9</u> <u>108</u> <u>158</u> <u>0.1</u> Mid-Depth: _____ Bottom: _____						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter ID: <u>Boop / Non</u>						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): _____						Color: ☒ Clear ☐ Tannic ☐ Green					
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						SECCHI (M) <u>3.4</u> Total Station Depth (M) <u>7.5</u> VOB _____					
Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☐ ☒ Nuisance Plants ☐ ☒ ☐ ☐ Submersed Plants ☐ ☐ ☐ ☒ Exotic Apple Snails ☒ ☐ ☐ ☐						Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic					
Weather Conditions: <u>90's cloudy. No bottom reading, severe weather approaching</u>											
SAMPLING TEAM: <u>Mike Linger, Mike Drennan</u>						SIGNATURE: _____			DATE: <u>8/15/17</u>		

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Mirror Lake</u>		County: <u>Lake</u>		Date: <u>8/15/17</u>							
Analyst: <u>Mike Linger / Mike Drennon</u>		Signature: <u>[Signature]</u>		STORET: <u>G1CE0041</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): <u>1, 4, 7, 10</u> 2, 5, 8, 11 3, 6, 9, 12							
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	1	4	7	10	Collected? (✓)	SPECIES	1	4	7	10	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						Hygrophilla 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						Limnium spongia					
Cyperus haspan						Limnophila sessiliflora					
*Cyperus lecontei						Liquidambar styraciflua					
*Cyperus polystachyos						*Ludwigia arcuata					
*Cyperus odoratus						*Ludwigia grandiflora					
*Cyperus surinamensis						*Ludwigia hexapetala					
Cyrtilla 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 submersa viviparous						Mimosa pigra					
*Eriocaulon compressum						Myrica cerifera					
*Eriocaulon decangulare											
Eupatorium capillifolium											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: Mirror Lake					Date: 8/15/17				
SPECIES				Collected? (✓)	SPECIES				Collected? (✓)
<i>Myriophyllum aquaticum</i>					<i>Salix caroliniana</i>				
* <i>Myriophyllum heterophyllum</i>					<i>Salvinia minima</i>				
* <i>Myriophyllum laxum</i>					<i>Sambucus canadensis</i>				
* <i>Myriophyllum pinnatum</i>					<i>Sapium sebiferum</i>				
<i>Myriophyllum spicatum</i>					<i>Saururus cernuus</i>				
* <i>Najas filifolia</i>					<i>Schinus terebinthifolius</i>				
* <i>Najas guadalupensis</i>					* <i>Schoenoplectus californicus</i>				
* <i>Najas minor</i>					* <i>Schoenoplectus pungens</i>				
<i>Nelumbo lutea</i>					* <i>Schoenoplectus tabernaemontani</i> (<i>Scirpus validus</i>)				
<i>Nitella</i> spp.					<i>Scirpus cubensis</i> (<i>Oxycaryon cubense</i>)				
<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>					<i>Thelypteris interrupta</i>				
<i>Panicum repens</i>					<i>Thelypteris palustris</i>				
<i>Paspalidium geminatum</i>					<i>Triadenum virginicum</i>				
* <i>Paspalum repens</i>					<i>Typha</i> sp.				
<i>Paspalum urvillei</i>					<i>Urochloa mutica</i> (<i>Brachiaria mutica</i>)				
<i>Peltandra</i> sp.					* <i>Utricularia gibba</i> (<i>U. biflora</i>)				
<i>Persea</i> sp.					* <i>Utricularia foliosa</i>				
<i>Pennisetum purpureum</i>					* <i>Utricularia inflata</i>				
<i>Phragmites australis</i>					* <i>Utricularia purpurea</i>				
<i>Pinus elliotii</i>					* <i>Utricularia radiata</i>				
<i>Pistia stratioides</i>					* <i>Utricularia resupinata</i>				
<i>Pluchea</i> sp.					<i>Vallisneria americana</i>				
* <i>Polygonum glabrum</i> (<i>densiflorum</i>)					<i>Vitis</i> sp.				
<i>Polygonum hirsutum</i>					* <i>Websteria confervoides</i>				
* <i>Polygonum hydropiperoides</i>					<i>Wedelia trilobata</i> (<i>Sphagneticola trilobata</i>)				
* <i>Polygonum punctatum</i>					<i>Wolffiella</i> spp.				
* <i>Polygonum</i>					<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>Rhynchospora microcephala</i>				
* <i>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)					<i>Limn. wt. flowers</i>				
<i>Proserpinaca pectinata</i>					<i>Scarlet flower/brn</i>				
* <i>Rhexia</i> <i>Cubensis</i>					<i>Pink/Purple fl.</i>				
* <i>Rhynchospora corniculata</i>					<i>Mitreola petiolata</i>				
* <i>Rhynchospora inundata</i>					<i>Macroptilium lathyroides</i>				
<i>Rhynchospora nitens</i>					<i>Rhexia mariana</i>				
<i>Ricciocarpus natans</i>									
<i>Sabal palmetto</i>									
<i>Sacciolepis striata</i>									
* <i>Sagittaria filiformis</i>									
* <i>Sagittaria graminea</i>									
* <i>Sagittaria isoetiformis</i>									
<i>Sagittaria lancifolia</i>									
<i>Sagittaria latifolia</i>									

Mirror Lake 2868A

