



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF

Data Qualified?

Yes / No

Location/STORET Station Name: LAKE MINNEOLA NEAR CENTER

Date: 9/14/2017

(mm/dd/yyyy)

STORET # G1CE0057

WBID: 2839A

Latitude: 28.57527764

(Decimal Degrees)

County: LAKE

RQ - 2017-08-21-39

ORG ID: 21 FL CEN

Longitude: -81.76792811

(Decimal Degrees)

Receiving Body of Water:

Field ID: G1CE0057

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
TERRY RIORDAN			✓		✓	✓	✓	
Katie Williams		✓		✓				

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☒ Carboy	☒ Syringe	
☐ Dipper	☐ Other	
Equipment ID: DF #4		

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

Water Level: Dry / Pooled / Low / Normal / <u>High</u> / Flooded	Matrix: <u>Fresh</u> / Marine / DI
Meter ID# <u>Betty 67</u>	Photos: <u>Yes</u> / No
	Tide Falling: Yes / No / <u>NA</u>

Field Sample

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>	1115	0.3	5.0	8.6	111	7.1	0.04	0.8	90	28.8
CEN		4.5		7.2	89	6.4	0.04		90	26.4

Biological Samples Collected:	None	HA	SCI	RPS	Algae ID	LVS	<u>LVI</u>	Other
SBIO ID Numbers:	SBIO-ID: <u>77919</u>	RPS-ID: <u>n/a</u>	Macrophyte-ID: <u>10721</u>	LIMS#: <u>1929138</u>				

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			☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ 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-CI-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			

Contains 11 Sulfuric Acid Lot No.: SA7163030 Expires: 06/12/18 See Safety Data Sheet (SDS)

STICKER(S) HERE

G1CE0057_D

Date: 09/14/17

Total Depth (m): 5.0

[illegible][illegible]

(Initials/Date)

DEPT FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Minnetonka</u>	County: <u>Lake</u>	Date: <u>9/14/17</u>									
Analyst: <u>Katie Williams</u>	Signature: <u>Katie Williams</u>	STORET: <u>G1CE0057</u>									
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 3, 6, 9, 12									
SPECIES	2	5	8	11	Collected? (✓)	SPECIES					Collected? (✓)
Acer rubrum	/		/	/		Fuirena scirpoides		/		/	
Alternanthera philoxeroides						Gordonia lasianthus					
Amaranthus australis						Habenaria repens					
Andropogon sp.						Hibiscus coccineus					
Azolla filiculoides (A. caroliniana)						Hibiscus grandiflora					
Baccharis sp.						Hydrilla verticillata					
Bacopa caroliniana						Hydrocotyle sp.					
Bacopa monnieri						Hygrophila polysperma					
Bidens alba						Hymenocallis sp.					
Bidens laevis						*Hypericum fasciculatum					
Bidens mitis						*Hypericum hypericoides					
Blechnum serrulatum						*Hypericum myrtifolium					
Boehmeria cylindrica						Ilex cassine					
Brasenia schreberi						Ipomoea aquatica					
Cabomba caroliniana						Ipomoea sagittata					
Canna						Itea virginica					
Centella asiatica						Juncus effusus					
Cephalanthus occidentalis	/		/	/		*Juncus marginatus					
Ceratophyllum demersum						*Juncus megacephalus					
Chara sp.						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 hex-grand-uruguayensis complex grandiflora				/	/
*Cyperus surinamensis						*Ludwigia leptocarpa					
Cyrilla racemiflora						Ludwigia (native)					
Decodon verticillatus						*Ludwigia octovalvis	/	/	/	/	/
Diodia virginiana						*Ludwigia peruviana				/	/
*Echinochloa crus-galli						*Ludwigia repens					
*Echinochloa muricatum						Ludwigia suffruticosa					
Echinochloa walteri						Luziola fluitans (Hydrochloa carolinensis)				/	/
Eclipta prostrata (E. alba)						Magnolia virginiana				/	/
Eichhornia crassipes			/	/		Mayaca fluviatilis					
*Eleocharis						Melaleuca quinquenervia					
Eleocharis cellulosa						Micranthemum glomeratum					
*Eleocharis elongata			/	/		Micranthemum umbrosum					
Eleocharis equisetoides						Mikania scandens					
Eleocharis interstincta						Mimosa pigra					
Eleocharis submersed viviparous				/		Myrica cerifera	/	/	/	/	/
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium											
Fraxinus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site:					Date:					
SPECIES				Collected? (✓)	SPECIES	2	5	8	11	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>					* <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> sp.					
<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>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)										
<i>Proserpinaca pectinata</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>										
* <i>Sagittaria graminea</i>										
* <i>Sagittaria isoetiformis</i>										
<i>Sagittaria lancifolia</i>										
<i>Sagittaria latifolia</i>										

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: 10721 LATITUDE: _____
COUNTY: Lake STORET #: GICE0057 LONGITUDE: _____
DATE: 9/14/17 TIME: _____ SAMPLING AGENCY: _____
SITE NAME: _____ WBID: 2839A
FIELD ID/NAME: Lake Minneola near Center LAKE SIZE: Large RQ: 2017-08-21-39

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>20</u> Silviculture <u>0</u> Field/Pasture <u>0</u> Agricultural <u>0</u> Residential <u>75</u> Commercial <u>0</u> Industrial <u>0</u> Other (Specify) <u>90</u>							LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: <u>0</u> Land Use Source & Year: _____						
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy							Artificially Impounded ☐ Yes ☒ No						
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy													
STORMWATER INPUTS <u>3</u>		Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation 20 19 18 17 16			Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place 15 14 13 12 11			Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6			Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place 5 4 3 2 1		
LAKESIDE ALTERATIONS <u>3</u>		Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected) 20 19 18 17 16			Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected) 15 14 13 12 11			Many structures, roads or other human disturbance visible (50%-70% lakeside affected) 10 9 8 7 6			Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1		
BUFFER ZONE <u>4</u>		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20 19 18 17 16			89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer 15 14 13 12 11			50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10 9 8 7 6			< 29% of shoreline with >18m buffer 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>28.0</u> <u>7.1</u> <u>8.6</u> <u>11</u> <u>90</u> <u>0.04</u> Mid-Depth: _____ Bottom: <u>4.5</u> <u>26.4</u> <u>6.4</u> <u>7.2</u> <u>89</u> <u>90</u> <u>0.04</u> Meter ID: <u>Betty 67</u>								Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____ Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green SECCHI (M) <u>0.8</u> Total Station Depth (M) <u>5.0</u> VOB <u>0</u>			
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 ☐ 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>hot & sunny, Hurricane Irma earlier in week</u>											
SAMPLING TEAM: <u>KMW, TR</u>				SIGNATURE: <u>KWiltman</u>		DATE: <u>9/14/17</u>					

