FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

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Data Qualified? Yes / No

Location/STORET Station Name: Lake Lotus @ Center **Date:** 5/22/17 (mm/dd/yyyy)

STORET # G2CE0093 15 **WBID:** 3004M **Latitude:** 28.64836 11 (Decimal Degrees)

County: Seminole **RQ -** 2017-02-06-54 **PRG ID:** 21FLCEN **Longitude:** -81.42188888 (Decimal Degrees)

Receiving Body of Water: _____ **Field ID:** G2CE0093 15

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Leif Bowman		X		X	X
Katie Williams	X		X		

Sampling Equipment

- [x] Sample Container
- [ ] Carboy
- [ ] Dipper
- [ ] Van Dorn
- [x] Syringe
- [ ] Other _____
- [ ] Pole

Equipment ID _____

Collection Method

- [ ] Wading
- [ ] From Shore
- [ ] Other (note below)

Via Boat
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [x] Gasoline Motor

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

Matrix: (Fresh) / Marine / DI

Meter ID# Betty07 **Photos:** Yes / No

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°)
(EST)	11:25	0.3	1.2	10.1	133	8.1	0.13	0.5	267	29.5
CEN										

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

SBIO ID Numbers: SBIO-ID: 77669 RPS-ID: n/a Macrophyte-ID: 10499 LIMS#: 1900674

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[x] Ice [x] H_2SO_4			[x] <2
Metals	[x] W-ICPMS [x] W-ICP KW	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] 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-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 1:1 Sulfuric Acid SA – 7093010 EXP: 04/03/18 Warning! See SDS

Place [illegible] icker(s) Here

Notes:

Lake Lotus @ Center

RQ-2017-02-06-54

Date: 05/22/17

G2CE0015

Field ID ↑

STORET ↓

G2CE0015

Signature: KWilliams **Date:** 5/22/17

Field Parameters Entered into LIMS: KMW 6/9/17 (Initials/Date) Field Parameters QC in LIMS: _____ (Initials/Date)

Date Migrated to STORET: _____ (Initials/Date) Field Sheets Scanned/Saved: _____ (Initials/Date)

Form FD9000-27 **Lake Vegetation Index Data Sheet** (04-21-11)

Waterbody: Lake Lotus	County: Seminole	Date: 5/22/17
Analyst: KMW, LGB	Signature: KWillems	STORET:

Except where noted as "sp." species level identification required. *Genera that may require lab verification*
Plants in bold= FLEPPC invasive exotic.

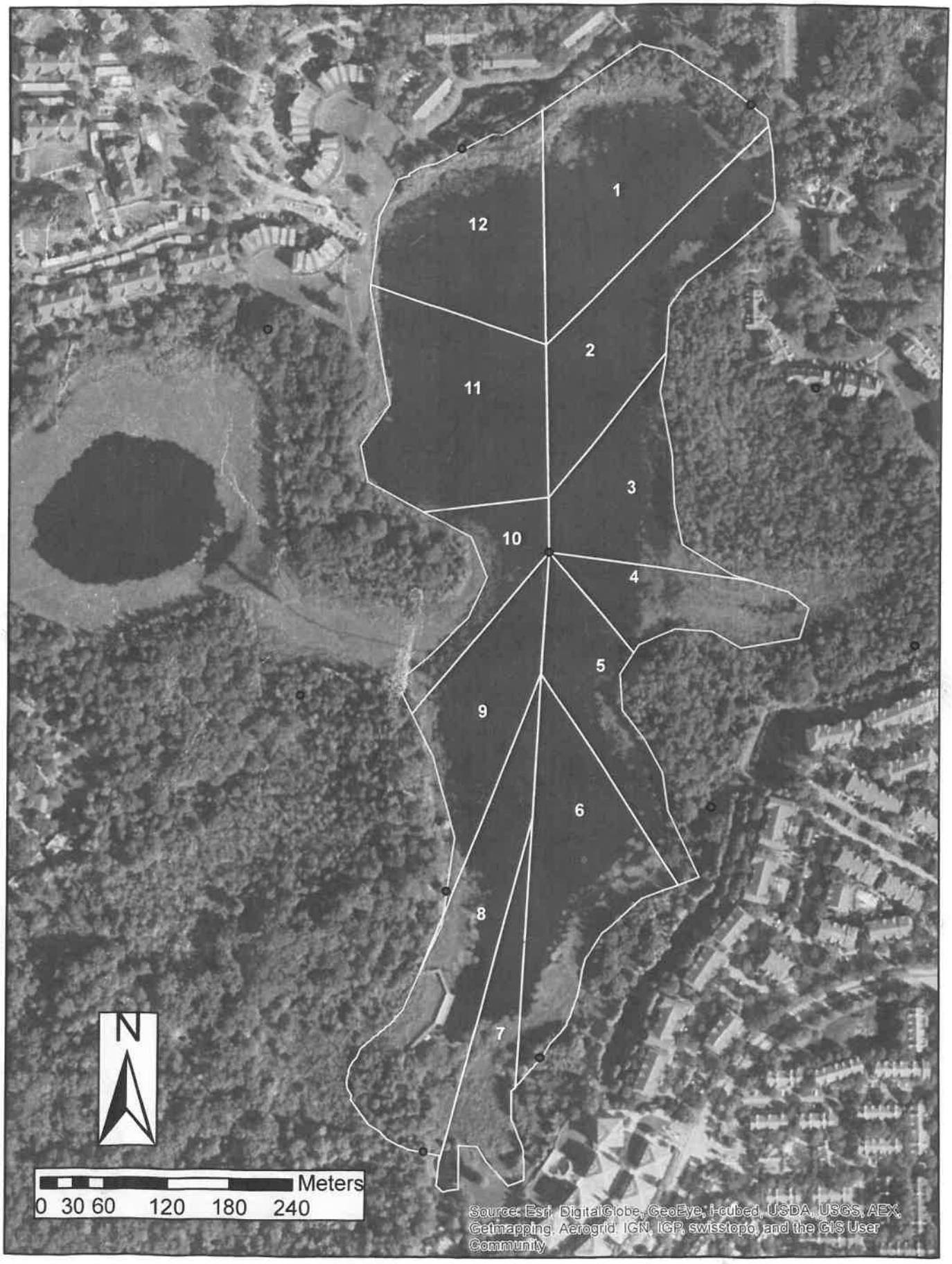
It is important to note dominant or co-dominant taxa (by areal extent) for each unit. Use "D" to denote dominant taxon, or "C" for the 2 co-dominant taxa.

Lake units sampled (circle one group):
1, 4, 7, 10 2, 5, 8, 11 ~~3, 6, 9, 12~~

SPECIES	3 1	6 2	9 3	12 4	Collected? (√)	SPECIES	3 1	6 2	9 3	12 4	Collected? (√)
Acer rubrum	/	/	/			Habenaria repens					
Alternanthera philoxeroides		/	/			**Hydrilla verticillata**	C	/	=	C	
Andropogon sp.						Hydrocotyle sp.		/	/	/	
Azolla filiculoides (A. caroliniana)	/	/				**Hygrophila polysperma**					
Baccharis sp.						*Hypericum fasciculatum					
Bacopa caroliniana						*Hypericum hypericoides					
Bacopa monnieri						*Hypericum myrtifolium					
Bidens laevis						Ilex cassine					
Bidens mitis						**Ipomoea aquatica**					
Blechnum serrulatum		/	/			Ipomoea sagittata					
Boehmeria cylindrica						Itea virginica					
Brasenia schreberi						Juncus effusus					
Cabomba caroliniana						*Juncus marginatus					
Casuarina equisitifolia						*Juncus megacephalus					
Centella asiatica						Juncus repens					
Cephalanthus occidentalis	/		/			*Juncus scirpoides					
Ceratophyllum demersum						Lachnanthes caroliana					
Chara sp.						Leersia hexandra					
Cladium jamaicense						**Landoltia punctata (Spirodela punctata)**					
Cliftonia monophylla						Lemna sp.					
Colocasia esculenta		/				Leucothoe racemosa (Eubotrys racemosa)					
*Commelina		/				Limnobium spongia					
Crinum americanum						**Limnophila sessiliflora**					
***Cyperus alternifolius** (C. involucratus)						Liquidamber styraciflua					
Cyperus articulatus						*Ludwigia arcuata					
Cyperus haspan						*Ludwigia leptocarpa	/	/	/		
*Cyperus lecontei						*Ludwigia linearis					
*Cyperus polystachyos						*Ludwigia octovalvis					
*Cyperus odoratus						***Ludwigia peruviana**	/	C	/	/	
*Cyperus surinamensis						*Ludwigia repens					
Cyrilla racemiflora						*Ludwigia native		/			KW
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					
Diodia virginiana						Lyonia lucida					
*Echinochloa crus-galli						Magnolia virginiana					
*Echinochloa muricatum						Mayaca fluviatilis					
Echinochloa walteri						**Melaleuca quinquenervia**					
Eclipta prostrata (E. alba)						Micranthemum glomeratum					
Egeria densa						Micranthemum umbrosum					
Eichhornia crassipes	/	/	/	/		Mikania scandens		/			
*Eleocharis baldwinii						**Mimosa pigra**					
*Eleocharis						Myrica cerifera					
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

Thick buffer of Nuphar & Hydrilla preventing good access of shoreline plants.

Lake Lotus (Seminole County)



DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____

COUNTY: Seminole STORET #: 62CE0015 LONGITUDE: _____

DATE: 5/22/17 TIME: _____ SAMPLING AGENCY: _____

SITE NAME: Lake Lotus @ Center WBID: 3004M

FIELD ID/NAME: 62CE0015 LAKE SIZE: small RQ: 2017-02-06-54

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)
10				90			

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)

LDI: _____

Land Use Source & Year:

Local Watershed Erosion (select one) : ☑ None ☐ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☑ Moderate ☐ Heavy

Artificially Impounded ☐ Yes ☑ No

STORMWATER INPUTS 15	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 13	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 13	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 ☑ 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:	0.3	29.5	6.1	10.1	133	267	0.13
Mid-Depth:							
Bottom :							

Meter ID: Betty 67

Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☑ Slightly Turbid

Color: ☐ Clear ☑ Tannic ☐ Green

SECCHI (M) 0.5

VOB ☐

Total Station Depth (M) 1.2

Sediment Type: (may check more than one)

☐ Sandy ☑ Sand/Silt ☐ Organic fibrous (peaty, CPOM) ☐ Organic smooth (muck) ☑ Vegetated ☐ 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:

Weather Conditions :

hot, sunny

SAMPLING TEAM: LGB, KMW **SIGNATURE:** [signature] **DATE:** 5/22/17