



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

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Data Qualified?
Yes / No

June 2016

STORET Station Name: Center of Lake Russell Date: 08/24/2016
STORET Station ID: 26010239 WBID: 3170 B Latitude: 28.13500
County: Osceola RQ - 2016-08-22-26 ORG ID: 2IFLCEN Longitude: 81.41666
Receiving Body of Water: Reedy Creek Field ID: G4CE0134

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
<u>Mike Linger</u> <u>Mike Drennan</u>				☒	☒	☒	☒	☒	☒ 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 / Low / <u>Normal</u> / High / Flooded									Matrix: <u>Fresh</u> / Marine / DI			
Meter ID# <u>11C / AB</u> Photos: <u>Yes</u> / No									Tide Falling: Yes / No / <u>NA</u>			
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>1113</u>	<u>0.3</u>	<u>2.5</u>	<u>6.6</u>	<u>89</u>	<u>7.5</u>	<u>0.06</u>	<u>0.6</u>	<u>137</u>	<u>31.4</u>		
<u>CEN</u>		<u>2.0</u>		<u>6.5</u>	<u>89</u>	<u>7.4</u>	<u>0.06</u>		<u>138</u>	<u>31.6</u>		
Biological Samples Collected: None HA SCI LVS RPS <u>LVI</u> Other												
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>6209120</u>	<u>7/27/17</u>	☒ < 2		
Metals		☒ W-ICPMS ☒ W-ICP					☒ Ice ☒ HNO3	<u>5259030</u>	<u>9/16/16</u>	☒ < 2		
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter					☒ Ice					
Chlorophyll		☒ CHLSUITE-W					☒ Ice					
BOD		☐ BOD-UNIN					☐ 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					
Microbiology		☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR					☐ Ice					
Periphyton		☐ ALGAE-ID					☐ Ice					
Pesticides		☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH					☐ Ice ☐ Other					

Notes: Flow for rivers/streams: N/A m/s

Reference Lake LVI

Center of Lake Russell

G4CE0134

Field ID

STORET

Date: 08/24/2016
RQ-2016-08-22-26

26010239

Signature: [Signature]

Date: 8/24/16

Field Parameters Entered into LIMS: _____ T.Sheet Updated: ☐ Field Parameters QC in LIMS: _____ T.Sheet Updated: ☐
Date Migrated to STORET: _____ T.Sheet Updated: ☐ Field Sheets Scanned/Saved: _____ T.Sheet Updated: ☐

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 28.13500
 COUNTY: Osceola STORET #: 26010239 LONGITUDE: -81.41666
 DATE: 8/24/16 TIME: 10:00 SAMPLING AGENCY: FDEP CE-ROC
 SITE NAME: Center of Lake Russell WBID: 3170 B
 FIELD ID/NAME: G4CE0134 LAKE SIZE: Med RQ: 2016-08-22-26

WATERSHED / LAKESIDE FEATURES

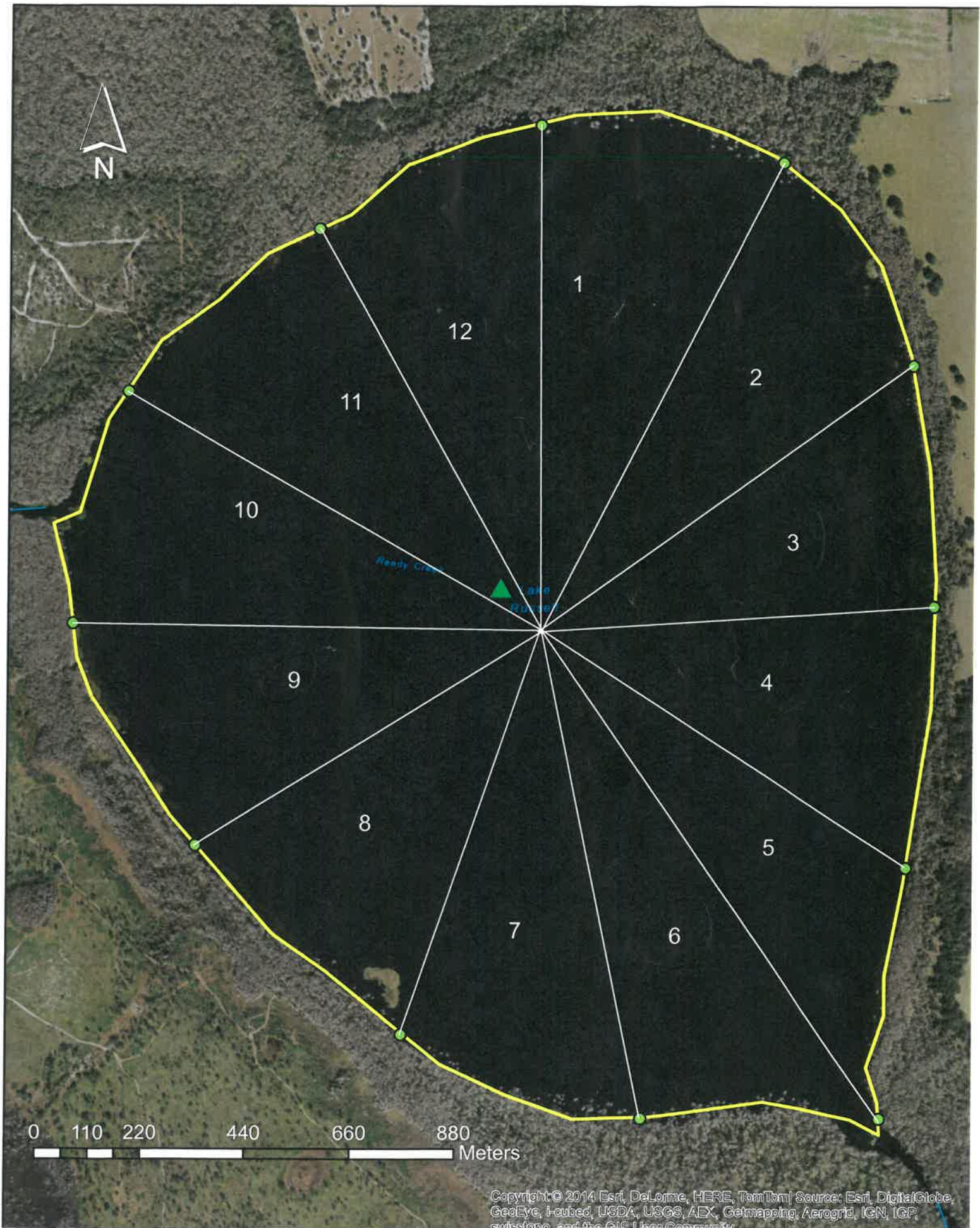
PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>65</u> Silviculture _____ Field/Pasture <u>30</u> Agricultural _____ Residential <u>5</u> Commercial _____ Industrial _____ Other (Specify) _____				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: <u>1.11</u>					
Local Watershed Erosion (select one) : ☒ None ☐ Slight ☐ Moderate ☐ Heavy				Artificially Impounded ☐ Yes ☒ No					
Local Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy				Land Use Source & Year:					
STORMWATER INPUTS <u>18</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>15</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>19</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 # <u>6209120</u> Exp. Date: <u>7/27/17</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High				Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____			
Meter Readings: Top: <u>0.3</u> <u>31.4</u> <u>7.5</u> <u>6.6</u> <u>89</u> <u>137</u> <u>0.06</u> Mid-Depth: _____ Bottom: <u>2.0</u> <u>31.6</u> <u>7.4</u> <u>6.5</u> <u>89</u> <u>138</u> <u>0.06</u> Meter ID: <u>11C / AB</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			
Biological Communities: LVI Conducted? ☒ Yes ☐ No Phytoplankton Sample Taken? ☒ Yes ☐ No Sample Preserved? <u>In lab</u> ☐ 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 ☐ ☒ ☐ ☐			
Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic				SECCHI (M) <u>0.6</u> Total Station Depth (M) <u>2.5</u> VOB ☐			

Weather Conditions: <u>80's humid, T-Storm nearby Overcast</u>			
SAMPLING TEAM: <u>Mike Linger, Mike Drennan</u>		SIGNATURE: <u>Dr. K. Li</u>	
DATE: <u>8/24/16</u>		Additional Notes: <u>Reference LVI</u>	

Lake Russell REF Lake LVI 3170



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

Waterbody: <u>Center of LAke Russell</u>					County: <u>Osceola</u>					Date: <u>8/24/16</u>				
Analyst: <u>Mike Lizer, Mike Drennan</u>					Signature: <u>[Signature]</u>					STORET: <u>26010239</u>				
Except where noted as "sp." species level identification required. *Genera that may require lab verification*										Lake units sampled (circle one group):				
Plants in bold = FLEPPC invasive exotic.										1, 4, 7, 10 2, 5, 8, 11				
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.										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								
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 equisetifolia						*Juncus megacephalus								
Centella asiatica						Juncus repens								
Cephalanthus occidentalis		/	/	/		*Juncus scirpoides								
Ceratophyllum demersum						Lachnanthes carolina								
Chara sp.						Leersia hexandra								
Cladium jamaicense						Landoltia punctata (Spirodela punctata)								
Cliftonia monophylla						Lemna sp.								
Colocasia esculenta						Leucothoe racemosa (Eubotrys racemosa)								
*Commelina						Limnoblum spongia								
Crinum americanum						Limnophila sessiliflora								
*Cyperus alternifolius (C. involucratus)						Liquidambar styraciflua								
Cyperus articulatus						*Ludwigia arcuata								
Cyperus haspan						*Ludwigia leptocarpa								
*Cyperus lecontei						*Ludwigia linearis								
*Cyperus polystachyos						*Ludwigia octovalvis								
*Cyperus odoratus						*Ludwigia peruviana								
*Cyperus surinamensis						*Ludwigia repens								
Cyrilla racemiflora						*Ludwigia								
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						Wild Hibiscus - Hibiscus coccineus				/				
Eleocharis equisetoides						Butterfly - Cyperus articulatus				/				
Eleocharis interstincta						Hymenocleis amplexicaulis				/				
*Eriocaulon compressum														
*Eriocaulon decangulare														
Eupatorium capillifolium														
*Fuirena														
Fuirena scirpoidea														
Gordonia lasianthus														

MKL

[illegible]