

LVI

Site Name Ella Lake @ Center of Lake Sample Date 7/15/19

WBID 2797A WIN ID 20020550 RQ 2018-10-22-37

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	KWM JUL 17 2019	LB 08/12/19
Create SBIO station visit	KWM AUG 02 2019	n/a
Vascular Entry (add LIMS ID)	KWM AUG 02 2019	LB 08/12/19
Lake Observation Sheet Entry	KWM AUG 02 2019	LB 08/12/19
Authorize SBIO data	LB 08/12/19	n/a
Scan all sheets to 21FLCEN folder	LB 08/12/19	n/a
LIMS/WIN migration		n/a
File in cabinet		n/a

Comments/notes:

23-LL-13002 SKWMD large status lake



SRWMD status / Reference LV1

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET**

January 2019

Data Qualified?
Yes / No

WIN Station Name: Ella Lake @ center of Lake

Date: 07/15/2019

WIN/ Field ID: 20020550

WBID: 2797A

Latitude: 28.95927

(mm/dd/yyyy)

County: Lake

ORG ID: 21FLCEN

Longitude: -81.70935

(Decimal Degrees)

Receiving Body of Water: _____

RQ-2018- 10-22-37

Sampling Team Members						Sampling Equipment				
Leif Boman	✓	✓	✓	✓	✓	☒ Sample Container	☐ Van Dorn	☐ Pole		
Katie March	✓	✓	✓	✓	✓	☐ Carboy	☒ Syringe			
						☐ Dipper	☐ Other			
						Depth Measured with <u>Secchi Disk Line</u> / Meter				
						Equipment ID <u>Leadfoot, Knothead, Crusty/Bucket, Mucky/Trap</u>				
Collection Method										
☐ Wading						☐ Canoe/Kayak				
☐ From Shore						☐ Electric Motor				
☐ Other						☒ Gasoline Motor				
Water Level: <u>Dry</u> / Pooled / Low / <u>Normal</u> / High / Flooded						Meter ID# <u>Betty / 67</u>		Matrix: <u>Fresh</u> / Marine / DI		
Photos: <u>Yes</u> / No		Flow: <u>No Flow</u> / Intestinal / Flowing / <u>NA</u>		Tide: <u>Rising</u> / Falling / Slack / <u>NA</u>		Tide Times: High <u>Low</u>				
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)
(EST)	<u>1238</u>	<u>3.8</u>	<u>0.3</u>	<u>0.3</u>	<u>10.16</u>	<u>142.1</u>	<u>8.36</u>	<u>0.12</u>	<u>251</u>	<u>33.56</u>
CEN			<u>3.3</u>		<u>2.15</u>	<u>28.0</u>	<u>6.91</u>	<u>0.12</u>	<u>251</u>	<u>29.04</u>
Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS <u>LVI</u> Other:										
SBIO ID Numbers: SBIO-ID: <u>80045</u> HA-ID: _____ RPS-ID: <u>N/A</u> Macrophyte-ID: <u>11432</u> LIMS#: <u>2103149</u>										
Parameter Suite	Parameter Methods					Preservation	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	<u>13615055</u>			
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					☐ Ice				
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD					☐ Ice				
Tracers	☐ W-E8321-DI ☐ W-E8321-MS					☐ Ice				
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ W-E8321-MS ☐ W-CARB-AA					☐ Ice ☐ Other				
Phytoplankton	☒ DTY-QN-C ☒ PKD-QN-C					☒ Ice				

Notes: pics - 12, 3, N, E, S, W, 6, 9

WIN ID / Field ID →

Ella Lake @ center of Lake



20020550

Signature: K March

Date: 7/15/19

LIMS EVENT ID: CEN-DIST-2019-07-16-01

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM JUL 17 2019

QC Station ID, Field Parameters In LIMS DMT: 18 08/12/19

Scan/Save Field Sheets

18 08/12/19

Migrate Data to WIN:

Verify Data In WIN:

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
 COUNTY: _____ STORET #: 20020550 LONGITUDE: _____
 DATE: _____ TIME: _____ SAMPLING AGENCY: _____
 SITE NAME: Ella Lake @ Center of Lake WBID: 2797A
 FIELD ID/NAME: _____ LAKE SIZE: _____ RQ: 2018-10-22-37

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>75</u> Silviculture _____ Field/Pasture <u>5</u> Agricultural <u>15</u> Residential <u>5</u> Commercial _____ Industrial _____ Other (Specify) _____				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 <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>18</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>18</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: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>10.14</u> <u>8.34</u> <u>33.56</u> <u>142.1</u> <u>251</u> <u>0.12</u> Mid-Depth: _____ Bottom: <u>3.3</u> <u>2.15</u> <u>6.91</u> <u>29.04</u> <u>28.0</u> <u>251</u> <u>0.12</u>						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____			
Meter ID: <u>Betty 47</u>						Clarity: ☐ Clear ☒ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green			
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____						SECCHI (M) <u>0.3</u> Total Station Depth (M) <u>3.8</u> VOB _____			
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 ☐ Don't Know Active Vegetation Mgmt? ☐ Yes ☒ No ☐ Don't Know		Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☐ ☒ ☐ ☐ Submersed Plants ☐ ☒ ☐ ☐ Exotic Apple Snails ☒ ☐ ☐ ☐	
Weather Conditions: <u>very hot & sunny</u>						Additional Notes:			
SAMPLING TEAM: <u>Leif Boman, Katie March</u>				SIGNATURE: <u>KMarch</u>		DATE: <u>7/15/19</u>			

Waterbody: <u>Lake Ella</u>		County: <u>Lake</u>		Date: <u>7/15/19</u>							
Analyst: <u>Boman, March</u>		Signature: <u>K March</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. <u>virginicus</u> (B)			/			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						Limnium 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)					
Eichhornia 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	3	6	9	12	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						<i>Setaria pinnatifida</i>	/				6
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata	/				6 ym						
Rhynchospora nitens	/				6 ym						
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia	/	/	/	/							
Sagittaria latifolia	/	/	/	/							

Lake Ella



WBID 2797A, Ella Lake

Section-Points	Lat	Long
12/1	28.97201	-81.71161
1/2	28.97273	-81.70936
2/3	28.97273	-81.70936
3/4	28.96773	-81.7051
4/5	28.96325	-81.70164
5/6	28.95963	-81.70559
6/7	28.95395	-81.70794
7/8	28.95271	-81.71446
8/9	28.95431	-81.72214
9/10	28.95766	-81.71635
10/11	28.96258	-81.71268
11/12	28.96713	-81.7118

0 150 300 600 900 1200 Meters

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community