

LVI

Site Name Lake Ken Sample Date 8/19/19

WBID 2899B WIN ID G2CE0215 RQ 2019-08-05-51

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	KWM SEP 12 2019	LB 09/13/19
Create SBIO station visit	KWM SEP 12 2019	n/a
Vascular Entry (add LIMS ID)	KWM SEP 13 2019	LB 09/13/19
Lake Observation Sheet Entry	KWM SEP 13 2019	LB 09/13/19
Authorize SBIO data	LB 09/13/19	n/a
Scan all sheets to 21FLCEN folder	LB 09/13/19	n/a
LIMS/WIN migration	LND 9/23/19	n/a
File in cabinet		n/a

Comments/notes:

821
14751

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: Lake Kerr @ Center of Western Lobe

Date: 08/19/2019

(mm/dd/yyyy)

WIN/ Field ID: G2CE0215

WBID: 2899B

Latitude: 29.362028

(Decimal Degrees)

County: Marion

ORG ID: 21FLCEN

Longitude: -81.789543

(Decimal Degrees)

Receiving Body of Water:

RQ-2019- 08-05-51

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Leif Boman										☒ Sample Container	☐ Van Dorn	☐ Pole		
Katie March										☐ Carboy	☒ Syringe			
										☐ Dipper	☐ Other			
										Depth Measured with Secchi Disk Line / 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: Dry/ Pooled/ Low / Normal / High / Flooded					Motor ID# <u>Craw Dolly</u>					Matrix: Fresh / Marine / DI				
Photos: Yes / No					Flow: No Flow / Intestinal / Flowing / NA					Tide: Rising/ Falling/ Slack/ NA				
Tide Times: High / Low														
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	1343	48	0.3	<u>km 2.5</u>	7.66	103.4	6.46	0.07	146.8	31.3				
GEN			43	30	7.40	95.7	6.23	0.07	145.8	28.9				
Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:														
SBIO ID Numbers: SBIO-ID: <u>80234</u> HA-ID: RPS-ID: Macrophyte-ID: <u>11477</u> LIMS#: <u>2112803</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		13615055					
Chlorophyll		☒ CHLSUITE-W					☒ 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					☐ Ice							
Molecular		☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF1B3 ☐ 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 ☐ WE8321-MS ☐ W-CARB-AA					☐ Ice ☐ Other							
Phytoplankton		☐ DTY-QN-C ☐ PKD-QN-C					☐ Ice							

Notes:

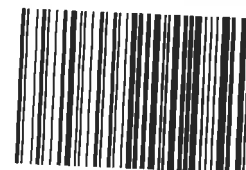
20740 NE 140 Street Ft. McCoy, FL 32134

WIN ID / Field ID →

Lake Kerr @ Center of Western Lobe

Signature: K March

Date: 8/19/19



G2CE0215

LIMS EVENT ID: CENT-DIST-2019-08-20-01

Enter Field Parameters, Verify Station ID in LIMS DMT:

KWM SEP 12 2019

QC Station ID, Field Parameters in LIMS DMT:

LB 9/13/19

Scan/Save Field Sheets

9/13/19

Migrate Data to WIN:

LM 9/23/19

Verify Data in WIN:

LB 9/13/19

(Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Ken</u>		County: <u>Macon</u>		Date: <u>8/19/19</u>							
Analyst: <u>KWM, LGB</u>		Signature: <u>KMars</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 <u>2, 5, 8, 11</u> 3, 6, 9, 12							
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	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						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					
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 submersed viviparous				/		Mimosa pigra	/	/		/	
*Eriocaulon compressum						Myrica cerifera	/	/	/	/	
*Eriocaulon decangulare											
Eupatorium capillifolium			/								

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site:						Date:					
SPECIES	2	5	8	11	Collected? (v)	SPECIES	2	5	8	11	Collected? (v)
Myriophyllum aquaticum						<i>Salix caroliniana</i>	/	/	/	/	
* <i>Myriophyllum heterophyllum</i>						Salvinia minima					
* <i>Myriophyllum laxum</i>						<i>Sambucus canadensis</i>					
* <i>Myriophyllum pinnaefolium</i> <i>Native</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>					
<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>					
Panicum repens	/	/	/	/		<i>Thelypteris palustris</i>					
<i>Paspalidium geminatum</i>						<i>Triadenum virginicum</i>					
* <i>Paspalum repens</i>						<i>Typha</i> sp.	/	/	/	/	
<i>Paspalum urvillei</i>						Urochloa mutica (<i>Brachiaria mutica</i>)					
<i>Peltandra</i> sp.						* <i>Utricularia gibba</i> (<i>U. biflora</i>)	/	/		/	
<i>Persea</i> sp.						* <i>Utricularia foliosa</i>					
Pennisetum purpureum						* <i>Utricularia inflata</i>					
<i>Phragmites australis</i>						* <i>Utricularia purpurea</i>	/	/		/	
<i>Pinus elliotii</i>						* <i>Utricularia radiata</i>					
Pistia stratioides						* <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>						Wedelia trilobata (<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>											

spraying present in 11, 2.

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
 COUNTY: Maion STORET #: 62CE0215 LONGITUDE: _____
 DATE: 8/19/19 TIME: _____ SAMPLING AGENCY: _____
 SITE NAME: Lake Ken WBID: 2899B
 FIELD ID/NAME: _____ LAKE SIZE: _____ RQ: 2019-08-05-57

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category - from GIS) : Forest/Natural <u>70</u> Silviculture _____ Field/Pasture _____ Agricultural _____ Residential <u>30</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				Artificially Impounded ☐ Yes ☒ No	
Local Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy					
STORMWATER INPUTS <u>15</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>15</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 _____					
						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter Readings: Top: <u>0.3</u> <u>31.3</u> <u>6.46</u> <u>7.66</u> <u>103.4</u> <u>146.8</u> <u>0.07</u> Mid-Depth: _____ Bottom: <u>4.3</u> <u>28.8</u> <u>6.23</u> <u>7.40</u> <u>95.7</u> <u>145.8</u> <u>0.07</u>		Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT)		Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green							
Meter ID: <u>Craw Dally</u>		SECCHI (M) <u>3.0</u>		Total Station Depth (M) <u>4.8</u>							
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CROM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____						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 ☒ ☐ ☐ ☐					
Weather Conditions: <u>very hot & sunny</u>						Additional Notes: <u>Active spraying for cuban bulrush, torpedo grass, and hyacinth.</u>					
SAMPLING TEAM: <u>KWM, LGB</u>						SIGNATURE: <u>KWM</u>					
DATE: <u>8/19/19</u>											

LVI Map for Lake Kerr , WBID 2899B

