



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN FIELD SHEET

January 2022

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: LAKE ETON , CENTER

Date: 5/17/2022

WIN/Field ID: G1CE0119

WBID: 2771A

ENR: -

Latitude: 29.25833

County: MARION

Org ID: 21FLCEN

Longitude: -81.86944

Receiving Body of Water: -

RQ- 2022-05-16-38

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Elizabeth Bates	☒	☐	☒	☐	☐
☒	Terry Riordan Leif Boman (eb 6/17/22)	☐	☒	☐	☒	☒
☐		☐	☐	☐	☐	☐
☐		☐	☐	☐	☐	☐

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: Light	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☒ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded		Meter ID# SHRIMP TRAP	
Photos: YES	Flow: NA	Tide:	Tide Times: High: Low:
Biological Samples Collected: ☐ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☒ LVI Other:			
SBIO ID Numbers:			
Notes:			

Duplicate Sample

Time Zone: EST	Time:	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID:			

Blank

Time Zone:	Time:	Field ID:	(Blank Type_DDMMYYYY)
DI Source:	Location:		
DI Type:	Equipment ID:		
DI Container (Name/ID):	DI Container Type:		

LIMS EVENT ID: CEN-DIST-2022-05-18-02 WIN Import ID: 33669

Enter Field Parameters, Verify Station ID In LIMS DMT: EB 6/3/22 QC Station ID, Field Parameters In LIMS DMT: KWM 6/17/22

Scan/Save Field Sheets KWM 6/17/22 Migrate Data to WIN: KWM 6/17/22 Verify Data In WIN:



RQ-2022-05-16-38
Customer: CEN-DIST
Project ID: STRATEGIC MONITORING PLAN

Collected By: Elizabeth Bates, Terry Riordan, Leif Boman (eb 6/
Field Report Prepared By: Elizabeth Bates
Sampling Agency: FDEP

Place Label Here WIN ID/Field ID: G1CE0119 Location: LAKE ETON, CENTER						Comments: Please add 1 filtered nutrients bottle test code W-PO4-f					
Matrix: Fresh						(Check one) ☒ GRAB ☐ COMPOSITE					
Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT)	
5/17/2022	1213 EST	5.16	63.6	26.1	6.81	0.3	0.7 ☐ VOB (S)	1.8	111.2	0.05	
	1220 EST	3.61	43.9	25.2	6.53	1.3	Central Lab please use top row for login purposes		110.6	0.05	
Parameter Suite		Parameter Methods				Preservation		pH Check	# Bottles sent to Lab	Bottle Group	
Preserved Nutrients (P-500ML)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☐ H2SO4*		☒ <2	1	A	
		Lot #	SA1308030		Exp:	12/1/22					
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☐ HNO3*		☒ <2	1	A	
		Lot #	NA1286110		Exp:	11/16/22					
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A	
		Filter Lot #	17413308			Syringe Lot #	1335260				
BOD (BP-1L)		☐ OV-BODUNIN				☐ Ice					
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	A	
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice			1	A	
Physical/Aggregate (Marine) (P-1L)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice					
Macroinvertebrates (PJ-2L)		☐ MI-FW-QLDC				☐ Formalin					
Periphyton (PT-50ML)		☐ ALGAE-ID				☐ Ice					
Microbiology (Contract Lab Bottle)		☐ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab				☐ Ice					
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐				☐ Ice					
Tracers (BG-500ML)		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice		MCAA Exp.			
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI	☒ WE8321-MS	☒ W-PSNP-TQ	W-CT-CL-R		☒ Ice	MCAA Lot#	9	A	
		W-PCL-TQ-R		W-CARB-AA (5 ml of MCAA** Buffer Solution)							
		W-PCB-TQ-R									
Phytoplankton/Periphyton				DTY-QN-C	PKD-QN-C	☐ Ice					
Name: Elizabeth Bates Terry Riordan					Signature:					Date: 05/17/2022	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Estlin</u>		County: <u>Marion</u>		Date: <u>5/17/22</u>	
Analyst: <u>Robbie Leiferman</u>		Signature: <u>[Signature]</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		Collected? (✓)		SPECIES	
3 6 9 12		3 6 9 12		3 6 9 12	
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	
Cladium jamaicense				*Juncus scirpoides	
Colocasia esculenta				Lachnanthes caroliniana	
*Commelina				Leersia hexandra	
Crinum americanum				Landoltia punctata (Spirodela punctata)	
*Cyperus alternifolius (C. involucratus)				Lemna sp.	
Cyperus articulatus				Leucothoe racemosa (Eubotrys racemosa)	
Cyperus haspan				Limnium spongia	
*Cyperus lecontei				Limnophila sessiliflora	
*Cyperus polystachyos				Liquidambar styraciflua	
*Cyperus odoratus				*Ludwigia arcuata	
*Cyperus surinamensis				*Ludwigia grandiflora	
Cyrilla racemiflora				*Ludwigia hexapetala	
Decodon verticillatus				*Ludwigia leptocarpa	
Diodia virginiana				Ludwigia (native)	
*Echinochloa crus-galli				*Ludwigia octovalvis	
*Echinochloa muricatum				*Ludwigia peruviana	
Echinochloa walteri				*Ludwigia repens	
Eclipta prostrata (E. alba)				Ludwigia suffruticosa	
Eichhornia crassipes				Luziola fluitans (Hydrochloa carolinensis)	
*Eleocharis				Magnolia virginiana	
Eleocharis cellulosa				Mayaca fluviatilis	
*Eleocharis elongata				Melaleuca quinquenervia	
Eleocharis equisetoides				Micranthemum glomeratum	
Eleocharis interstincta				Micranthemum umbrosum	
Eleocharis submersed viviparous				Mikania scandens	
*Eriocaulon compressum				Mimosa pigra	
*Eriocaulon decangulare				Myrica cerifera	
Eupatorium capillifolium				<u>Ludwigia sp</u>	
Fraxinus				<u>collected grass</u>	

collected small + some large

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Ulce Eaton</u>				Date: <u>5/17/22</u>			
SPECIES			Collected? (✓)	SPECIES			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>			
<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 foliosa</i>			
<i>Persea</i> sp.				* <i>Utricularia gibba</i> (<i>U. biflora</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>Vigna luteola</i>			
<i>Polygonum hirsutum</i>				<i>Vitis</i> sp.			
* <i>Polygonum hydropiperoides</i>				* <i>Websteria confervoides</i>			
* <i>Polygonum punctatum</i>				Wedelia trilobata (<i>Sphagneticola trilobata</i>)			
* <i>Polygonum</i>				<i>Wolffiella</i> spp.			
<i>Pontederia cordata</i>				<i>Woodwardia virginica</i>			
* <i>Potamogeton diversifolius</i>				<i>Xyris</i> sp.			
* <i>Potamogeton illinoensis</i>				<i>Zizania aquatica</i>			
* <i>Potamogeton pusillus</i>				<i>Zizaniopsis milacea</i>			
* <i>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)				<i>Cyperus maculatus</i>			
<i>Proserpinaca pectinata</i>				<i>Cyperus comoia</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: _____ LATITUDE: 29.25833
COUNTY: Marion STORET #: _____ LONGITUDE: -81.86944
DATE: 5/17/22 TIME: 12:13 SAMPLING AGENCY: 21FCEN
SITE NAME: GILEO119 WBID: 2771A
FIELD ID/NAME: LAKE ETON CENTER LAKE SIZE: _____ RQ: 2022-05-16-3

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>100</u> Silviculture _____ Field/Pasture _____ Agricultural _____ Residential _____ Commercial _____ Industrial _____ Other (Specify) _____				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: _____	
Local Watershed Erosion (select one) : ☒ None ☐ Slight ☐ Moderate ☐ Heavy Artificially Impounded ☐ Yes ☒ No				Land Use Source & Year: <u>2013-2016</u>	
Local Watershed NPS Pollution : ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy					
STORMWATER INPUTS <u>20</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	
LAKESIDE ALTERATIONS <u>19</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	
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	
				Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6	
				Many structures, roads or other human disturbance visible (50%-70% lakeside affected) 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	
				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 ☐ 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) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>26.1</u> <u>6.81</u> <u>5.16</u> <u>63.6</u> <u>111.2</u> <u>0.05</u> Mid-Depth: _____ Bottom: <u>1.3</u> <u>25.2</u> <u>6.53</u> <u>3.61</u> <u>43.9</u> <u>110.6</u> <u>0.05</u>				Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____			
Meter ID: <u>Swamp Trap</u>				Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid			
Sediment Type: (may check more than one) ☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____				Color: ☐ Clear ☒ Tannic ☐ Green			
Biological Communities: LVI Conducted? ☒ Yes ☐ No Phytoplankton Sample Taken? ☐ Yes ☒ No Sample Preserved? <u>N/A</u> ☐ Yes ☐ No Lot #: _____ Exp Date: _____ Algal Bloom/Algal ID Sample Taken? Yes ☐ No ☒ Active Vegetation Mgmt? ☐ Yes ☐ No ☒ Don't Know				SECCHI (M) <u>0.7</u> Total Station Depth (M) <u>1.8</u> VOB ☐			
Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☐ ☐ ☐ ☒ Submersed Plants ☐ ☐ ☒ ☐ Exotic Apple Snails ☐ ☒ ☐ ☐				Sediment Odors: <u>N/A</u> ☐ Normal ☐ Other (Specify): _____ ☐ Anaerobic			
Weather Conditions: <u>Sunny Hot</u>				Additional Notes: <u>could not access shore line @ 6,9 due to large veg buffer. ludwigia not bloo</u>			
SAMPLING TEAM: <u>Lee Boman</u>				SIGNATURE: _____			
DATE: <u>5/17/22</u>							