FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF ____

Data Qualified? Yes / No

Location/STORET Station Name: Lake Lorraine @ NE Corner of Lake **Date:** 10/17/2017 (mm/dd/yyyy)

STORET # G1CE0061 **WBID:** 2829A **Latitude:** 28.82803 (Decimal Degrees)

County: Lake **RQ -** ~~2017-05-15-47~~ 2017-10-16-36 **ORG ID:** 21FLCEN **Longitude:** -81.88078 (Decimal Degrees)

Receiving Body of Water: _____ **Field ID:** G1CE0061

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Mike Linger	✓		✓		
Mike Drennan		✓		✓	✓

Sampling Equipment

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

Equipment ID _____

Collection Method

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

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

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

Matrix: (Fresh) / Marine / DI

Meter ID# Boop/Non **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)	1212	0.3	1.1	1.5	18	6.6	0.1	0.9	169	26.3
CEN										

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

SBIO ID Numbers: SBIO-ID: 78073 RPS-ID: Macrophyte-ID: 10756 LIMS#: 1937779

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 ☐ H_2SO_4			☐ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ <2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice			
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 ☒ 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			

Place Preservative Sticker(s) Here (If Available)

B
C

Notes:

Lake Lorraine @ NE Corner of Lake

Date: 10/17/2017
RQ-2017-10-16-36

G1CE0061
Field ID
STORET
G1CE0061

Signature: _____ **Date:** 10/17/2017

Field Parameters Entered into LIMS: CMD 10 19 17 (Initials/Date) **Field Parameters QC in LIMS:** _____

Date Migrated to STORET: _____ (Initials/Date) **Field Sheets Scanned/Saved:** 10 30 17 CMD (Initials/Date)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

October 2017

PAGE 1 OF ____

Data Qualified? Yes / No

Location/STORET Station Name: Lake Lorraine @ 50m SW of Center **Date:** 10/17/2017 (mm/dd/yyyy)

STORET # G1CE0060 **WBID:** 2829A **Latitude:** 28.826756 (Decimal Degrees)

County: Lake **RQ -** 2017-10-16-36 **ORG ID:** 21FLEEN **Longitude:** -81.982103 (Decimal Degrees)

Receiving Body of Water: _____ **Field ID:** G1CE0060

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
Mike Linger	✓		✓				
Mike Drennan		✓		✓	✓	✓	

Sampling Equipment

☑ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☑ Syringe
☐ Dipper ☐ Other _____
Equipment ID _____

Collection Method

☐ Wading ☑ Canoe/Kayak
☐ From Shore ☐ Electric Motor
☐ Other _____ ☑ Gasoline Motor

A

Water Level: Dry / Low / Normal / (Above Normal) / Flooded **Meter ID#** Boop / Non **Matrix:** (Fresh) / Marine / DI

10

Photos: Yes / (No) **Flow:** No Flow / Intestital / Flowing **Tide:** Rising/ Falling/ Slack/ (NA) **Tide Times:** High Low

Field Sample

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)	1201	0.3	1.0	1.2	15	6.6	0.1	0.9	168	26.2
CEN										

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

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☑ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☑ Ice ☑ H_2SO_4	SA7163030	6/12/18	☑ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ <2
Filtered Nutrients	☑ W-PO4-F ☑ Field Filtered 0.45 µm Filter	☑ Ice			
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-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☑ 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				

Lake Lorraine @ 50m SW of Center

Date: 10/17/2017
RQ-2017-10-16-36

G1CE0060
Field ID ↑
STORET ↓
G1CE0060

QA/QC Sample Information

Duplicate

Time Zone: (EST) CEN Sample Depth (m): 0.3

Time: 1205 Total Depth (m): 1.0 Field ID: G1CE0060_DUP

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved N		☐ Ice ☐ H_2SO_4			☐ < 2
Metals		☐ Ice ☐ HNO_3			☐ < 2
Filtered Nu		☐ Ice			
Chlorophyll		☐ 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			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci	☐ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☐ 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			

Place Preservative Sticker(s) Here (If Available)

Lake Lorraine @ 50m SW of Center_DUP G1CE0060_DUP

Field ID ↑ STORET ↓

Date: 10/17/2017
RQ-2017-10-16-36

G1CE0060_DUP

C
2
3

Blank

Time Zone: EST CEN Time: _____ Field ID: _____

DI Source: _____ Location: _____

☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank Equipment ID: _____

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☐ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☐ Ice ☐ H_2SO_4			☐ < 2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ < 2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☐ Ice			
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			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci	☐ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☐ 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	☐ Other			

Place Preservative Sticker(s) Here (If Available)

C
2
3

Notes:

No Blank collected

MKL

Field Blank

Date: 10/17/2017
RQ-2017-10-16-36

Field Blank

Field ID ↑ STORET ↓

Field Blank

Signature: _____ Date: 10/17/17

Field Parameters Entered into LIMS: LMD 10 19 17 (Initials/Date)

Field Parameters QC in LIMS: _____ (Initials/Date)

Date Migrated to STORET: _____ (Initials/Date)

Field Sheets Scanned/Saved: LMD 10 30 17 (Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 78073 | MACROPHYTE ID: 10756 | LATITUDE: 28.82803
COUNTY: Lake | STORET #: G1CE0061 | LONGITUDE: -81.88078
DATE: 10/17/17 | TIME: 1212 | SAMPLING AGENCY: FDEP-CEROC
SITE NAME: Lake Lorraine @ NE Corner of Lake | WBID: 2829A
FIELD ID/NAME: G1CE0061 | LAKE SIZE: 4.23 Ha | RQ: 2017-10-16-36

WATERSHED / LAKESIDE FEATURES

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

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)
				85			15

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) — LDI: 1.613

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

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

Artificially Impounded: ☐ Yes ☒ No

Land Use Source & Year: Run 53 (2017)

STORMWATER INPUTS: 3	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: 2	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: 2	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 # SA7163030 Exp. Date: 6/12/18
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	26.3	6.6	1.5	18	169	0.1
Mid-Depth:							
Bottom :							

Meter ID:

Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid

Color: ☒ Clear ☐ Tannic ☐ Green

SECCHI (M): 0.9 VOB ☐

Total Station Depth (M): 1.1

Sediment Type: (may check more than one) Sample Taken? ☐ Yes ☒ No
☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated
☒ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify):

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
Active Vegetation Mgmt? ☐ Yes ☐ No ☒ Don't Know

Abundance:

	Absent	Rare	Common	Abundant
Periphyton	☐	☒	☐	☐
Nuisance Plants	☐	☐	☒	☐
Submersed Plants	☐	☐	☒	☐
Exotic Apple Snails	☐	☒	☐	☐

Additional Notes: Nutrient sample is from G1CE0060 WQ parameters from G1CE0061

Weather Conditions : 80's, overcast

SAMPLING TEAM: Mike Linger / Mike Drennan **SIGNATURE:** [signature] **DATE:** 10/17/17

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Lake Lorraine @ NE Corner of Lake	County: Lake	Date: 10/17/17
Analyst: Mike Linger / Mike Drennan	Signature:	STORET: 21FLCEN061

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	1	4	7	10	Collected? (√)
Acer rubrum					
Alternanthera philoxeroides					
Amaranthus australis					
Andropogon sp.					
Azolla filiculoides (A. caroliniana)					
Baccharis sp.					
Bacopa caroliniana					
Bacopa monnieri					
Bidens alba					
Bidens laevis					
Bidens mitis					
Blechnum serrulatum					
Boehmeria cylindrica					
Brasenia schreberi					
Cabomba caroliniana					
Canna					
Centella asiatica					
Cephalanthus occidentalis					
Ceratophyllum demersum					
Chara sp.					
Cicuta maculata					
Cinnamomum campgora					
Cladium jamaicense					
Colocasia esculenta					
*Commelina diffusa					
Crinum americanum					
***Cyperus alternifolius (C. involucratus)**					
Cyperus articulatus					
Cyperus haspan					
*Cyperus lecontei					
*Cyperus polystachyos					
*Cyperus odoratus					
*Cyperus surinamensis					
Cyrilla racemiflora					
Decodon verticillatus					
Diodia virginiana					
*Echinochloa crus-galli					
*Echinochloa muricatum					
Echinochloa walteri					
Eclipta prostrata (E. alba)					
Eichhornia crassipes					
*Eleocharis baldwinii					
Eleocharis cellulosa					
*Eleocharis elongata					
Eleocharis equisetoides					
Eleocharis interstincta					
Eleocharis submersed viviparous					
*Eriocaulon compressum					
*Eriocaulon decangulare					
Eupatorium capillifolium					

SPECIES	1	4	7	10	Collected? (√)
Fraxinus					
Fuirena scirpoides					
Gordonia lasianthus					
Habenaria repens					
Hibiscus coccineus					
Hibiscus grandiflora					
Hydrilla verticillata					
Hydrocotyle sp.					
Hygrophila polysperma					
Hymenocallis sp.					
*Hypericum fasciculatum					
*Hypericum hypericoides					
*Hypericum myrtifolium					
Ilex cassine					
Ipomoea aquatica					
Ipomoea sagittata					
Itea virginica					
Juncus effusus					
*Juncus marginatus					
*Juncus megacephalus					
Juncus repens					
*Juncus scirpoides					
Lachnanthes caroliniana					
Leersia hexandra					
Landoltia punctata (Spirodela punctata)					
Lemna sp.					
Leucothoe racemosa (Eubotrys racemosa)					
Limnobium spongia					
Limnophila sessiliflora					
Liquidamber styraciflua					
*Ludwigia arcuata					
*Ludwigia grandiflora					
*Ludwigia hexapetala					
*Ludwigia leptocarpa					
Ludwigia (native)					
*Ludwigia octovalvis					
***Ludwigia peruviana**					
*Ludwigia repens					
Ludwigia suffruticosa					
Luziola fluitans (Hydrochloa carolinensis)					
Magnolia virginiana					
Mayaca fluviatilis					
Melaleuca quinquenervia					
Micranthemum glomeratum					
Micranthemum umbrosum					
Mikania scandens					
Mimosa pigra					
Myrica cerifera					

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: CK. Lorraine

Date: 10/17/17

SPECIES	1	4	7	10	Collected? (√)
Myriophyllum aquaticum	/	/	/	/	
*Myriophyllum heterophyllum					
*Myriophyllum laxum					
*Myriophyllum pinnatum					
Myriophyllum spicatum					
*Najas filifolia					
*Najas guadalupensis					
*Najas minor				/	
Nelumbo lutea		F	C	/	
Nitella spp.					
Nuphar sp.	/		/	/	
Nymphaea mexicana					
Nymphaea odorata	/	D	/	D	
Nymphoides aquatica					
Nyssa sylvatica var. biflora					
Orontium aquaticum					
Osmunda cinnamomea					
Osmunda regalis					
Panicum hemitomon (LMD)	/	/	/	/	
Panicum repens	/	/	/	/	
Paspalidium geminatum					
*Paspalum repens					
Paspalum urvillei					
Peltandra sp.					
Persea sp.					
Pennisetum purpureum					
Phragmites australis					
Pinus elliottii					
Pistia stratioides					
Pluchea sp.					
*Polygonum glabrum (densiflorum)					
Polygonum hirsutum					
*Polygonum hydropiperoides					
*Polygonum punctatum					
*Polygonum punctatum? √ (LMD)	/			/	/
Pontederia cordata	/	/		/	
*Potamogeton diversifolius					
*Potamogeton illinoensis					
*Potamogeton pusillus					
*Potamogeton pectinatus (Stuckenia pectinatus)					
Proserpinaca pectinata					
*Rhexia Cubensis		/			
*Rhynchospora corniculata					
*Rhynchospora inundata					
Rhynochospora nitens					
Ricciocarpus natans					
Sabal palmetto					
Sacciolepis striata	/	/	/	/	
*Sagittaria filiformis					
*Sagittaria graminea					
*Sagittaria isoetiformis					
Sagittaria lancifolia	/	/	/		
Sagittaria latifolia					

SPECIES	1	4	7	10	Collected? (√)
Salix caroliniana					
Salvinia minima	/	/		/	
Sambucus canadensis			/		
Sapium sebiferum		/			
Saururus cernuus					
Schinus terebinthifolius					
*Schoenoplectus californicus					
*Schoenoplectus pungens					
*Schoenoplectus tabernaemontani (Scirpus validus)					
Scirpus cubensis (Oxycaryon cubense)					
Scirpus cyperinus					
*Sesbania					
Solidago sp.					
Sparganium americanum					
Spartina bakeri					
Spirodela polyrhiza					
Taxodium sp.	/		/		
Thalia geniculata					
Thelypteris interrupta					
Thelypteris palustris					
Triadenum virginicum					
Typha sp.			/		
Urochloa mutica (Brachiaria mutica)					
*Utricularia gibba (U. biflora)	/	/		/	
*Utricularia foliosa					
*Utricularia inflata					
*Utricularia purpurea					
*Utricularia radiata	D	/	C	/	
*Utricularia resupinata					
Vallisneria americana	/				
Vitis sp.					
*Websteria confervoides					
Wedelia trilobata (Sphagneticola trilobata)	/				
Wolffiella spp.					
Woodwardia virginica					
Xyris sp.					
Zizania aquatica					
Zizaniopsis milacea					

Lake Lorraine

N 28.8277111 W 81.8815917