



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes / No

WIN Station Name: Florence Lake @ Center

Date: 9/15/2021

WIN/Field ID: G3CE0012

WBID: 3064A

ENR: -

Latitude: 28.3266

County: BREVARD

Org ID: 21FLCEN

Longitude: -80.78

Receiving Body of Water: Upper St. Johns

RQ- 2021-09-27-16

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Leif Boman		x		x	x
☒	Katie March	x		x		
☐						
☐						

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

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# CRAW DADDY					
Photos: YES		Flow: NA		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers: VISIT ID: 83216 MACROPHYTE ID: 11968						LIMS: 2276363					
Notes:											

Duplicate Sample

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

Blank

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

LIMS EVENT ID: CEN-DIST-2021-09-17-02	WIN Import ID: 32596
Enter Field Parameters, Verify Station ID In LIMS DMT: EB 9/27/21	QC Station ID, Field Parameters In LIMS DMT: VLS 10/13/21
(Initials/Date)	(Initials/Date)
Scan/Save Field Sheets KWM 5/5/22	Migrate Data to WIN: KWM 5/5/22
(Initials/Date)	(Initials/Date)
Verify Data In WIN:	
(Initials/Date)	



RQ-2021-09-27-16

Customer: WQAP

Project ID: SMP

Collected By: Leif Boman, Katie March

Field Report Prepared By: Leif Boman

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G3CE0012

Location: Florence Lake @ Center

Comments:

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)		
	1243 EST	2.24	29.4	29.2	6.91	0.3	0.4 ☐ VOB (S)	1.4	1257	0.62		
9/15/2021												
	EST											
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 #	SA1105060		Exp:	4/30/2022						
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A		
		Lot #	NA0344060		Exp:	1/04/2022						
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A		
		Filter Lot #	17135566									
		Syringe Lot #	1091364									
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 Lot #			☐ Formalin						
Periphyton (PT-50ML)		☐ ALGAE-ID				☐ Ice						
Microbiology (Contract Lab Bottle)		☐ E Coli ☐ F Coli ☐ Enterococci				☐ Ice						
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3				☐ Ice						
		☐ PCR-GULL2 ☐ PCR-GFD ☐				☐ Ice						
Tracers (BG-500ML)		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice						
Pesticides (BG-500ML) (BG-1L)		W-E8321-DI	WE8321-MS	W-PSNP-TQ	W-CT-CL-R	☐ Ice						
Phytoplankton/Periphyton		W-PCL-TQ-R		W-CARB-AA (5 ml of MCAA** Buffer Solution)		☐ Ice						
				☒ DTY-QN-C		☒ Ice			1	A		
				☒ PKD-QN-BV								
Name: Leif Boman Katie March					Signature:				Date: 09/15/2021			

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ **MACROPHYTE ID:** _____ **LATITUDE:** 28.326634
COUNTY: Broward **STORET #:** G3CE0012 **LONGITUDE:** -80.782
DATE: 6/15/21 **TIME:** _____ **SAMPLING AGENCY:** 21FLCEN
SITE NAME: Florence Lake @ center **WBID:** 3064A **VLS 10/13/21**
FIELD ID/NAME: G3CE0012 **LAKE SIZE:** 0.16 sq miles **RQ:** 2021 06 11 59

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) :										LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)											
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)														
<u>55</u>			<u>20</u>	<u>25</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		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										
<u>16</u>		20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
LAKESIDE ALTERATIONS		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)										
<u>18</u>		20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
BUFFER ZONE		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										
<u>18</u>		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 ☐ 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) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>29.2</u> <u>6.91</u> <u>2.24</u> <u>29.4</u> <u>1257</u> <u>0.62</u> Mid-Depth: _____ Bottom: _____								Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____							
Meter ID: _____								Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☒ Tannic ☐ Clear ☐ Green							
Sediment Type: (may check more than one) <u>N/A</u> ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☒ Organic smooth (muck) ☐ Other (Specify): _____								SECCHI (M) <u>0.4</u> Total Station Depth (M) <u>1.4</u> VOB ☐							
Sediment Odors: <u>N/A</u> ☐ Normal ☐ Other (Specify): _____ ☐ Anaerobic								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							
Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☐ ☐ ☒ ☐ Submersed Plants ☒ ☐ ☐ ☐ Exotic Apple Snails ☐ ☒ ☐ ☐								Additional Notes: <u>mostly natural but a canal does enter the lake near the ramp bringing water from residential areas.</u>							
Weather Conditions :								SAMPLING TEAM: <u>Leif Roman, Katie March</u> SIGNATURE: <u>KMarch</u> DATE: <u>6/15/21</u>							

Waterbody: <u>Florence Lake</u>	County: <u>Brevard</u>	Date: <u>4/15/21</u> 9/15/21 EB
Analyst: <u>Ferry Borden/Victoria Schmitt</u>	Signature:	STORET: <u>G3CE0012</u>
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold = FLEPPC invasive exotic.		Lake units sampled (circle one group): 1, 4, 7, 10 2, 5, 8, 11 3, 6, 9, 12
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.		
SPECIES	1 4 7 10 Collected? (✓)	SPECIES
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		Limnobium spongia
*Cyperus lecontei		Limnophila sessiliflora
*Cyperus polystachyos		Liquidambar styraciflua
*Cyperus odoratus		*Ludwigia arcuata
*Cyperus surinamensis		*Ludwigia grandiflora
Cyrtilla 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 submersa viviparous		Mikania scandens
*Eriocaulon compressum		Mimosa pigra
*Eriocaulon decangulare		Myrica cerifera
Eupatorium capillifolium		
Fraxinus		

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Florence Lake</u>					Date: <u>6/15/21</u> 9/15/2021						
SPECIES	1	4	7	10	Collected? (✓)	SPECIES	1	4	7	10	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 foliosa					
Persea sp.						*Utricularia gibba (U. biflora)					
Pennisetum purpureum						*Utricularia inflata					
Phragmites australis						*Utricularia purpurea					
Pinus elliotii						*Utricularia radiata					
Pistia stratioides						*Utricularia resupinata					
Pluchea sp.						Vallisneria americana					
*Polygonum glabrum (densiflorum)						Vigna luteola					
Polygonum hirsutum						Vitis sp.					
*Polygonum hydropiperoides						*Websteria confervoides					
*Polygonum punctatum						Wedelia trilobata (Sphagneticola trilobata)					
*Polygonum						Wolffiella spp.					
Pontederia cordata						Woodwardia virginica					
*Potamogeton diversifolius						Xyris sp.					
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora nitens											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

LVI Map for Florence Lake , WBID 3064A

1/4/7/10

