



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?
Yes / No

WIN Station Name: Lake Mary @ Center

Date: 10/28/2019

WIN/ Field ID: G2CE0223

WBID: 2962D

Latitude: 28.75362001

County: Seminole

ORG ID: 21FLCEN

Longitude: -81.3172727

Receiving Body of Water: _____

RQ-2019- 10-21-63

Sampling Team Members						WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Terry Riordan											☒ Sample Container	☐ Van Dorn	☐ Pole		
Natalie Ayala											☐ Carboy	☒ Syringe			
											☐ Dipper	☐ Other			
											Depth Measured with <u>Secchi Disk Line / Meter</u>				
											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 / <u>Normal</u> / High / Flooded											Meter ID# <u>Craw / Daddy</u>			Matrix: <u>Fresh</u> / Marine / DI	
Photos: Yes / No		Flow: No Flow / Intestinal / Flowing / <u>NA</u>				Tide: Rising/ Falling/ Slack/ <u>NA</u>			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 (umhos/cm)	Temp. (C°)					
EST	1146	4.7	0.3	2.0	7.41	95.2	7.50	0.08	173.0	28.3					
CEN			4.1		28.3 NA	49.9	6.98	0.08	173.5	26.7					
Biological Samples Collected: None HA SCI RPS Algae ID LVS <u>LVI</u> Other:															
SBIO ID Numbers:		SBIO-ID: <u>80491</u>		HA-ID:		RPS-ID:		Macrophyte-ID: <u>11551</u>		LIMS#: <u>2132184</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		<u>SA7163030</u>	<u>10/30/19</u>	☒ <2				
Metals		☐ W-ICPMS ☐ W-ICP					☐ Ice ☐ HNO3				☐ <2				
Filtered Nutrients		☒ W-PO4-F ☒ Field Filtered 0.45 um Filter					☒ Ice		<u>16930280</u>						
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					☐ Ice								
		☐ 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					☐ Ice								
		☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA					☐ Other								
Phytoplankton		☐ DTY-QN-C ☐ PKD-QN-C					☐ Ice								

H2SO4-Recertif
LOT# SA7163030
EXP: 10/30/2019

Here

Notes:

Gayle Smith (cell - 407-920-5075, no need to call ahead), small vessel shore launch @ 28.756172 -81.307120, vacant lot, next door to 1425 West Lake Mary Blvd. - Or Claude/Joan Burkett, 282 Evansdale Rd, Call ahead at 407-754-6808 or 407-754-6800.

Signature: [Signature]

Date: 10-28-19

WIN ID / Field ID →

Lake Mary @ Center



G2CE0223

LIMS EVENT ID: CENT-DIST-2019- 10-29-02

Enter Field Parameters, Verify Station ID In LIMS DMT: 7R 11/14/19

QC Station ID, Field Parameters In LIMS DMT: NA 11/26/19

Scan/Save Field Sheets 2/24/20

Migrate Data to WIN:

Verify Data In WIN:

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 80491 **MACROPHYTE ID:** **LATITUDE:** 28.75362001
COUNTY: Seminole **STORET #:** G2CE0223 **LONGITUDE:** -81.3172727
DATE: 10/28/2019 **TIME:** 1146 **SAMPLING AGENCY:** FDEP
SITE NAME: Lake Mary **WBID:** 2962D
FIELD ID/NAME: G2CE0223 **LAKE SIZE:** **RQ:** 2019-10-21-63

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)
				100			
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
3	20	19	18	17	16	15	14
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)
2	20	19	18	17	16	15	14
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
3	20	19	18	17	16	15	14

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: Top: Depth (M) 0.3 Temp. (°C) 28.3 pH (SU) 7.50 D.O. (MG/L) 7.41 D.O. Sat. (%) 95.2 Cond. (UMHO/CM) 173.0 Salinity (PPT) 0.08 Mid-Depth: _____ Bottom: 4.1 26.7 6.98 4.00 49.9 173.5 0.08				Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____			
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____				Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☒ Clear ☐ Tannic ☐ Green			
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				SECCHI (M) 2.0 Total Station Depth (M) 4.7 VOB ☐			
Sediment Odors: ☐ Normal ☐ Other (Specify): _____ ☐ Anaerobic				Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☐ ☐ ☒ ☐ Submersed Plants ☐ ☐ ☒ ☐ Exotic Apple Snails ☐ ☒ ☐ ☐			
Weather Conditions :				Additional Notes:			
SAMPLING TEAM: Natalie Ayala, Terry Riordan				SIGNATURE:		DATE: 10/28/19	

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Mary</u>				County: <u>Seminole</u>				Date: <u>10/28/19</u>			
Analyst: <u>T. Riordan, N. Ayala</u>				Signature: <u>[Signature]</u>				STORET: <u>G2CE0223</u>			
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.	✓		/	/		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						Limnobia 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 <u>baldwin</u>			/			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	/	/	/								

Site:						Date:					
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	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.	✓	10	/	/		<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>	✓	/	10	10		<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 polyrrhiza</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.	/	/	10	/	
<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>Myriophyllum (native)</i>	✓	/	10	/	
* <i>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)						<i>Elodea</i>			10	/	
<i>Proserpinaca pectinata</i>						<i>Cyperus polystachyos</i>	/				
* <i>Rhexia</i>						<i>Cyperus (pic)</i>			/		
* <i>Rhynchospora corniculata</i>						<i>Rhynchospora microcarpa</i>			/	/	
* <i>Rhynchospora inundata</i>						<i>Fuirena pumila</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>											