



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV☒ Yes / ☐ No

WIN Station Name:	LAKE TYNER AT CENTER				Sample Date:	6/15/2023	
WIN / Field ID:	G4CE0237	ORG ID:	21FLCEN	ENR:	-	Latitude:	28.48024
County:	ORANGE	WBID:	3168W5	LAKE		Longitude:	-81.39279
Receiving Body of Water:	-				RQ-	2023-06-12-31	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Katie March		x		x	x
Victoria Schwartz	x		x		

Sampling Equipment			
x	Sample Container		Carboy
	Dipper		Van Dorn
x	Syringe		Pole
Syringe Lot# 2327923		Filter Lot# 17769663	
Secchi Equipment ID:		Light	
Collection Method			
	Wading	x	Canoe/Kayak
	From Shore		Electric Motor
			Gasoline Motor
Depth Measured With		Secchi	

Water Level:	Normal
Flow:	NA
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	Yes
Meter ID:	Shrimp Trap
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	1226	1.9	0.3	9.87	134.4	31.8	8.15	0.5	235	0.11
	1232		1.4	7.01	93.6	30.5	7.73		237.6	0.11

Biological Samples Collected:

LVI

SBIO Visit ID: 87179

HA ID:

RPS ID:

Macrophyte ID: 12476

LIMS Sample ID Entered
Into The Macrophyte Module:

2418203

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology							
Chlorophyll	CHLSUITE-W			ICE			
Physical/Aggregate	ALKALINITY, TURBIDITY, W-F, W-TSS			ICE			
Nutrients	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			ICE			
Filtered Nutrients	W-PO4-F	Field Filtered 0.45 µm Filter		ICE	Syringe Lot#:2327923; Filter Lot#:17769663		
Acid Preserved Nutrients	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	SA3013020	1/25/24
Metals	W-ICPMS	W-ICP	W-HARD	ICE	HNO3**	NA2230040	9/1/23
Organics (LC)	W-E8321-DI	W-E8321-MS					
Macroinvertebrates							
Organics (GC)	W-PSNP-TQ	W-TR-SQ-R		Ice	*2.0 ml of H2SO4 Used Unless Noted Otherwise **2.0 ml of HNO3 Used Unless Noted Otherwise		
Molecular							
Periphyton							
Phytoplankton							
BOD							
DOC							
Other(s)							
Field Comments:	Sunny						
Comments on COC:							
Relinquish Date:	06/15/2023	Signature:					

LIMS EVENT ID: CEN-DIST-2023-06-16-02

WIN Import ID: 41618

Enter Field Parameters, Verify Station ID in LIMS DMT: KWM 7/7/23

QC Station ID, Field Parameters in LIMS DMT: VLS 7/12/23

Save Field Sheets on Network: KWM 7/19/23 (Initials/Date)

Migrate Data to WIN: KWM 7/19/23 (Initials/Date)

(Initials/Date)

(Initials/Date)

trash/outlet

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 28.48024
 COUNTY: Orange STORET #: G4CE0237 LONGITUDE: -81.39279
 DATE: 6/15/23 TIME: 12:26 SAMPLING AGENCY: 21FLCEN
 SITE NAME: Lake Tyner at Center WBID: 3168W5
 FIELD ID/NAME: G4CE0237 LAKE SIZE: _____ RQ: 2023-06-12-31

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>100</u>	<u>80</u>	<u>20</u>															
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy										Artificially Impounded											
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☐ Moderate ☒ Heavy										☐ Yes ☒ No											
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>2</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>3</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>3</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 #: <u>SA3013020</u> Exp. Date: <u>1/25/24</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High										Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____									
Meter Readings: Top: <u>0.3</u> <u>31.8</u> <u>8.15</u> <u>9.87</u> <u>134.4</u> <u>235</u> <u>0.11</u> Mid-Depth: _____ Bottom: <u>1.4</u> <u>30.5</u> <u>7.73</u> <u>7.01</u> <u>93.6</u> <u>237.6</u> <u>0.11</u>										Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Meter ID: <u>Shrimp Trap</u>										Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green									
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____										SECCHI (M): <u>0.5</u> Total Station Depth (M): <u>1.9</u> VOB: ☐									
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 ☒ ☐ ☐ ☐									
Sediment Odors: ☐ Normal ☐ Other (Specify): _____ ☐ Anaerobic										Additional Notes: • Launched from canal in Sec. 5 that ended at road w/ culvert, carp fence, and well drain (pics taken) → • more trash than expected for a small residential lake (chairs, cans, bottles, etc.) Lake Jessamine to the East									
Weather Conditions: <u>Sunny</u>										SAMPLING TEAM: <u>Katie March/Victoria</u>									
SIGNATURE: <u>Katie March</u>										DATE: <u>6/15/23</u>									

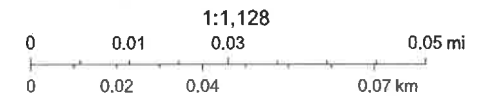
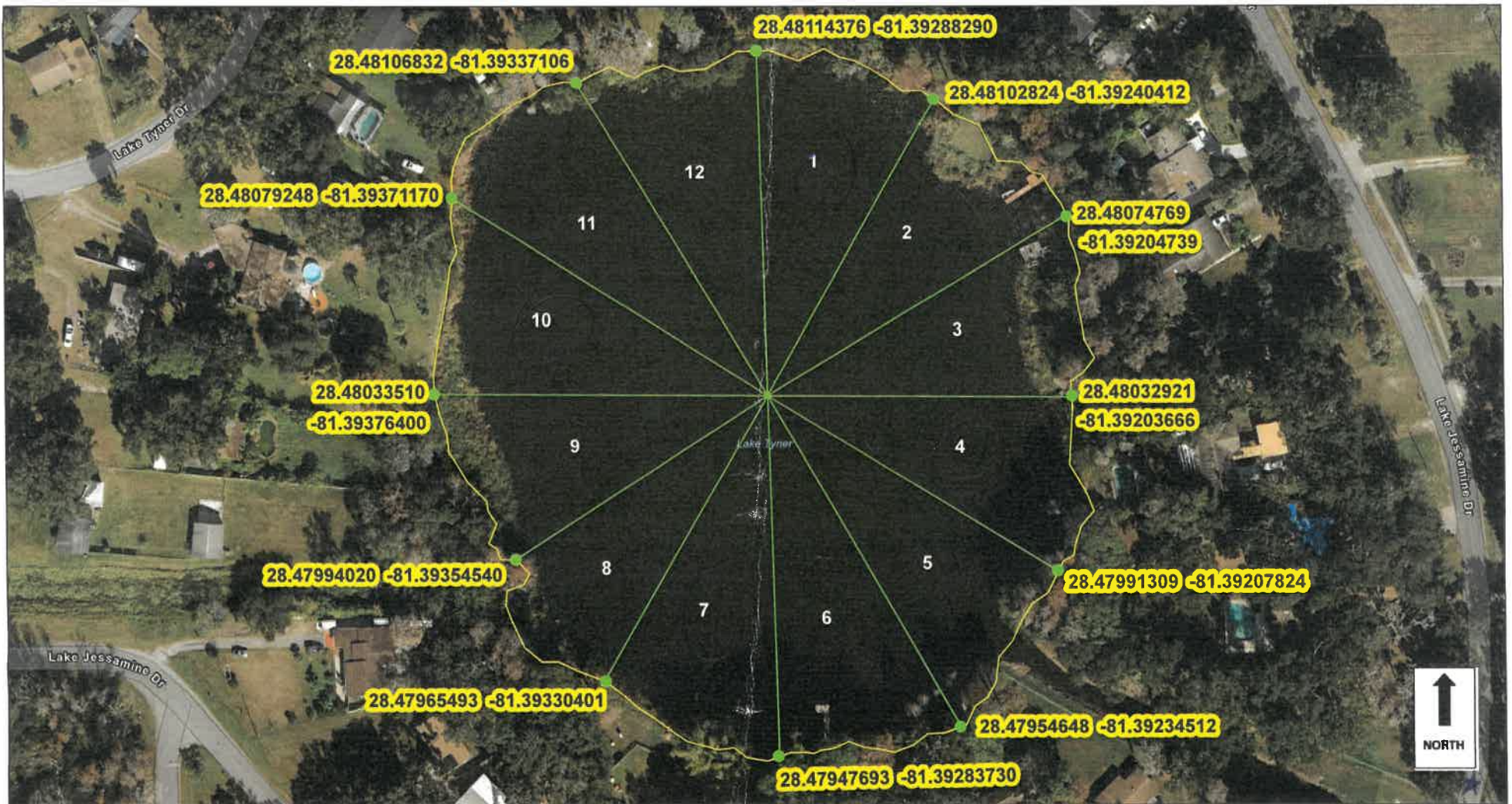
DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Tyner</u>	County: <u>Orange</u>	Date: <u>6/15/23</u>									
Analyst: <u>Kate Mary/Victoria Szwed</u>	Signature: <u>Kate Mary/Victoria Szwed</u>	STORE: <u>G4CE0237</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): <u>1, 4, 7, 10</u> 2, 5, 8, 11 3, 6, 9, 12									
SPECIES	1	4	7	10	Collected? (v)	SPECIES	1	4	7	10	Collected? (v)
Acer rubrum						Fraxinus					
Alternanthera philoxeroides	/	/	/	/		Fuirena scirpoidea					
Amaranthus australis						Gordonia lasianthus					
Andropogon sp.						Habenaria repens					
Azolla filiculoides (A. caroliniana)						Hibiscus coccineus					
Baccharis sp.						Hibiscus grandiflorus					
Bacopa caroliniana						Hydrilla verticillata					
Bacopa monnieri						Hydrocotyle sp.	/	/	/	/	
Bidens alba						Hygrophila polysperma					
Bidens laevis						Hymenocallis sp.					
Bidens mitis						*Hypericum fasciculatum					
Boehmeria cylindrica			/			*Hypericum hypericoides					
Brasenia schreberi						*Hypericum myrtifolium					
Cabomba caroliniana						Ilex cassine					
Canna sp.						Ipomoea aquatica					
Centella asiatica						Ipomoea sagittata					
Cephalanthus occidentalis		/				Itea virginica					
Ceratophyllum demersum						Juncus effusus					
Chara sp.						*Juncus marginatus					
Cicuta maculata						*Juncus megacephalus					
Cinnamomum camphora						Juncus repens					
Cladium jamaicense						*Juncus scirpoides					
Colocasia esculenta		/	/			Lachnanthes caroliniana					
*Commelina						Leersia hexandra					
Crinum americanum						Landoltia punctata (Spirodela punctata)					
Cyperus articulatus						Lemna sp.					
Cyperus blepharoleptos (Scirpus cubensis)	/	/	/	/		Leucothoe racemosa (Eubotrys racemosa)					
Cyperus haspan						Limnium spongia					
*Cyperus involucratus		/				Limnophila sessiliflora					
*Cyperus lecontei						Liquidambar styraciflua					
*Cyperus odoratus						*Ludwigia arcuata					
*Cyperus polystachyos						*Ludwigia grandiflora					
*Cyperus surinamensis						*Ludwigia hexapetala					
Cyrilla racemiflora						*Ludwigia leptocarpa				/	
Decodon verticillatus						Ludwigia (native)					
Diodia virginiana						*Ludwigia octovalvis	/	/	/	/	
*Echinochloa crus-galli						*Ludwigia peruviana	/	/	/	/	
*Echinochloa muricata						*Ludwigia repens					
Echinochloa walteri						Ludwigia suffruticosa					
Eclipta prostrata						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 vivipara (submersed)						Mimosa pigra	/	/	/	/	
*Eriocaulon compressum						Myrica cerifera	/	/	/	/	
*Eriocaulon decangulare											
Eupatorium capillifolium											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Lake Tyner</u>					Date: <u>6/15/23</u>						
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					
Nitella spp.											
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 gibba (U. biflora)					
Persea sp.						*Utricularia foliosa					
*Persicaria glabra (densiflora)						*Utricularia inflata					
Persicaria hirsuta						*Utricularia purpurea					
*Persicaria hydropiperoides						*Utricularia radiata					
*Persicaria punctata						*Utricularia resupinata					
*Persicaria						Vallisneria americana					
Pennisetum purpureum						Vitis sp.					
Phragmites australis						*Websteria confervoides					
Pinus elliotii						Wedelia trilobata (Sphagneticola trilobata)					
Pistia stratiotes						Wolffiella spp.					
Pluchea sp.						Woodwardia virginica					
Pontederia cordata						Xyris sp.					
*Potamogeton diversifolius						Zizania aquatica					
*Potamogeton illinoensis						Zizaniopsis milacea					
*Potamogeton pusillus											
*Potamogeton pectinatus (Stuckenia pectinatus)						<u>Dioscorea bulbifera (air potato)</u>					
Proserpinaca pectinata						<u>Vigna luteola</u>					
*Rhexia											
*Rhynchospora comiculata											
*Rhynchospora inundata											
Rhynchospora nitens											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

LVI MAP FOR WBID 3168W5, LAKE TYNER



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