



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	LAKE OLA AT CENTER				Sample Date:	5/9/2023	
WIN / Field ID:	G1CE0127	ORG ID:	21FLCEN	ENR:	-	Latitude:	28.75458
County:	ORANGE	WBID:	2836B	LAKE		Longitude:	-81.6352
Receiving Body of Water:	-				RQ-	2023-05-08-28	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Matt Bearden		x		x	
Victoria Schwartz	x		x		
Denver Bourassa		x		x	

Sampling Equipment			
x	Sample Container		Carboy
	Dipper		Van Dorn
	Syringe		Pole
	Syringe Lot#	2298556	Filter Lot#
			17769663
	Secchi Equipment ID:	Knothead	
Collection Method			
	Wading		Canoe/Kayak
	From Shore		Electric Motor
		x	Gasoline Motor
	Depth Measured With	Secchi	

Water Level:	Normal
Flow:	NA
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	Yes
Meter ID:	Craw Daddy
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	1313	5.3	0.3	8.62	107.4	26.6	7.85	2.7	228.6	0.11
	1317		2	8.69	107.6	26.2	7.89		228.3	0.11
	1319		4.8	7.54	91.4	25.1	7.74		228.1	0.11

Biological Samples Collected:

LVI

SBIO Visit ID:

87027

HA ID:

RPS ID:

Macrophyte ID:

12455

LIMS Sample ID Entered

Into The Macrophyte Module:

2408651

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#:2298556; 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:	05/09/2023	Signature:					

LIMS EVENT ID: CEN-DIST-2023-05-10-01

WIN Import ID: 41199

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 6/16/23

QC Station ID, Field Parameters In LIMS DMT: VLS 6/21/23

Save Field Sheets on Network: KWM 6/27/23 (Initials/Date)

Migrate Data to WIN: KWM 6/27/23 (Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 28.75458
 COUNTY: Orange STORET #: G1CE0127 LONGITUDE: -81.6352
 DATE: 5/9/23 TIME: 13:13 SAMPLING AGENCY: 2IFCEN
 SITE NAME: Lake Ola at Center WBID: 2836B
 FIELD ID/NAME: G1CE0127 LAKE SIZE: _____ RQ: 2023-05-08-28

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)				LDI: _____												
<u>10</u>	<u>7</u>	<u>10</u>	<u>0</u>	<u>25</u>	<u>0</u>	<u>45</u>	<u>55</u>	<u>90</u>	<u>3</u>					Land Use Source & Year: _____									
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy										Artificially Impounded ☐ Yes ☒ No													
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy																							
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>8</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>6</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>5</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>SAS03020</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>26.6</u> <u>7.85</u> <u>8.62</u> <u>107.4</u> <u>228.6</u> <u>0.4</u> Mid-Depth: <u>2.0</u> <u>26.2</u> <u>7.89</u> <u>8.69</u> <u>107.6</u> <u>228.3</u> <u>0.11</u> Bottom: <u>4.8</u> <u>25.1</u> <u>7.74</u> <u>7.54</u> <u>91.4</u> <u>228.1</u> <u>0.11</u>										Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Meter ID: <u>Crawdad</u>										Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid SECCHI (M) <u>2.7</u> Total Station Depth (M) <u>5.3</u>									
Sediment Type: (may check more than one) ☐ 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 ☒ ☐ ☐ ☐									
Weather Conditions: <u>Sunny</u> * Bloom-ID collected w/ HAB kit near NE shore (HABCE0164) SAMPLING TEAM: <u>Matt Bearden, Victoria Schwartz,</u> <u>& Denver Bourassa</u>										Additional Notes: Resident in WI Sec. 11 says county recently came out to chop <i>Nymphaea odorata</i> (and has removed nuphar in the past) • <i>Nitella</i> near shore Silt smothered SIGNATURE: <u>MB</u> <u>Victoria Schwartz</u> DATE: <u>5/9/23</u>									

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Ola</u>		County: <u>Orange</u>		Date: <u>5/9/23</u>									
Analyst: <u>Matt B / Victoria S / Denver B</u>		Signature: <u>[Signature]</u>		STORET: <u>GACE0127</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 3, 6, 9, 12									
SPECIES		2	5	8	11	Collected? (✓)	SPECIES		2	5	8	11	Collected? (✓)
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							Limnobia 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 (ej?)		/	/	/	/	
Eclipta prostrata (E. alba)							Ludwigia suffruticosa						
Eichhornia crassipes							Luziola fluitans (Hydrochloa carolinensis)						
*Eleocharis <u>baldwinii</u>		/	/	/	/		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													
Fraxinus													

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Lake Ola</u>					Date: <u>5/9/23</u>						
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	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)						FRSA					
Proserpinaca pectinata						<u>Ludwigia sp.</u>					
*Rhexia						<u>Tiny white flower → Barcus (✓)</u>					
*Rhynchospora corniculata						<u>↳ Ptilimnium capillare barata</u>					
*Rhynchospora inundata						<u>Polygonum sp → punctatum</u>					
Rhynchospora nitens						<u>Eleocharis baldwinii</u>					
Ricciocarpus natans						<u>Pineapple Cy → Fuirena pumila</u>					
Sabal palmetto						<u>Fall grass → Paspalum urvillei</u>					
Sacciolepis striata						<u>Poa viridis → Vigna luteola</u>					
*Sagittaria filiformis						<u>St John's wort → Hypericum muticum</u>					
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

Lake Ola WBID 2836B

