

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STRATEGIC MONITORING PLAN Field Sheet

July 2022

DO did not pass CCV

Meter
Passed End
of Day CCVYes / **No**

WIN Station Name:	LAKE GEAR @ CENTER				Sample Date:	7/18/2022	
WIN / Field ID:	G2CE0154	ORG ID:	21FLCEN	ENR:	-		
County:	Orange	WBID:	3023D	LAKE			
Receiving Body of Water:	-				RQ-	2022-07-18-26	
Latitude:	28.55642				Longitude:	-81.3308	

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# 1335260		Filter Lot# 17413308	
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

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	1254	6.8	0.3	6.67	90.5	31.4	7.66	2.5	180.2	0.08
	1300		2	6.21	83.2	30.7	7.52		180.3	0.08
	1305		6.3	0.34	3.9	20.8	6.3		234.8	0.11

Biological Samples Collected:

LVI

SBIO Visit ID: 85161

HA ID:

RPS ID:

Macrophyte ID: 12252

LIMS ID: 2342174

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology							
Chlorophyll	CHLSUITE-W			ICE			
Physical/Aggregate Nutrients	ALKALINITY, TURBIDITY, W-F, W-TSS			ICE			
Filtered Nutrients	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			ICE			
Acid Preserved Nutrients	W-PO4-F			ICE			
Metals	Field Filtered 0.45 µm Filter			ICE			
Organics (LC)	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	132683	12/18/22
Macroinvertebrates	W-ICPMS			ICE	HNO3**	NA1286110	11/16/22
Organics (GC)	W-E8321-DI						
Molecular	W-E8321-MS						
Periphyton							
Phytoplankton							
BOD							
Other(s)							
Field Comments:	Sunny DO did not pass CCV						
Comments on COC:							
Relinquish Date:	07/18/2022	Signature:					

LIMS EVENT ID: CEN-DIST-2022-07-19-01

WIN Import ID: 35386

Enter Field Parameters, Verify Station ID in LIMS DMT: EB 8/11/22

QC Station ID, Field Parameters in LIMS DMT: KWM 8/16/22

Save Field Sheets on Network: KWM 9/9/22 (Initials/Date)

Migrate Data to WIN: KWM 9/9/22 (Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ **MACROPHYTE ID:** _____ **LATITUDE:** 28.55642
COUNTY: Orange **STORET #:** G2CE0154 **LONGITUDE:** -81.3308
DATE: 7/18/22 **TIME:** _____ **SAMPLING AGENCY:** 21FLCEN
SITE NAME: Lake Groar @ Center **WBID:** 3023D
FIELD ID/NAME: G2CE0154 **LAKE SIZE:** _____ **RQ:** 2022-07-18-26

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>60</u>	<u>40</u>					Land Use Source & Year: _____							
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>3</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>4</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>132683</u> Exp. Date: <u>12/18/22</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>31.4</u> <u>7.66</u> <u>6.67</u> <u>90.5</u> <u>180.2</u> <u>0.08</u> Mid-Depth: <u>2.0</u> <u>30.7</u> <u>7.52</u> <u>6.21</u> <u>83.2</u> <u>180.3</u> <u>0.08</u> Bottom: <u>6.3</u> <u>20.8</u> <u>6.3</u> <u>0.34</u> <u>3.9</u> <u>234.8</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>2.5</u> Total Station Depth (M) <u>6.8</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								Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic							
Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☐ ☒ Nuisance Plants ☐ ☐ ☐ ☒ Submersed Plants ☐ ☒ ☐ ☐ Exotic Apple Snails ☒ ☐ ☐ ☐								Additional Notes: <u>Heavy algae smothering of all submerged aquatic veg.</u>							
Weather Conditions: <u>Sunny</u>															
SAMPLING TEAM: <u>Katie March/Victoria Schwab</u>										SIGNATURE: <u>[Signature]</u>				DATE: <u>7/18/22</u>	

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Gear</u>		County: <u>Orange</u>		Date: <u>7/18/22</u>	
Analyst: <u>Katie Marsh/Victoria Schwartz</u>		Signature: <u>K Marsh / V Schwartz</u>		STORE: <u>G2CE0154</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.					
		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.					
Cladium jamaicense					
Colocasia esculenta					
*Commelina					
Crinum americanum					
*Cyperus alternifolius (C. involucratus)					
Cyperus articulatus					
Cyperus haspan					
*Cyperus lecontei					
*Cyperus polystachyos					
*Cyperus odoratus					
*Cyperus surinamensis					
Cyrtilla racemiflora					
Decodon verticillatus					
Diodia virginiana					
*Echinochloa crus-galli					
*Echinochloa muricatum					
Echinochloa walteri					
Eclipta prostrata (E. alba)					
Eichhornia crassipes					
*Eleocharis					
Eleocharis cellulosa					
*Eleocharis elongata					
Eleocharis equisetoides					
Eleocharis interstincta					
Eleocharis submersed viviparous					
*Eriocaulon compressum					
*Eriocaulon decangulare					
Eupatorium capillifolium					
Fraxinus					

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Lake Gear</u>					Date: <u>7/18/22</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 (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						Polygonum punctatum					✓
* Rhynchospora corniculata						Echinochloa walteri					✓
* Rhynchospora inundata						Centella asiatica					
Rhynchospora nitens						Setaria parviflora					
Ricciocarpus natans						Ptilium → Ptilimnium capillaceum					
Sabal palmetto											
Sacciolepis striata											
* Sagittaria filiformis											
* Sagittaria graminea											
* Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

LVI Map for LAKE GEAR, WBID 3023D

