

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STRATEGIC MONITORING PLAN FIELD SHEET

January 2022

Meter Passed End

of Day CCV

☒ Yes / No

WIN Station Name: LAKE ELIZABETH AT CENTER

Date: 5/25/2023

WIN/Field ID: G1SW0141

WBID: 1474B

ENR: -

Latitude: 28.157284

County: HILLSBOROUGH

Org ID: 21FLTPA

Longitude: -82.573445

Receiving Body of Water: -

RQ- 2023-05-01-19

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Sarah Meyer	x		x		
☒	Kevin Grace		x		x	x
☐						
☐						

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

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# LEIA	
Photos: YES		Flow: NA		Tide:		Tide Times: High: Low:	
Biological Samples Collected:		☒ None	☒ HA	☐ SCI	☐ RPS	☐ Algae ID	☐ LVS ☒ LVI Other:
SBIO ID Numbers: SBIO: 86896, HA: 18487, Macro: 12443							
Notes:							

Duplicate Sample

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

Blank

Time Zone: EST	Time: 1145	Field ID: FB_05252023	(Blank Type_DDMMYYYY)
DI Source: SW ROC		Location: Shore of Lake Elizabeth	
DI Type: Field Blank		Equipment ID:	
DI Container (Name/ID):		DI Container Type: Carboy_4	

LIMS EVENT ID: SW-DIST-2023-05-26-01

WIN Import ID: 41693

Enter Field Parameters, Verify Station ID In LIMS DMT: DM 6/5/2023

QC Station ID, Field Parameters In LIMS DMT: MM 7/24/2023

(Initials/Date)

(Initials/Date)

Scan/Save Field Sheets MM 7/31/23

(Initials/Date)

Migrate Data to WIN: MM 7/31/2023

(Initials/Date)

Verify Data In WIN: MM 7/31/2023

(Initials/Date)



RQ-2023-05-01-19
Customer: SW-DIST
Project ID: STRATEGIC MONITORING PLAN

Collected By: Sarah Meyer, Kevin Grace
Field Report Prepared By: Sarah Meyer
Sampling Agency: FDEP

Place Label Here WIN ID/Field ID: G1SW0141 Location: LAKE ELIZABETH AT 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 _h)
	1130 EST	7.09	92.4	29.2	7.37	0.3	1.8 ☐ VOB (S)	5.1	182.1	0.08
5/25/2023	1135	7.14	92.5	28.8	7.28	2	Central Lab please use top row for login purposes		181.5	0.08
	1138 EST	1.89	22.4	23.6	6.53	3.9			167.8	0.08
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 #	SA3013020		Exp:	01/25/24				
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A
		Lot #	NA2230040		Exp:	09/01/23				
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A
		Filter Lot #	17756911		Syringe Lot#	2153759				
Biochemical Oxygen Demand (BP-1L)		BODTEST OV-BODUNIN				☐ ICE				
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-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 ☐ Contract Lab				☐ Ice				
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD				☐ Ice				
Tracers (BG-500ML)		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice		MCAA Exp. Date		
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI ☒ WE8321-MS		☒ W-PSNP-TQ		☐ W-CT-Cl-R		MCAA Lot#	5	A
		☐ W-PCl-TQ-R		☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)		☒ W-TR-SQ-R				
Phytoplankton/Periphyton		☐ W-PCB-TQ-R		☐ PKD-QN-BV		☐ Ice				
Name: Sarah Meyer Kevin Grace				Signature:				Date: 05/25/2023		

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution



RQ- 2023-05-01-19

Collected By: Sarah Meyer, Kevin Grace

Customer: WQAP

Field Report Prepared By: Sarah Meyer, Kevin Grace

Project ID: SMP

Sampling Agency: FDEP

BLANK



Field ID: FB 05252023

Comments:

Matrix: Field Blank

(Check one) ☐ COMPOSITE ☒ GRAB

Date

Time

DI Source: SW ROC

5/25/2023

1145

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 # SA3013020 Exp: 01/25/24				
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	☒ <2	1	A
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	Filter Lot # 17756911				
	Syringe Lot # 2153759				
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-IC / TDS	☒ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice	MCAA Exp. Date		
Pesticides (BG-500ML) (BG-1L)	☒ W-E8321-DI ☒ WE8321-MS ☒ W-PSNP-TQ ☐ W-CT-CI-R	☒ Ice	MCAA Lot#	3	A
	☐ W-PCL-TQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution) ☒ W-TR-SQ-R				
Name: Sarah Meyer Kevin Grace		Signature: Sarah Meyer		Date: 05/25/2023	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Site Name: **Lake Elizabeth @ Center**COUNTY: HillsboroughLAKE SIZE: Small

WBID: _____

MACROPHYTE ID: _____

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: 													
 	 	 	 	100	 	 	 	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>12</u>		20	19	18	17	16	15	14	13	<u>12</u>	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>9</u>		20	19	18	17	16	15	14	13	12	11	10	<u>9</u>	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>7</u>		20	19	18	17	16	15	14	13	12	11	10	9	8	<u>7</u>	6	5	4	3	2	1

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☒ 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: <table border="1"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat. (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td><u>0.3</u></td> <td><u>29.2</u></td> <td><u>7.37</u></td> <td><u>7.09</u></td> <td><u>92.4</u></td> <td><u>182.1</u></td> <td><u>0.08</u></td> </tr> <tr> <td>Mid-Depth:</td> <td><u>2.0</u></td> <td><u>28.8</u></td> <td><u>7.28</u></td> <td><u>7.14</u></td> <td><u>92.5</u></td> <td><u>181.5</u></td> <td><u>0.08</u></td> </tr> <tr> <td>Bottom:</td> <td><u>3.9</u></td> <td><u>23.6</u></td> <td><u>6.53</u></td> <td><u>1.89</u></td> <td><u>22.4</u></td> <td><u>167.8</u></td> <td><u>0.08</u></td> </tr> </tbody> </table>											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>7.37</u>	<u>7.09</u>	<u>92.4</u>	<u>182.1</u>	<u>0.08</u>	Mid-Depth:	<u>2.0</u>	<u>28.8</u>	<u>7.28</u>	<u>7.14</u>	<u>92.5</u>	<u>181.5</u>	<u>0.08</u>	Bottom:	<u>3.9</u>	<u>23.6</u>	<u>6.53</u>	<u>1.89</u>	<u>22.4</u>	<u>167.8</u>	<u>0.08</u>	Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
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Meter ID: <u>1019</u>										Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid																																									
Sediment Type: (may check more than one) ☒ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____										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										Abundance: <table border="1"> <thead> <tr> <th></th> <th>Absent</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>Nuisance Plants</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Submersed Plants</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>Exotic Apple Snails</td> <td>☐</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>											Absent	Rare	Common	Abundant	Periphyton	☐	☐	☐	☒	Nuisance Plants	☐	☐	☒	☐	Submersed Plants	☐	☐	☐	☒	Exotic Apple Snails	☐	☒	☐	☐							
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Exotic Apple Snails	☐	☒	☐	☐																																															
Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic										Additional Notes: <u>Storms previous day</u>																																									
Weather Conditions: <u>Cloudy, warm, light wind</u>																																																			

SAMPLING TEAM: Kevin Grace Sarah MeyerSIGNATURE: Sarah MeyerDATE: 05/25/2023

Site Name: **Lake Elizabeth @ Center**

Waterbody:	County: <u>Hillsborough</u>
Signature: <u>Sarah Meyer</u>	Date: <u>05/25/2023</u>

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

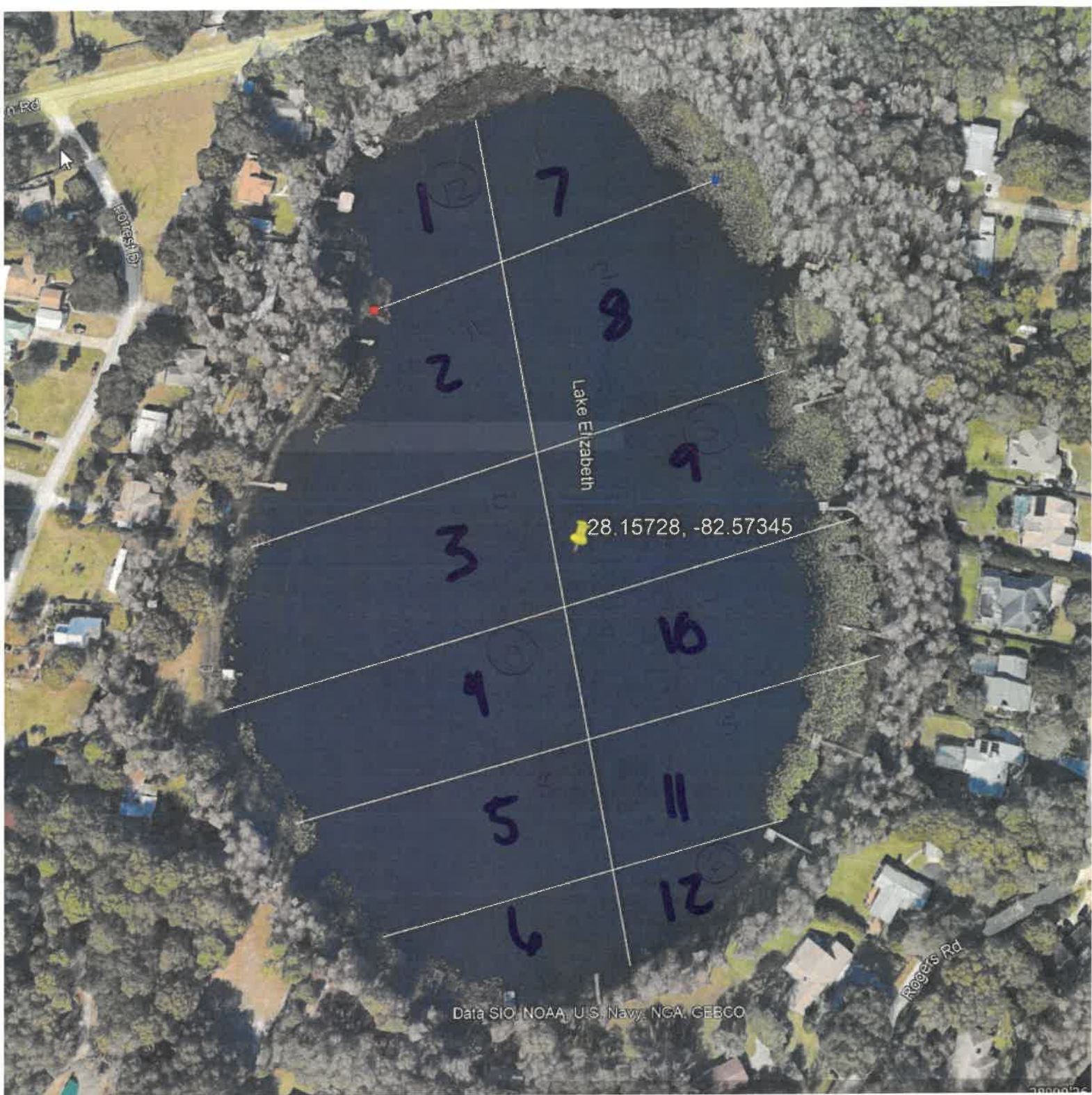
SPECIES (A-F)	3	6	9	12	Collected? (✓)	SPECIES (G-L)	3	6	9	12	Collected? (✓)
Acer rubrum						Gordonia lasianthus					
Alternanthera philoxeroides		X	X			Habenaria repens					
Andropogon sp.						Hymenachne amplexicaulis					
Azolla filiculoides (A. caroliniana)						Hydrilla verticillata					
Baccharis sp.						Hydrocotyle sp.	X	X	X	X	
Bacopa caroliniana	X	X	X	X		Hygrophila polysperma					
Bacopa monnieri						*Hypericum fasciculatum					
Bidens laevis						*Hypericum hypericoides					
Bidens mitis						*Hypericum myrtifolium					
Blechnum serrulatum						Ilex cassine					
Boehmeria cylindrica						Ipomoea aquatica					
Brasenia schreberi						Ipomoea sagittata					
Cabomba caroliniana						Itea virginica					
Casuarina equisetifolia						Juncus effusus					
Centella asiatica						*Juncus marginatus					
Cephalanthus occidentalis	X					*Juncus megacephalus					
Ceratophyllum demersum	X	X	X	X		Juncus repens					
Chara sp.	X	X	X	X	✓	*Juncus scirpoides					
Cladium jamaicense						Lachnanthes caroliniana					
Cliftonia monophylla						Leersia hexandra					
Colocasia esculenta						Landoltia punctata (Spirodela punctata)					
*Commelina						Lemna sp.					
Crinum americanum						Leucothoe racemosa (Eubotrys racemosa)					
* Cyperus alternifolius (C. involucratus)						Limnium spongia					
Cyperus articulatus						Limnophila sessiliflora					
Cyperus haspan						Liquidambar styraciflua					
*Cyperus lecontei						*Ludwigia arcuata					
*Cyperus polystachyos						*Ludwigia leptocarpa					
*Cyperus odoratus						*Ludwigia linearis					
*Cyperus surinamensis						*Ludwigia octovalvis		X			
Cyrtilla racemiflora						* Ludwigia peruviana	X	X	X	X	
Decodon verticillatus						*Ludwigia repens					
Diodia virginiana						*Ludwigia					
*Echinochloa crus-galli						Luziola fluitans (Hydrochloa carolinensis)					
*Echinochloa muricatum						Lyonia lucida					
Echinochloa walteri											
Eclipta prostrata (E. alba)											
Egeria densa											
Eichhornia crassipes											
*Eleocharis baldwinii		X		X							
*Eleocharis											
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium	X										
*Fuirena											
Fuirena scirpoidea											



Site Name: **Lake Elizabeth @ Center**

Date: 05/25/2023

Name: Lake Elizabeth @ Center					Collec						Collec
SPECIES (M-P)	3	6	9	12	ted? (✓)	SPECIES (R-Z)	3	6	9	12	ted? (✓)
Magnolia virginiana						*Rhexia					
Mayaca fluviatilis						*Rhynchospora corniculata					
Melaleuca quinquenervia	X			X		*Rhynchospora inundata					
Micranthemum glomeratum						Rhynchospora tracyi					
Micranthemum umbrosum						Ricciocarpus natans					
Mikania scandens			X	X		Sabal palmetto					
Mimosa pigra						Sacciolepis striata					
Myrica cerifera						*Sagittaria filiformis					
Myriophyllum aquaticum						*Sagittaria graminea					
*Myriophyllum heterophyllum						*Sagittaria isoetiformis					
*Myriophyllum laxum						Sagittaria lancifolia			X		
*Myriophyllum pinnatum						Sagittaria latifolia					
Myriophyllum spicatum						Salix caroliniana					
*Najas filifolia						Salvinia minima					
*Najas guadalupensis						Sambucus canadensis					
*Najas minor						Sapium sebiferum					
Nelumbo lutea						Saururus cernuus					
Nitella spp.						Schinus terebinthifolius					
Nuphar sp.	X	X	X	X		*Schoenoplectus californicus (Cali bulrush)					
Nymphaea odorata						*Schoenoplectus pungens (three square)					
Nymphoides aquatica	X	X			✓	*Schoenoplectus tabernaemontani (softsteam)					
Nyssa sylvatica var. biflora						Scirpus cubensis (Oxycaryon cubense)		X			
Orontium aquaticum						Scirpus cyperinus					
Osmunda cinnamomea						*Sesbania					
Osmunda regalis						Solidago sp.					
Panicum hemitomon		X	X	X		Sparganium americanum					
Panicum repens	X	X	X	X		Spartina bakeri					
Paspalidium geminatum		X				Sphagneticola trilobata (Wedelia)					
*Paspalum repens						Spirodela polyrhiza					
Paspalum urvillei						Taxodium sp.	X	X	X	X	
Peltandra sp.						Thalia geniculata					
Persea sp.						Thelypteris palustris	X			X	
Pennisetum purpureum						Triadenum virginicum					
Phragmites australis						Typha sp.					
Pinus elliotii						Urochloa mutica (Brachiaria mutica)					
Pistia stratioides						*Utricularia gibba (U. biflora)		X			
Pluchea sp.						*Utricularia floridana					
*Polygonum glabrum (densiflorum)						*Utricularia foliosa					
*Polygonum hydropiperoides						*Utricularia inflata					
*Polygonum punctatum						*Utricularia purpurea					
*Polygonum sp.						*Utricularia cornuta					
Pontederia cordata						*Utricularia radiata					
*Potamogeton diversifolius						Vallisneria americana					
*Potamogeton illinoensis						*Websteria confervoides					
*Potamogeton pusillus						Wolffiella spp.					
*Potamogeton pectinatus						Woodwardia virginica					
Proserpinaca pectinata						Xyris sp.					
						Zizania aquatica					
						Zizaniopsis milacea					



8/3 728 7896
mail
neighbor results
Heather
flygirlheb@
me.com