

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STRATEGIC MONITORING PLAN FIELD SHEET

January 2022

Meter Passed End

of Day CCV

☒ Yes / ☐ No

WIN Station Name: LAKE SUNSHINE AT CENTER

Date: 5/1/2023

WIN/Field ID: G4CE0233

WBID: 1342B

ENR: -

Latitude: 28.92569

County: LAKE

Org ID: 21FLCEN

Longitude: -81.92171

Receiving Body of Water: -

RQ- 2023-05-01-20

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

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

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# SHRIMP TRAP			
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 86646		MACROPHYTE 12429					2404436		
Notes: SUNNY AND WINDY									

Duplicate Sample

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

Blank

Time Zone: EST		Time: 1330		Field ID: FB_05012023		(Blank Type_DDMMYYYY)		
DI Source: Lab sink				Location: Lake side/ canoe launch				
DI Type: Field Blank				Equipment ID:				
DI Container (Name/ID):				DI Container Type: Butter Baby				

LIMS EVENT ID: CEN-DIST-2023-05-02-02

WIN Import ID: 40834

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 5/16/23

QC Station ID, Field Parameters In LIMS DMT: VLS 5/26/23

(Initials/Date)

(Initials/Date)

Scan/Save Field Sheets KWM 6/9/23

Migrate Data to WIN: KWM 6/9/23

Verify Data In WIN:

(Initials/Date)

(Initials/Date)

(Initials/Date)



RQ-2023-05-01-20
Customer: CEN-DIST
Project ID: STRATEGIC MONITORING PLAN

Collected By: Katie March, Victoria Schwartz
Field Report Prepared By: Katie March
Sampling Agency: FDEP

Place Label Here WIN ID/Field ID: G4CE0233 Location: LAKE SUNSHINE 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)
	1246 EST	8.34	101.3	25.2	7.44	0.3	1.3 ☐ VOB (S)	2.8	152.8	0.07
5/1/2023	1250	8.42	102.1	25.2	7.69	2	Central Lab please use top row for login purposes		152.8	0.07
	1253 EST	9.42	114.2	25.2	8.1	2.3			152.9	0.07
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:	1/25/24				
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A
		Lot #	NA2230040		Exp:	9/1/23				
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A
		Filter Lot #	17769663		Syringe Lot#	2298556				
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: Katie March Victoria Schwartz		Signature: <i>Victoria Schwartz</i>				Date: 05/01/2023				

*2.0 ml of Preservative used unless noted otherwise.
**MCAA: Monochloroacetic acid buffer solution



RQ- 2023-05-01-20

Collected By: Katie March, Victoria Schwartz

Customer: WQAP

Field Report Prepared By: Katie March, Victoria Schwartz

Project ID: SMP

Sampling Agency: FDEP

BLANK



Field ID: FB 05012023

Comments:

Matrix: Field Blank

(Check one) ☐ COMPOSITE ☒ GRAB

Date

Time

DI Source: Lab sink

5/1/2023

1330

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	B
	Lot # SA3013020 Exp: 1/25/24				
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP	☒ Ice ☒ HNO3	☒ <2	1	B
	Lot # NA2230040 Exp: 9/1/23				
Filtered Nutrients (P125ML)	☒ W-PO4-F Filter ☒ Field Filtered 0.45 µm	☒ Ice		1	B
	Filter Lot # 17769663				
	Syringe Lot # 2298556				
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-IC / TDS	☒ Ice		1	B
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#		
	☐ W-PCL-TQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution) ☐ W-TR-SQ-R				
Name: Katie March Victoria Schwartz		Signature:		Date: 05/01/2023	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ **MACROPHYTE ID:** _____ **LATITUDE:** 28.92569
COUNTY: Lake **STORET #:** G4CE0233 **LONGITUDE:** -81.92171
DATE: 5/1/23 **TIME:** 12:46 **SAMPLING AGENCY:** 21FLCEN
SITE NAME: Lake Sunshine at Center **WBID:** 1342B
FIELD ID/NAME: G4CE0233 **LAKE SIZE:** _____ **RQ:** 2023-05-01-20

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>5</u>		<u>20</u>		<u>50</u>	<u>20</u>		<u>5</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>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>2</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>2</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>11/25/24</u> 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>25.2</u></td> <td><u>7.44</u></td> <td><u>8.34</u></td> <td><u>101.3</u></td> <td><u>152.8</u></td> <td><u>0.07</u></td> </tr> <tr> <td>Mid-Depth:</td> <td><u>2</u></td> <td><u>25.2</u></td> <td><u>7.69</u></td> <td><u>8.42</u></td> <td><u>102.1</u></td> <td><u>152.8</u></td> <td><u>0.07</u></td> </tr> <tr> <td>Bottom :</td> <td><u>2.3</u></td> <td><u>25.2</u></td> <td><u>8.1</u></td> <td><u>9.42</u></td> <td><u>114.2</u></td> <td><u>152.9</u></td> <td><u>0.07</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>25.2</u>	<u>7.44</u>	<u>8.34</u>	<u>101.3</u>	<u>152.8</u>	<u>0.07</u>	Mid-Depth:	<u>2</u>	<u>25.2</u>	<u>7.69</u>	<u>8.42</u>	<u>102.1</u>	<u>152.8</u>	<u>0.07</u>	Bottom :	<u>2.3</u>	<u>25.2</u>	<u>8.1</u>	<u>9.42</u>	<u>114.2</u>	<u>152.9</u>	<u>0.07</u>	Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____			
	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)																																				
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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: <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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Periphyton	☐	☒	☐	☐																																							
Nuisance Plants	☐	☐	☒	☐																																							
Submersed Plants	☐	☐	☒	☐																																							
Exotic Apple Snails	☒	☐	☐	☐																																							
Weather Conditions: <u>Sunny + windy w/ choppy water E</u>								Additional Notes: • Located in golf course community with construction along main road 441 • grass mowed to shoreline																																			
SAMPLING TEAM: <u>Katie March / Victoria Schwartz</u>								SIGNATURE: _____ DATE: <u>5/1/23</u>																																			

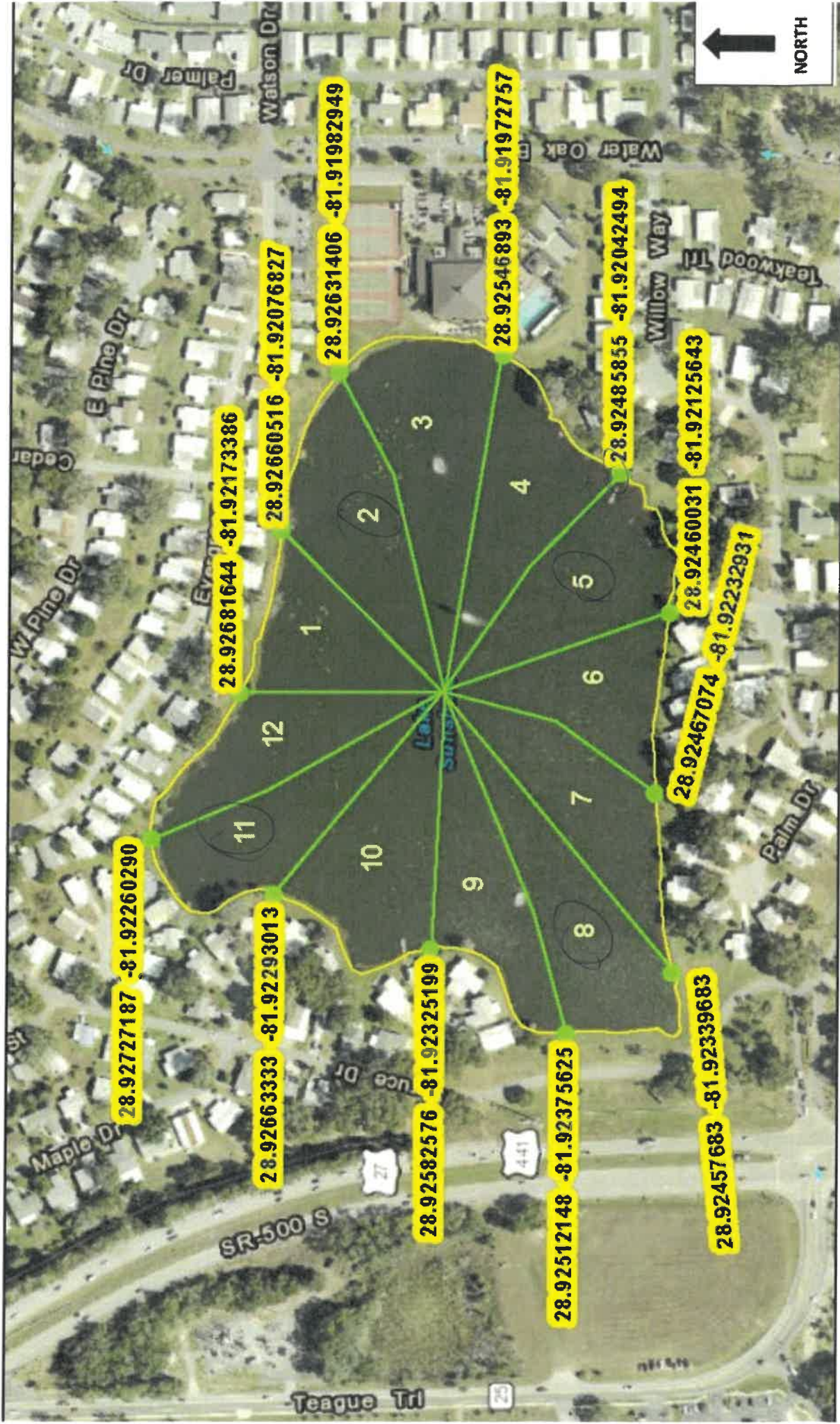
DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Sunshine</u>		County: <u>Lake</u>		Date: <u>5/1/23</u>									
Analyst: <u>Katie March / Victoria Schwab</u>		Signature: <u>KM March / V Schwab</u>		STORET: <u>C74CE0233</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.													
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		D	D	E	E	
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							Limnium 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						
Eclipta prostrata (E. alba)							Ludwigia suffruticosa						
Eichhornia crassipes							Luziola fluitans (Hydrochloa carolinensis)						
*Eleocharis							Magnolia virginiana						
Eleocharis cellulosa							Mayaca fluviatilis						
*Eleocharis elongata							Melaleuca quinquenervia						
Eleocharis equisetoides							Micranthemum glomeratum						
Eleocharis interstincta							Micranthemum umbrosum						
Eleocharis submersa 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 Sunshine</u>					Date: <u>5/1/23</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)						Rhexia					
Proserpinaca pectinata						Pink flower (late)					
*Rhexia						Sycamore → Platanus occidentalis					
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora nitens											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

LVI MAP FOR WBID 1342B, LAKE SUNSHINE



1:3,425
0 0.03 0.05 0.1 mi
0 0.04 0.08 0.16 km
Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community. Source: Esri, Maxx Earthstar Geographics, and the GIS User Community