

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STRATEGIC MONITORING PLAN FIELD SHEET

January 2022

Meter Passed End

of Day CCV

☒ Yes / ☐ No

WIN Station Name: Lake Lily @ Center

Date: 5/17/2022

WIN/Field ID: G1CE0123

WBID: 2872C

ENR: -

Latitude: 28.54481

County: ORANGE

Org ID: 21FLCEN

Longitude: -81.53472

Receiving Body of Water: -

RQ- 2022-05-16-39

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Terry Riordan		☒			
☒	Victoria Schwartz	☒		☒	☒	☒
☐						
☐						

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

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# CRAW DADDY			
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 84254		MACROPHYTE 12156				LIMS 2327859			
Notes: SUNNY									

Duplicate Sample

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

Blank

Time Zone:	Time:	Field ID:	(Blank Type_DDMMYYYY)
DI Source:	Location:		
DI Type:	Equipment ID:		
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: CEN-DIST-2022-05-18-01

WIN Import ID: 33668

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 6/3/22

QC Station ID, Field Parameters In LIMS DMT: EB 6/17/22

(Initials/Date)

(Initials/Date)

Scan/Save Field Sheets KWM 6/17/22

(Initials/Date)

Migrate Data to WIN: KWM 6/17/22

(Initials/Date)

Verify Data In WIN:

(Initials/Date)



RQ-2022-05-16-39
Customer: CEN-DIST
Project ID: STRATEGIC MONITORING PLAN

Collected By: Terry Riordan, Victoria Schwartz
Field Report Prepared By: Terry Riordan
Sampling Agency: FDEP

Place Label Here						Comments:					
WIN ID/Field ID:  G1CE0123 Location: Lake Lily @ Center											
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)	
5/17/2022	1106 EST	2.33	28.7	25.6	6.39	0.3	1.4 ☐ VOB (S)	1.7	199	0.09	
	1110 EST	0.42	5.2	24.6	6.2	1.2	Central Lab please use top row for login purposes		195.7	0.09	
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 #	SA1308030		Exp:	12/1/22					
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☐ HNO3*		☒ <2	1	A	
		Lot #	NA1286110		Exp:	11/16/22					
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☐ Ice			1	A	
		Filter Lot #	17413308			Syringe Lot #	1335260				
BOD (BP-1L)		☐ 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-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice					
Macroinvertebrates (PJ-2L)		☐ MI-FW-QLDC				☐ 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.			
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI	☒ WE8321-MS	☒ W-PSNP-TQ		W-CT-CL-R	☒ Ice	MCAA Lot#	9	A	
		W-PCL-TQ-R	W-CARB-AA (5 ml of MCAA** Buffer Solution)		☒ W-TR-SQ-R						
		W-PCB-TQ-R									
Phytoplankton/Periphyton				DTY-QN-C		PKD-QN-C	☐ Ice				
Name: Terry Riordan Victoria Schwartz					Signature: 					Date: 05/17/2022	

*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:** 28.54481
COUNTY: Orange **STORET #:** GICE0123 **LONGITUDE:** -81.53772
DATE: 5/17/22 **TIME:** _____ **SAMPLING AGENCY:** 21FLCEN
SITE NAME: Lake Lily @ Center **WBID:** 2872C
FIELD ID/NAME: GICE0123 **LAKE SIZE:** _____ **RQ:** 2022-05-16-39

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>15</u>		<u>5</u>		<u>70</u>	<u>40</u>									
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy								Artificially Impounded		LDI:				
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy								☐ Yes ☒ No		Land Use Source & Year:				
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>18</u>		20 19 18 <u>17</u> <u>16</u>		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>15</u>		20 19 18 17 <u>16</u>		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>16</u>		20 19 18 <u>17</u> <u>16</u>		15 14 13 12 11		10 9 8 7 6		5 4 3 2 1						

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

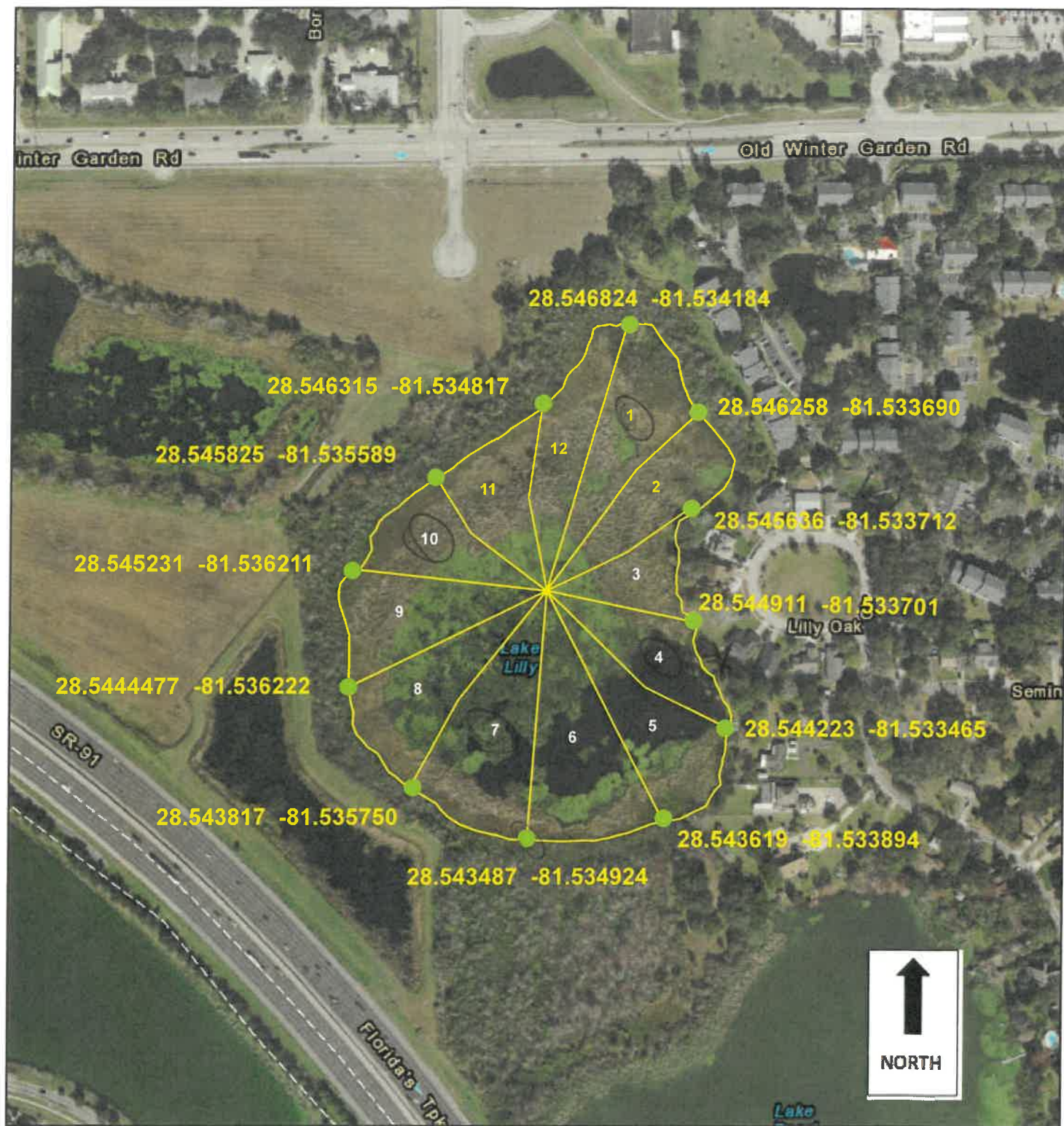
MACROPHYTE 12156									
Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # <u>SA1308030</u> Exp. Date: <u>12/1/22</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High					Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____ Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____				
Meter Readings: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>25.6</u> <u>6.39</u> <u>2.33</u> <u>28.7</u> <u>199</u> <u>0.09</u> Mid-Depth: _____ Bottom: <u>1.2</u> <u>24.6</u> <u>6.2</u> <u>0.42</u> <u>5.2</u> <u>195.7</u> <u>0.09</u>					Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☒ Clear ☐ Tannic ☐ Green SECCHI (M) <u>1.4</u> Total Station Depth (M) <u>1.7</u> VOB ☐				
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 #: <u>8</u> 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> { <u>FL Turnpike ~130m from Lake</u>					Additional Notes: <u>LVI: No dominant section 7</u> <u>LVI: Section 1 could only be viewed from center of lake due to dense aquatic veg. (see pics)</u>				
SAMPLING TEAM: <u>Terry Riordan / Victoria Schwartz</u>					SIGNATURE: <u>[Signature]</u> DATE: <u>5/17/22</u>				

Waterbody: <u>Lake Lily</u>		County: <u>Orange</u>		Date: <u>5/17/22</u>	
Analyst: <u>Terry Riosan / Victoria Schwab</u>		Signature: <u>[Signature]</u>		STORE: <u>GICE0123</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		Collected? (✓)	
SPECIES				SPECIES	
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	/	D	/	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	/
Cyrtilla 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 <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					/
Sec. 7 - no dominant					

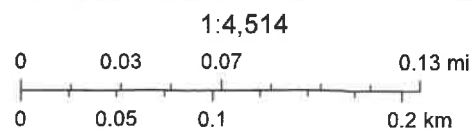
FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Lake Lily</u>					Date: <u>5/17/22</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 inflata					
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 (Sphagnetocola trilobata)					
*Polygonum						Wolffiella spp.					
Pontederia cordata						Woodwardia virginica					
*Potamogeton diversifolius						Xyris sp.					
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)						Phyla nodiflora					
Proserpinaca pectinata						Wild perilla (mexican)					
*Rhexia						→ Ruellia simplex					
*Rhynchospora corniculata						Ptilimnium					
*Rhynchospora inundata						→ Ptilimnium capillaceum					
Rhynchospora nitens						Panicum virgatum virgatum					
Ricciocarpus natans						(Smutgrass)					
Sabal palmetto						Sacciolepis indica					
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

LVI MAP FOR 2872C LAKE LILY



April 21, 2022



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community