

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV☒ Yes / ☐ No

WIN Station Name:	Lake Silver @ Center				Sample Date:	9/20/2022	
WIN / Field ID:	G3CE0056	ORG ID:	21FLCEN	ENR:	-		
County:	Polk	WBID:	1488G	LAKE			
Receiving Body of Water:	-				RQ-	2022-06-06-37	
Latitude:	28.03167			Longitude:	-81.72819		

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Matt Bearden		x		x	x
Leif Boman	x		x		

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
x	Syringe	Pole	
Syringe Lot# 2090604		Filter Lot# 17413308	
Secchi Equipment ID:		Light	
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:	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	1150	10.8	0.3	7.46	99.7	30.5	7.87	2.1	133.5	0.06
	1153		2	7.83	103.5	30	8.08		133.1	0.06
	1156		10.3	0.39	4.8	23.4	6.31		239.2	0.11

Biological Samples Collected:

LVI

SBIO Visit ID: 85798

HA ID:

RPS ID:

Macrophyte ID: 12319

LIMS ID: 2358247

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 Field Filtered 0.45 µm Filter			ICE			
Metals	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	132683 12/18/2022 H2SO4 pH<2	
Organics (LC)	W-ICPMS	W-ICP	W-HARD	ICE	HNO3**	NA1105100 06/07/2023 HNO3 pH<2	
Macroinvertebrates	W-E8321-DI	W-E8321-MS					
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							
Other(s)							
Field Comments:	Sunny, partly cloudy						
Comments on COC:							
Relinquish Date:	09/20/2022	Signature:					

LIMS EVENT ID: CEN-DIST-2022-09-21-02

WIN Import ID: 36905

Enter Field Parameters, Verify Station ID in LIMS DMT: KWM 11/18/22

QC Station ID, Field Parameters in LIMS DMT: VLS 11/22/22

Save Field Sheets on Network: KWM 11/30/22 (Initials/Date)

Migrate Data to WIN: KWM 11/30/22 (Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
COUNTY: Polk STORET #: _____ LONGITUDE: _____
DATE: 9/20/22 TIME: _____ SAMPLING AGENCY: _____
SITE NAME: Lake Silver WBID: _____
FIELD ID/NAME: _____ LAKE SIZE: _____ RQ: _____

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>20</u>	<u>75</u>		<u>Park</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	<u>3</u>	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	<u>2</u>	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	<u>2</u>	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: Top: _____ Mid-Depth: _____ Bottom: _____								Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____							
Meter: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: _____ Mid-Depth: _____ Bottom: _____								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): _____								Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____							
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>80's, Cloudy</u>															
SAMPLING TEAM: <u>M. Bearden / L. Boman</u>								SIGNATURE: <u>M. Bearden</u>				DATE: <u>9/20/22</u>			

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Silver</u>		County: <u>Polk</u>		Date: <u>9/20/22</u>							
Analyst: <u>Leif Brown, Matt Bearden</u>		Signature: <u>[Signature]</u>		STORET:							
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold = FLEPPC invasive exotic.				Lake units sampled (circle one group): <u>1, 4, 7, 10</u> 2, 5, 8, 11 3, 6, 9, 12							
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	1	4	7	10	Collected? (✓)	SPECIES	1	4	7	10	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						Limnium 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						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 Silver</u>				Date: <u>09/20/2022</u>			
SPECIES			Collected? (✓)	SPECIES			Collected? (✓)
Myriophyllum aquaticum				<i>Salix caroliniana</i>			
* <i>Myriophyllum heterophyllum</i>				Salvinia minima			
* <i>Myriophyllum laxum</i>				<i>Sambucus canadensis</i>			
* <i>Myriophyllum pinnatum</i>				Sapium sebiferum			
Myriophyllum spicatum				<i>Saururus cernuus</i>			
* <i>Najas filifolia</i>				Schinus terebinthifolius			
* <i>Najas guadalupensis</i>				* <i>Schoenoplectus californicus</i>			
* <i>Najas minor</i>				* <i>Schoenoplectus pungens</i>			
<i>Nelumbo lutea</i>				* <i>Schoenoplectus tabernaemontani</i> (<i>Scirpus validus</i>)			
<i>Nitella</i> spp.				<i>Scirpus cubensis</i> (<i>Oxycaryon cubense</i>)			
<i>Nuphar</i> sp.				<i>Scirpus cyperinus</i>			
<i>Nymphaea mexicana</i>				* <i>Sesbania</i>			
<i>Nymphaea odorata</i>				<i>Solidago</i> sp.			
<i>Nymphoides aquatica</i>				<i>Sparganium americanum</i>			
<i>Nyssa sylvatica</i> var. <i>biflora</i>				<i>Spartina bakeri</i>			
<i>Orontium aquaticum</i>				<i>Spirodela polyrhiza</i>			
<i>Osmunda cinnamomea</i>				<i>Taxodium</i> sp.			
<i>Osmunda regalis</i>				<i>Thalia geniculata</i>			
<i>Panicum hemitomon</i>				<i>Thelypteris interrupta</i>			
Panicum repens				<i>Thelypteris palustris</i>			
<i>Paspalidium geminatum</i>				<i>Triadenum virginicum</i>			
* <i>Paspalum repens</i>				<i>Typha</i> sp.			
<i>Paspalum urvillei</i>				Urochloa mutica (Brachiaria mutica)			
<i>Peltandra</i> sp.				* <i>Utricularia foliosa</i>			
<i>Persea</i> sp.				* <i>Utricularia gibba</i> (<i>U. biflora</i>)			
Pennisetum purpureum				* <i>Utricularia inflata</i>			
<i>Phragmites australis</i>				* <i>Utricularia purpurea</i>			
<i>Pinus elliotii</i>				* <i>Utricularia radiata</i>			
Pistia stratioides				* <i>Utricularia resupinata</i>			
<i>Pluchea</i> sp.				<i>Vallisneria americana</i>			
* <i>Polygonum glabrum</i> (<i>densiflorum</i>)				<i>Vigna luteola</i>			
<i>Polygonum hirsutum</i>				<i>Vitis</i> sp.			
* <i>Polygonum hydropiperoides</i>				* <i>Websteria confervoides</i>			
* <i>Polygonum punctatum</i>				Wedelia trilobata (Sphagneticola trilobata)			
* <i>Polygonum</i>				<i>Wolffiella</i> spp.			
<i>Pontederia cordata</i>				<i>Woodwardia virginica</i>			
* <i>Potamogeton diversifolius</i>				<i>Xyris</i> sp.			
* <i>Potamogeton illinoensis</i>				<i>Zizania aquatica</i>			
* <i>Potamogeton pusillus</i>				<i>Zizaniopsis milacea</i>			
* <i>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)				<i>Lythrum</i>			
<i>Proserpinaca pectinata</i>							
* <i>Rhexia</i>							
* <i>Rhynchospora corniculata</i>							
* <i>Rhynchospora inundata</i>							
<i>Rhynchospora nitens</i>							
<i>Ricciocarpus natans</i>							
<i>Sabal palmetto</i>							
<i>Sacciolepis striata</i>							
* <i>Sagittaria filiformis</i>							
* <i>Sagittaria graminea</i>							
* <i>Sagittaria isoetiformis</i>							
<i>Sagittaria lancifolia</i>							
<i>Sagittaria latifolia</i>							

LVI MAP FOR WBID 1488G LAKE SILVER

