

**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**

STRATEGIC MONITORING PLAN FIELD SHEET

January 2022

Meter Passed End

of Day CCV

☒ Yes☐ No

WIN Station Name: Hidden Lake @ Center

Date: 5/11/2022

WIN/Field ID: G4CE0158

WBID: 1347B

ENR: -

Latitude: 28.80919

County: SUMTER

Org ID: 21FLCEN

Longitude: -81.99232

Receiving Body of Water: -

RQ- 2022-05-09-20

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Elizabeth Bates	x		x		
☒	Katie March		x		x	x
☐						
☐						

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 84191 MACROPHYTE 12136						LIMS 2326674					
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-2022-05-12-01

WIN Import ID: 33666

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 5/24/22

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-2022-05-09-20
Customer: CEN-DIST
Project ID: STRATEGIC MONITORING PLAN

Collected By: Elizabeth Bates, Katie March
Field Report Prepared By: Elizabeth Bates
Sampling Agency: FDEP

Place Label Here WIN ID/Field ID: G4CE0158 Location: Hidden Lake @ Center						Comments: Please Add filtered nutrients w-po4-f				
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 (PPTH)
5/11/2022	1105 EST	4.27	52.8	26.2	7.32	0.3	1.4 ☐ VOB (S)	3.3	308.3	0.15
	1108	3.37	41.3	25.6	7.27	2.0	Central Lab please use top row for login purposes		308.4	0.15
	1110 EST	0.31	3.6	22.8	6.77	2.8			332.1	0.16
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:	12/01/22				
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#	5	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: Elizabeth Bates Katie March						Signature:			Date: 05/11/2022	

*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: _____
 COUNTY: Sumter STORET #: GHCE0158
 DATE: 5/11/22 TIME: _____
 SITE NAME: _____
 FIELD ID/NAME: Hidden Lake @ Center

LATITUDE: 28.80919
 LONGITUDE: -81.99232
 SAMPLING AGENCY: 21FCEN
 WBID: 1347B
 LAKE SIZE: Small RQ: 2022-05-09-22

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : <u>golf course</u> Forest/Natural <u>50</u> Silviculture _____ Field/Pasture _____ Agricultural _____ Residential <u>40</u> Commercial _____ Industrial _____ Other (Specify) <u>10</u>					LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: _____ Land Use Source & Year: _____				
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy					Artificially Impounded ☐ Yes ☒ No				
STORMWATER INPUTS <u>15</u>		Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation 20 19 18 17 16		Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place 15 14 13 12 11		Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6		Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place 5 4 3 2 1	
LAKESIDE ALTERATIONS <u>15</u>		Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected) 20 19 18 17 16		Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected) 15 14 13 12 11		Many structures, roads or other human disturbance visible (50%-70% lakeside affected) 10 9 8 7 6		Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1	
BUFFER ZONE <u>16</u>		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20 19 18 17 16		89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer 15 14 13 12 11		50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10 9 8 7 6		< 29% of shoreline with >18m buffer 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 # _____ Exp. Date: _____ 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: <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>26.2</u></td> <td><u>7.32</u></td> <td><u>4.27</u></td> <td><u>52.8</u></td> <td><u>308.3</u></td> <td><u>0.15</u></td> </tr> <tr> <td>Mid-Depth:</td> <td><u>2.0</u></td> <td><u>25.6</u></td> <td><u>7.27</u></td> <td><u>3.37</u></td> <td><u>41.3</u></td> <td><u>308.4</u></td> <td><u>0.15</u></td> </tr> <tr> <td>Bottom:</td> <td><u>2.8</u></td> <td><u>22.8</u></td> <td><u>6.77</u></td> <td><u>0.31</u></td> <td><u>3.6</u></td> <td><u>332.1</u></td> <td><u>0.14</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>26.2</u>	<u>7.32</u>	<u>4.27</u>	<u>52.8</u>	<u>308.3</u>	<u>0.15</u>	Mid-Depth:	<u>2.0</u>	<u>25.6</u>	<u>7.27</u>	<u>3.37</u>	<u>41.3</u>	<u>308.4</u>	<u>0.15</u>	Bottom:	<u>2.8</u>	<u>22.8</u>	<u>6.77</u>	<u>0.31</u>	<u>3.6</u>	<u>332.1</u>	<u>0.14</u>	Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green SECCHI (M) <u>1.4</u> Total Station Depth (M) <u>3.3</u> VOB ☐					
	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 ☐ 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: <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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Submersed Plants	☒	☐	☐	☐																																							
Exotic Apple Snails	☐	☐	☒	☐																																							
Weather Conditions: <u>Sunny</u>						Additional Notes: <u>wastewater plant on west shore</u>																																					
SAMPLING TEAM: <u>Liz Bates, Katie March</u>						SIGNATURE: <u>KMarch</u>																																					
DATE: <u>5/11/22</u>																																											

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Hidden Lake</u>		County: <u>Sumter</u>		Date: <u>5/1/22</u>	
Analyst: <u>Liz Bates, Katie March</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): 1, 4, 7, 10 <u>(2, 5, 8, 11)</u> 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	2	5	8	11	Collected? (v)
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					
Cyrilla 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					
SPECIES	2	5	8	11	Collected? (v)
Fuirena scirpoides					
Gordonia lasianthus					
Habenaria repens					
Hibiscus coccineus					
Hibiscus grandiflora					
Hydrilla verticillata					
Hydrocotyle sp.					
Hygrophila polysperma					
Hymenocallis sp.					
*Hypericum fasciculatum					
*Hypericum hypericoides					
*Hypericum myrtifolium					
Ilex cassine					
Ipomoea aquatica					
Ipomoea sagittata					
Itea virginica					
Juncus effusus					
*Juncus marginatus					
*Juncus megacephalus					
Juncus repens					
*Juncus scirpoides					
Lachnanthes caroliniana					
Leersia hexandra					
Landoltia punctata (Spirodela punctata)					
Lemna sp.					
Leucothoe racemosa (Eubotrys racemosa)					
Limnium spongia					
Limnophila sessiliflora					
Liquidambar styraciflua					
*Ludwigia arcuata					
*Ludwigia grandiflora					
*Ludwigia hexapetala					
*Ludwigia leptocarpa					
Ludwigia (native)					
*Ludwigia octovalvis					
*Ludwigia peruviana					
*Ludwigia repens					
Ludwigia suffruticosa					
Luziola fluitans (Hydrochloa carolinensis)					
Magnolia virginiana					
Mayaca fluviatilis					
Melaleuca quinquenervia					
Micranthemum glomeratum					
Micranthemum umbrosum					
Mikania scandens					
Mimosa pigra					
Myrica cerifera					
<u>Cicuta maculata</u>					

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Hidden Lake</u>				Date: <u>5/11/22</u>			
SPECIES			Collected? (✓)	SPECIES			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	D		
*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.	/		D
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)				<u>Wolffia</u>	/	/	/
Proserpinaca pectinata				<u>Toxicodendron</u>	/	/	/
*Rhexia				<u>rhynch. colorata</u>	/	/	/
*Rhynchospora corniculata							
*Rhynchospora inundata	/	/	X				
Rhynchospora nitens							
Ricciocarpus natans							
Sabal palmetto							
Sacciolepis striata							
*Sagittaria filiformis							
*Sagittaria graminea							
*Sagittaria isoetiformis							
Sagittaria lancifolia			/				
Sagittaria latifolia							

LVI Map for Hidden Lake, WBID 1347B

