



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV☒ Yes / ☐ No

WIN Station Name:	BEAR LAKE AT CENTER				Sample Date:	8/15/2023	
WIN / Field ID:	G2CE0281	ORG ID:	21FLCEN	ENR:	-	Latitude:	28.652275
County:	SEMINOLE	WBID:	3004A	LAKE		Longitude:	-81.448422
Receiving Body of Water:	-				RQ-	2023-08-14-15	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Jessie Atchison	x		x		
Leif Boman		x		x	x

Sampling Equipment			
x	Sample Container		Carboy
	Dipper		Van Dorn
x	Syringe		Pole
Syringe Lot# 2327923		Filter Lot# 17769663	
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
Depth Gauge ID:	depth_gauge

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	1135	4.1	0.3	7.46	102.6	32.3	7.52	2.2	245.7	0.11
	1137		2	7.42	101.8	32.1	7.69		245.6	0.11
	1140		3.6	7.31	99.8	31.9	7.67		245.5	0.11

Biological Samples Collected: None

SBIO Visit ID: 87699 HA ID: RPS ID: Macrophyte ID: 12538 LIMS Sample ID 2431220
In The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
	Type	Lot#	Expiration Date	pH Check			
Microbiology							
Chlorophyll	CHLSUITE-W			ICE			
Physical/Aggregate	ALKALINITY, TURBIDITY, W-F, W-TSS			ICE			
Nutrients	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			ICE			
Filtered Nutrients	W-PO4-F	Field Filtered 0.45 µm Filter		ICE	Syringe Lot#:2327923 ; Filter Lot#:17769663		
Acid Preserved Nutrients	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	SA3013020 01/25/2024 H2SO4 pH<2	
Metals	W-ICPMS	W-ICP	W-HARD	ICE	HNO3**	NA2230040 09/01/2023 HNO3 pH<2	
Organics (LC)	W-E8321-DI	W-E8321-MS			MCAA***		
Macroinvertebrates							
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							
DOC					SyringeLot#	FilterLot#	
Other(s)							
Field Comments:	85 and sunny/windy						
Comments on COC:							
Relinquish Date:	08/15/2023	Signature:					

LIMS EVENT ID: CEN-DIST-2023-08-16-01

WIN Import ID: 42879

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 8/25/23

QC Station ID, Field Parameters In LIMS DMT: VLS 9/25/23

Save Field Sheets on Network: KWM 9/29/23 (Initials/Date)

Migrate Data to WIN: KWM 9/29/23 (Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 28.652275
COUNTY: Seminole STORET #: G2050281 LONGITUDE: -81.448422
DATE: 8/15/23 TIME: 11:35 SAMPLING AGENCY: FDEP
SITE NAME: Bear Lake WBID: 3004A
FIELD ID/NAME: Bear Lake @ Center LAKE SIZE: _____ RQ: 2023-08-14-15

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: _____	
☐	☐	☐	☐	☒	☐	☐	☐			Land Use Source & Year: _____	
Local Watershed Erosion (select one): ☒ None ☐ Slight ☐ Moderate ☐ Heavy				Artificially Impounded ☐ Yes ☒ No							
Local Watershed NPS Pollution: ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy											
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 <u>2</u> 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:										Water Odors:	
Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No										☒ Normal	
Color Sample Taken? ☒ Yes ☐ No Lot # <u>SAB03020</u> Exp. Date: <u>1/25/24</u>										☐ Sewage ☐ Petroleum ☐ Other _____	
Alkalinity Sample Taken? ☒ Yes ☐ No										Water Surface Oils: ☒ None	
Water Level ☐ Low ☒ Normal ☐ High										☐ Sheen/Slick ☐ Glob ☐ Other _____	
Meter Readings:		Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)	Clarity:	Color:	
Top:		<u>0.3</u>	<u>32.3</u>	<u>7.52</u>	<u>7.46</u>	<u>102.6</u>	<u>245.7</u>	<u>0.11</u>	☒ Clear	☐ Clear	
Mid-Depth:		<u>2.0</u>	<u>32.1</u>	<u>7.69</u>	<u>7.42</u>	<u>101.8</u>	<u>245.6</u>	<u>0.11</u>	☐ Opaque ☐ Turbid	☐ Tannic ☒ Green	
Bottom:		<u>3.6</u>	<u>31.9</u>	<u>7.67</u>	<u>7.31</u>	<u>99.8</u>	<u>245.5</u>	<u>0.11</u>	☒ Slightly Turbid		
Meter ID: _____		SECCHI (M) <u>2.2</u>		Total Station Depth (M) <u>4.1</u>		VOB ☐					
Sediment Type: (may check more than one)										Sediment Odors:	
☒ Sandy ☐ Organic fibrous (peaty, CPOM) ☒ Vegetated										☒ Normal ☐ Other (Specify): _____	
☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____										☐ Anaerobic	
Biological Communities:					Abundance:			Additional Notes:			
LVI Conducted? ☒ Yes ☐ No					Absent Rare Common Abundant						
Phytoplankton Sample Taken? ☐ Yes ☒ No					Periphyton ☐ ☐ ☒ ☐						
Sample Preserved? ☐ Yes ☐ No					Nuisance Plants ☐ ☐ ☒ ☐						
Lot #: _____ Exp Date: _____					Submersed Plants ☐ ☐ ☐ ☒						
Algal Bloom/Algal ID Sample Taken? Yes ☐ No ☒					Exotic Apple Snails ☒ ☐ ☐ ☐						
Active Vegetation Mgmt? ☐ Yes ☒ No ☐ Don't Know											
Weather Conditions: <u>85 and sunny/windy</u>											
SAMPLING TEAM: <u>LB3 JA</u>					SIGNATURE: <u>[Signature]</u>			DATE: <u>8/15/23</u>			

Waterbody: Bear Lake		County: Sevinole		Date: 8/15/23	
Analyst: J.A. JCB		Signature: Jesse Ortiz		STORET: 62050281	
Except where noted as "sp." species level identification required. *Genera that may require lab verification*				Lake units sampled (circle one group):	
Plants in bold = FLEPPC invasive exotic.				1, 4, 7, 10 2, 5, 8, 11	
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.				3, 6, 9, 12	
SPECIES	1	4	7	10	Collected? (✓)
Acer rubrum					
Alternanthera philoxeroides					
Andropogon sp.					
Azolla filiculoides (A. caroliniana)					
Baccharis sp.	/				
Bacopa caroliniana					
Bacopa monnieri					
Bidens laevis					
Bidens mitis					
Blechnum serrulatum					
Boehmeria cylindrica					
Brasenia schreberi					
Cabomba caroliniana					
Casuarina equisetifolia					
Centella asiatica					
Cephalanthus occidentalis					
Ceratophyllum demersum					
Chara sp.					
Cladium jamaicense					
Cliftonia monophylla					
Colocasia esculenta	/				
*Commelina					
Crinum americanum					
*Cyperus alternifolius (C. involucratus)	/				
Cyperus articulatus					
Cyperus haspan					
*Cyperus lecontei					
*Cyperus polystachyos					
*Cyperus odoratus					
*Cyperus surinamensis					
Cyrtilla racemiflora					
Decodon verticillatus					
Diodia virginiana					
*Echinochloa crus-galli					
*Echinochloa muricatum					
Echinochloa walteri					
Eclipta prostrata (E. alba)					
Egeria densa					
Eichhornia crassipes					
*Eleocharis baldwinii					
*Eleocharis					
Eleocharis cellulosa					
Eleocharis equisetoides					
Eleocharis interstincta					
*Eriocaulon compressum					
*Eriocaulon decangulare					
Eupatorium capillifolium	/				
*Fuirena					
Fuirena scirpoidea					
Gordonia lasianthus					
Habenaria repens					
Hydrilla verticillata					
Hydrocotyle sp.					
Hygrophila polysperma					
*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 leptocarpa					
*Ludwigia linearis					
*Ludwigia octovalvis					
*Ludwigia peruviana					
*Ludwigia repens					
*Ludwigia					
Luziola fluitans (Hydrochloa carolinensis)					
Lyonia lucida					
Magnolia virginiana					
Mayaca fluviatilis					
Melaleuca quinquenervia					
Micranthemum glomeratum					
Micranthemum umbrosum					
Mikania scandens					
Mimosa pigra					
Myrica cerifera					

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: BEAR LAKE					Date: 8/15/23						
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 odorata						*Sesbania					
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora						Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrhiza					
Osmunda regalis						Taxodium sp.	/	/	/	/	
Panicum hemitomon						Thalia geniculata					
Panicum repens						Thelypteris palustris					
Paspalidium geminatum						Triadenum virginicum					
*Paspalum repens						Typha sp.	/				
Paspalum urvillei						Urochloa mutica (Brachiaria mutica)					
Peltandra sp.						*Utricularia gibba (U. biflora)					
Persea sp.						*Utricularia floridana					
Pennisetum purpureum						*Utricularia foliosa					
Phragmites australis						*Utricularia inflata					
Pinus elliotii						*Utricularia purpurea					
Pistia stratioides						*Utricularia cornuta					
Pluchea sp.						*Utricularia radiata					
*Polygonum glabrum (densiflorum)						Vallisneria americana	/	/	/	/	
*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)						Utricularia resupinata	/	/	/	/	
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

LVI Map for BEAR LAKE, WBID 3004A

