



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

☒ Yes

☐ No

WIN Station Name: Bear Head Lake @ Center

Date: 6/16/2021

WIN/Field ID: G4CE0126

WBID: 3168W

ENR:

Latitude: 28.45227443

County: ORANGE

Org ID: 21FLCEN

Longitude: -81.36180257

Receiving Body of Water: Kissimmee River

RQ: 2021-05-03-15

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

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 82508 MACROPHYTE 11826						LIMS 225527					
Notes:											

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_DDDMMYY)
DI Source:		Location:	
DI Type:		Equipment ID:	
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: CEN-DIST-2021-06-17-01	WIN Import ID: 27969
Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 6/25/21	QC Station ID, Field Parameters In LIMS DMT: EB 7/14/21
(Initials/Date)	(Initials/Date)
Scan/Save Field Sheets KWM 8/6/21	Migrate Data to WIN: KWM 8/6/21
(Initials/Date)	(Initials/Date)
Verify Data In WIN:	(Initials/Date)



RQ-2021-05-03-15

Customer: WQAP

Project ID: SMP

Collected By: Victoria Schwartz, Katie March

Field Report Prepared By: Victoria Schwartz

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4CE0126

Location: Bear Head Lake @ 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)
6/16/2021	1128 EST	7.86	102.3	29.1	7.52	0.3	2.7 ☒ VOB (S)	2.7	170.8	0.08
	1132	8.13	105.6	28.9	7.54	2.0	Central Lab please use top row for login purposes		169.5	0.08
	1134 EST	8.3	107.9	28.9	7.61	2.2			173.7	0.08

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 Lot # SA1105060 Exp: 4/30/22	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3*	☐ <2		
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 17135566 Syringe Lot # 1091364	☒ Ice		1	A
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			
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ WE8321-MS ☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-TQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution) ☐ W-DIELDRIN	☐ Ice			
Phytoplankton/Periphyton	DTM-QL-C PEN-QL-C DTY-QN-C PKD-QN-C DTM-QN-C PRN-QN-C PKD-QN-BV	☐ Ice			

Name:
Victoria Schwartz
Katie March

Signature:

Victoria Schwartz

Date:

6/16/21

*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:** 28.45227443
COUNTY: Orange **STORET #:** G4CE0126 **LONGITUDE:** -81.36180257
DATE: 6/16/21 **TIME:** 11:28 **SAMPLING AGENCY:** 21 FCEN
SITE NAME: Bear Head Lake **WBID:** 3168W
FIELD ID/NAME: G4CE0126 **LAKE SIZE:** 0.02 **RQ:** 2021-05-03-15
59 miles

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>4</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>4</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>4</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 ☒ pH<2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # <u>SA1105060</u> Exp. Date: <u>4/30/22</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High						Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____					
Meter Readings: Top: <u>0.3</u> <u>29.1</u> <u>7.52</u> <u>7.86</u> <u>102.3</u> <u>170.8</u> <u>0.08</u> Mid-Depth: <u>2.0</u> <u>28.9</u> <u>7.54</u> <u>8.13</u> <u>105.6</u> <u>169.5</u> <u>0.08</u> Bottom: <u>2.2</u> <u>28.9</u> <u>7.61</u> <u>8.3</u> <u>107.9</u> <u>173.7</u> <u>0.08</u>						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter ID: <u>Craw Daddy</u>						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): _____						SECCHI (M) <u>2.7</u> Total Station Depth (M) <u>2.7</u> VOB ☒					
Biological Communities: LVI Conducted? ☒ Yes ☐ No Phytoplankton Sample Taken? ☐ Yes ☒ No Sample Preserved? <u>N/A</u> ☐ Yes ☐ No Lot #: _____ Exp Date: _____ Algal Bloom/Algal ID Sample Taken? Yes ☒ No Active Vegetation Mgmt? ☐ Yes ☐ No ☒ Don't Know						Sediment Odors: <u>N/A</u> ☐ Normal ☐ Other (Specify): _____ ☐ Anaerobic					
Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☒ ☐ Nuisance Plants ☐ ☐ ☐ ☒ Submersed Plants ☐ ☐ ☐ ☒ Exotic Apple Snails ☒ ☐ ☒ ☐						Additional Notes: * LVI section 2 - aggressive plant removal in four backyards * Apple snail eggs present (off-white)					

Weather Conditions: hot/humid/sunny

SAMPLING TEAM: Katie March & Victoria Schwarz **SIGNATURE:** [Signature] **DATE:** 6/16/21

Waterbody: <u>Bear Head Lake</u>		County: <u></u>		Date: <u>6/16/21</u>							
Analyst: <u>K. March, V. Schwartz</u>		Signature: <u>K. March / V. Schwartz</u>		STORET: <u>64CE0126</u>							
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 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	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	✓				
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		X			
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											

Note -
Section 2: aggressive plant removal in four backyards

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: Bear Head LakeDate: 7/16/21

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 <u>purpurea</u>		✓			✓
Nymphaea odorata	✓	✓		✓		Solidago sp.					
Nymphoides aquatica						Sparganium americanum					
Nyssa sylvatica var. biflora						Spartina bakeri					
Orontium aquaticum						Spirodela polyrrhiza					
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)						<u>Ptilimnium</u>		✓			
Proserpinaca pectinata						<u>Rhynchospora</u> sp.		✓			
*Rhexia						<u>Juncus</u> <u>marg.</u>		✓			✓
*Rhynchospora comiculata						<u>Setaria</u> <u>parviflora</u>		✓			✓
*Rhynchospora <u>imundata microcephala</u>	✓				✓	<u>Thelypteris interrupta?</u>			✓		✓
Rhynchospora nitens											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata			✓								
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia	✓	✓	✓	✓							
Sagittaria latifolia											

Bear Head Lake & Center
64CE 0126

LVI Map for Bear Head Lake, WBID 3168W

2/5/8/11

