



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV
Yes / **NO**

WIN Station Name:	LAKE HELEN BLAZES AT 50M NORTH OF CENTER				Sample Date:	8/28/2023	
WIN / Field ID:	G3CE0049	ORG ID:	21FLCEN	ENR:		Latitude:	28.020697
County:	BREVARD	WBID:	2893Q	LAKE	1	Longitude:	-80.79503
Receiving Body of Water:	-				RQ-	2023-08-28-49	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Matt Bearden		x		x	x
Katie March	x		x		

Sampling Equipment			
☒	Sample Container		Carboy
	Dipper		Van Dorn
	Syringe		Pole
	Syringe Lot# 2327923		Filter Lot# 17769663
	Secchi Equipment ID: Knothead		
Collection Method			
	Wading		Canoe/Kayak
	From Shore		Electric Motor
☒	Airboat		Gasoline Motor
	Depth Measured With Secchi		

Water Level:	Normal
Flow:	NA
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	Yes
Meter ID:	Craw Daddy
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	1405	1.3	0.3	1.99	26.2	29.8	6.62	0.4	375	0.17

Biological Samples Collected: None

SBIO Visit ID: 87900 **HA ID:** **RPS ID:** **Macrophyte ID:** 12551 **LIMS Sample ID** **In The Macrophyte Module:** 2433989

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								
Other(s)					SyringeLot#		FilterLot#	
Field Comments:								
Comments on COC:								
Relinquish Date:	08/28/2023	Signature:						

LIMS EVENT ID: CEN-DIST-2023-08-29-02

WIN Import ID: 43422

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 8/31/23

QC Station ID, Field Parameters In LIMS DMT: VLS 9/6/23

Save Field Sheets on Network: KWM 11/1/23 (Initials/Date)

Migrate Data to WIN: KWM 11/1/23 (Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
COUNTY: Buxard STORET #: G3CE0049 LONGITUDE: _____
DATE: 8/28/23 TIME: _____ SAMPLING AGENCY: _____
SITE NAME: Lake Helen Blazes 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> </u>					
<u>100</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>18</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>20</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>20</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

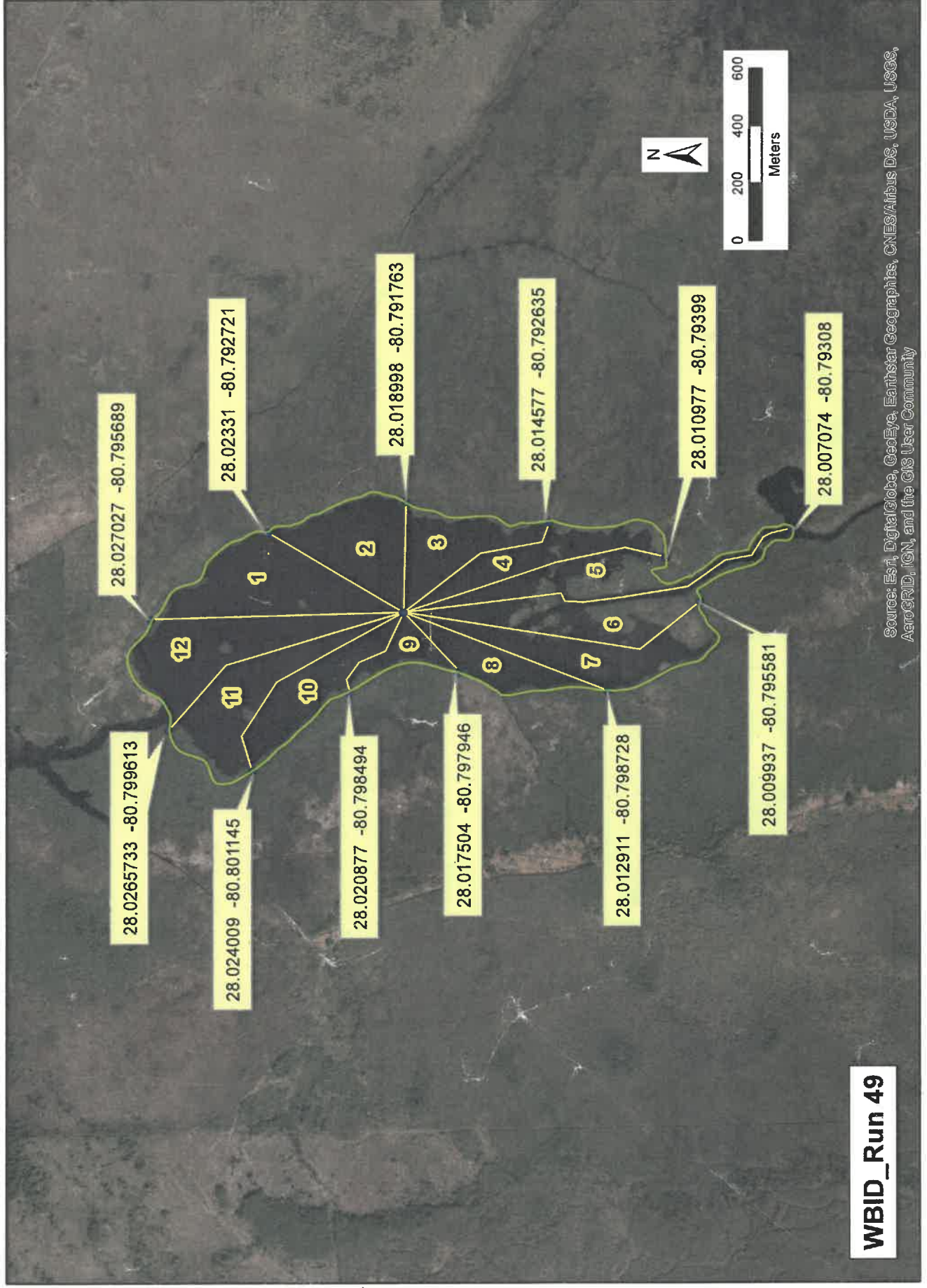
Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☐ Yes ☐ pH<2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # _____ Exp. Date: _____ Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High						Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____					
Meter Readings: Top: <u>0.3</u> <u>29.8</u> <u>6.62</u> <u>1.99</u> <u>26.2</u> <u>375</u> <u>0.17</u> Mid-Depth: _____ Bottom: _____						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter ID: _____						Clarity: ☐ Clear ☒ Slightly Turbid ☐ Opaque ☐ Turbid					
Sediment Type: (may check more than one) ☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated ☒ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____						Color: ☐ Clear ☒ Tannic ☐ Green SECCHI (M) <u>0.4</u> Total Station Depth (M) <u>1.3</u> VOB ☐					
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						Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____					
Abundance: Periphyton ☐ Absent ☒ Rare ☐ Common ☐ Abundant Nuisance Plants ☐ ☐ ☒ ☐ Submersed Plants ☐ ☒ ☐ ☐ Exotic Apple Snails ☐ ☐ ☒ ☐						Additional Notes: <u>Scheuchzeria palustris</u> <u>we collected was lost,</u> <u>presumed tabernaemontana</u> <u>due to short height</u> <u>everywhere we saw it.</u>					
Weather Conditions :											
SAMPLING TEAM: <u>m. Bearden, K. March</u>						SIGNATURE: <u>K. March</u>			DATE: <u>8/28/23</u>		

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Helen Blazes</u>		County: <u></u>		Date: <u>8/28/23</u>							
Analyst: <u>K. March, M. Bearden</u>		Signature: <u>K. March</u>		STORET: <u></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	1	4	7	10	Collected? (v)	SPECIES	1	4	7	10	Collected? (v)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides	✓	✓	✓	✓		Hydrilla verticillata	✓	✓	✓	✓	
Andropogon sp.			✓	✓		Hydrocotyle sp.					
Azolla filiculoides (A. caroliniana)			✓	✓		Hygrophila polysperma					
Baccharis sp.						*Hypericum fasciculatum					
Bacopa caroliniana						*Hypericum hypericoides					
Bacopa monnieri						*Hypericum myrtifolium					
Bidens laevis						Ilex cassine					
Bidens mitis						Ipomoea aquatica					
Blechnum serrulatum						Ipomoea sagittata					
Boehmeria cylindrica						Itea virginica					
Brasenia schreberi						Juncus effusus					
Cabomba caroliniana						*Juncus marginatus					
Casuarina equisetifolia						*Juncus megacephalus					
Centella asiatica			✓	✓		Juncus repens					
Cephalanthus occidentalis			✓	✓		*Juncus scirpoides					
Ceratophyllum demersum						Lachnanthes caroliniana					
Chara sp.						Leersia hexandra					
Cladium jamaicense						Landoltia punctata (Spirodela punctata)	✓	✓	✓		
Cliftonia monophylla						Lemna sp.					
Colocasia esculenta						Leucothoe racemosa (Eubotrys racemosa)					
*Commelina						Limnium spongia					
Crinum americanum						Limnophila sessiliflora					
* Cyperus alternifolius (C. involucratus)						Liquidambar styraciflua					
Cyperus articulatus						*Ludwigia erecta <u>erecta</u>	✓	✓	✓	✓	
Cyperus haspan						*Ludwigia leptocarpa	✓	✓	✓	✓	
*Cyperus lecontei						*Ludwigia linearis					
*Cyperus polystachyos	✓	✓	✓	✓		*Ludwigia octovalvis	✓		✓		
*Cyperus odoratus	✓	✓	✓	✓		*Ludwigia peruviana	✓				
*Cyperus surinamensis						*Ludwigia repens					
Cyrilla racemiflora						*Ludwigia					
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					
Diodia virginiana						Lyonia lucida					
*Echinochloa crus-galli						Magnolia virginiana					
*Echinochloa muricatum						Mayaca fluviatilis					
Echinochloa walteri <u>hairy</u>			✓			Melaleuca quinquenervia					
Eclipta prostrata (E. alba)						Micranthemum glomeratum					
Egeria densa	✓	✓	✓	✓		Micranthemum umbrosum					
Eichhornia crassipes	✓	✓	✓	✓		Mikania scandens					
*Eleocharis baldwinii						Mimosa pigra					
*Eleocharis						Myrica cerifera	✓	✓	✓	✓	
Eleocharis cellulosa											
Eleocharis equisetoides						<u>H. grand</u>	✓	✓	✓	✓	
Eleocharis interstincta						<u>Kosbaletzky</u>	✓	✓	✓	✓	
*Eriocaulon compressum						<u>Amaranthus</u>	✓	✓	✓	✓	
*Eriocaulon decangulare						<u>Hyptis</u>	✓	✓	✓	✓	
Eupatorium capillifolium				✓		<u>intertexta</u>	✓	✓	✓	✓	
*Fuirena						<u>Hymenachne</u>	✓	✓	✓	✓	
Fuirena scirpoidea											
Gordonia lasianthus											

[illegible]

LVI Map for Lake Helen Blazes, WBID 2893Q



WBID_Run 49