



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN FIELD SHEET

January 2022

Meter Passed End

of Day CCV

☒ Yes / No

WIN Station Name: Irvin Lake

Date: 6/1/2022

WIN/Field ID: G4SW0025

WBID: 1329M

ENR:

Latitude: 28.525046

County: HERNANDO

Org ID: 21FLTPA

Longitude: -82.3611

Receiving Body of Water: -

RQ- 2022-05-30-10

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Devin Mathias		x			
☒	Ben Paswater	X		X	X	X
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: Secchi #3	
Collection Method	
☐ Wading	☒ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded		Meter ID# SWD	
Photos: YES	Flow:	Tide:	Tide Times: High: Low:
Biological Samples Collected: ☐ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☒ LVI Other:			
SBIO ID Numbers: Visit ID: 84315 LVI: 12162			
Notes: 11			

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: 2022-06-02-04	WIN Import ID: 35072
Enter Field Parameters, Verify Station ID In LIMS DMT: MM 6/6/2022	QC Station ID, Field Parameters In LIMS DMT: KG 06/21/2022
(Initials/Date)	(Initials/Date)
Scan/Save Field Sheets NA 09/01/2022	Migrate Data to WIN: JS 08/29/2022
(Initials/Date)	(Initials/Date)
Verify Data In WIN: NA 09/01/2022	(Initials/Date)



RQ-2022-05-30-10
Customer: SW-DIST
Project ID: STRATEGIC MONITORING PLAN

Collected By: Devin Mathias, Ben Paswater
Field Report Prepared By: Devin Mathias
Sampling Agency: FDEP

Place Label Here WIN ID/Field ID: G4SW0025 Location: Irvin Lake						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 _h)
6/1/2022	1250 EST	12.08	161.3	30.5	8.57	0.3	0.4 ☐ VOB (S)	1.8	111.2	0.05
	1250 EST	11.31	161.9	29.8	8.11	1.3	Central Lab please use top row for login purposes		110.4	0.05
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:		12/1/2022			
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☐ HNO3*		☒ <2	1	A
		Lot #	NA1105100		Exp:		06/07/2022			
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A
		Filter Lot #	17232873				Syringe Lot #	1145497		
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-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. 2/4/2023		
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI	☒ WE8321-MS	☒ W-PSNP-TQ	☒ W-CT-CL-R	☒ Ice		MCAA Lot#	10	A
		☒ W-PCL-TQ-R	☒ W-CARB-AA (5 ml of MCAA** Buffer Solution)		128343					
		☒ W-PCB-TQ-R								
Phytoplankton/Periphyton				DTY-QN-C	PKD-QN-C	☐ Ice				
Name: Devin Mathias Ben Paswater				Signature:				Date: 06/01/2022		

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Site Name: **Irvin Lake @ Center**
 COUNTY: Hernando
 LAKE SIZE: mid
 WBID: 1329m
 MACROPHYTE ID: _____

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: _____													
<u>20</u>		<u>20</u>		<u>60</u>																	
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>11</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>15</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>14</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 ☐ 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 _____					
Meter Readings: Top: Depth (M) <u>0.3</u> Temp. (°C) <u>30.5</u> pH (SU) <u>8.57</u> D.O. (MG/L) <u>12.08</u> D.O. Sat. (%) <u>161.3</u> Cond. (UMHO/CM) <u>111</u> Salinity (PPT) <u>.05</u> Mid-Depth: _____ Bottom: <u>1.3</u> <u>29.8</u> <u>8.11</u> <u>11.31</u> <u>161.9</u> <u>110</u> <u>.05</u>						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter ID: _____						Clarity: ☐ Clear ☒ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Green ☐ Tannic					
Sediment Type: (may check more than one) ☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____						SECCHI (M) <u>.5</u> Total Station Depth (M) <u>1.7</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 ☐ Other (Specify): _____ ☐ Anaerobic					
Weather Conditions: <u>hot sunny ~ 90</u>						Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☐ ☒ Nuisance Plants ☐ ☐ ☐ ☒ Submersed Plants ☐ ☒ ☐ ☐ Exotic Apple Snails ☒ ☐ ☐ ☐					
Additional Notes: <u>RQ-2022-05-30-10</u>											
SAMPLING TEAM: <u>Ben Paswater Devin Mathias</u>						SIGNATURE: <u>Ben Paswater</u>					
DATE: <u>6/1/2022</u>											

Site Name: **Irvin Lake @ Center**Waterbody: **A**

County:

Signature: *Ben P...*

Date:

required. *Genera that may require lab verification*

Plants in bold = FLEPPC invasive exotic.

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.

Lake units sampled (circle one group):

1, 4, 7, 10 2, 5, 8, 11
3, 6, 9, 12

SPECIES (A-F)	1	4	7	10	Collected? (✓)	SPECIES (G-L)	1	4	7	10	Collected? (✓)
Acer rubrum	✓	✓	✓	✓		Gordonia lasianthus					
Alternanthera philoxeroides	✓		✓	✓		Habenaria repens					
Andropogon sp.						Hymenachne amplexicaulis		✓	✓		
Azolla filiculoides (A. caroliniana)		✓	✓	✓		Hydrilla verticillata					
Baccharis sp.						Hydrocotyle sp.	✓				
Bacopa caroliniana						Hygrophila polysperma					
Bacopa monnieri						*Hypericum fasciculatum					
Bidens laevis						*Hypericum hypericoides					
Bidens mitis						*Hypericum myrtifolium					
Blechnum serrulatum						Ilex cassine					
Boehmeria cylindrica	✓					Ipomoea aquatica					
Brasenia schreberi						Ipomoea sagittata					
Cabomba caroliniana						Itea virginica					
Casuarina equisetifolia						Juncus effusus					
Centella asiatica						*Juncus marginatus	✓				
Cephalanthus occidentalis	✓	✓	✓	✓		*Juncus megacephalus					
Ceratophyllum demersum	✓			✓		Juncus repens					
Chara sp.						*Juncus scirpoides					
Cladium jamaicense						Lachnanthes caroliniana	✓				
Cliftonia monophylla						Leersia hexandra					
Colocasia esculenta	✓	✓	✓	✓		Landoltia punctata (Spirodela punctata)					
*Commelina						Lemna sp.	✓	✓	✓	✓	
Crinum americanum						Leucothoe racemosa (Eubotrys racemosa)					
*Cyperus alternifolius (C. involucratus)						Limnium spongia					
Cyperus articulatus						Limnophila sessiliflora					
Cyperus haspan						Liquidambar styraciflua	✓	✓	✓	✓	
*Cyperus lecontei						*Ludwigia arcuata					
*Cyperus polystachyos						*Ludwigia leptocarpa					
*Cyperus odoratus						*Ludwigia linearis					
*Cyperus surinamensis						*Ludwigia octovalvis					
Cyrtilla racemiflora						*Ludwigia peruviana					✓
Decodon verticillatus						*Ludwigia repens					
Diodia virginiana						*Ludwigia	✓	✓	✓		
*Echinochloa crus-galli						Luziola fluitans (Hydrochloa carolinensis)					
*Echinochloa muricatum						Lyonia lucida					
Echinochloa walteri	✓										
Eclipta prostrata (E. alba)	✓					Carex l.			✓		
Egeria densa											
Eichhornia crassipes	D	C	C								
*Eleocharis baldwinii											
*Eleocharis				✓							
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium	✓										
*Fuirena											
Fuirena scirpoidea											

Eichornia (D)

47,10

co Eichornia + Salix

