



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes ☒ No ☒

WIN Station Name: See label on page 2

Date:

WIN/ Field ID: See label pg 2

WBID: 1497A

Latitude:

(mm/dd/yyyy)

County: Polk

ORG ID: 21FLTPA

Longitude:

(Decimal Degrees)

(Decimal Degrees)

Receiving Body of Water:

RQ-2020-

06-15-46

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Check
Ben Paswater		☒			
Jody Ashton		☒	☒	☒	

Sampling Equipment	
☐ Sample Container	☐ Van Dorn
☐ Syringe	☐ Pole
☐ Dipper	☐ Other
Depth Measured with	
Equipment ID	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☒ Electric Motor
☐ Other	☐ Gasoline Motor

Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded		Meter ID# SWD	
Photos: Yes / No	Flow: No Flow / Flowing / <u>NA</u>	Tide: Rising/ Falling/ Slack/ NA	Tide Times: High Low
Biological Samples Collected: None <u>HA</u> SCI RPS Algae ID LVS <u>LVI</u> Other:			
SBIO ID Numbers:	SBIO-ID: 81145	HA-ID: 16635	RPS-ID: /
Macrophyte-ID: 11682		LIMS#: 2176975	
Notes:			

Duplicate Sample

Time Zone: EST CEN	Time:	Field ID:	(WIN ID_DUP)
WIN DMT Activity ID:			

Blank

Time Zone: EST CEN	Time:	Field ID:	(Blank Type_DDMMYYYY)
DI Source:		Location:	
☐ Field Blank	☐ Equipment Blank	☐ Field Cleaned Equipment Blank	Equipment ID:

Signature: Ben Paswater	Date: 6/15/20
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LIMS EVENT ID: 2020-06-16-01

WIN Import ID: 22153

Enter Field Parameters, Verify Station ID In LIMS DMT: BP 07/07/2020
(Initials/Date)

QC Station ID, Field Parameters In LIMS DMT: SM 09/30/2020
(Initials/Date)

Scan/Save Field Sheets
(Initials/Date)

Migrate Data to WIN: SM 09/30/2020
(Initials/Date)

Verify Data In WIN:
(Initials/Date)



RQ-2020- See page 1

Collected By: SWROC

Customer: SWDIST

Field Report Prepared By:

ProjectID: SMP

Sampling Agency: FDEP

Field ID/WIN

G3SW0076



Site Name: Crystal Lake @ Center

Comments:

DO failed
post Cal.

Matrix: Fresh / Marine

(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)
6/15/20	1100	9.78	127.3	29.4	8.57	0.3	0.8	4.4	151.7	0.07
EST / CST							☐ VOB (S)			

Central Lab please use top row for login purposes

		0.48	6.1	27.5	6.77	3.9			163.9	0.08
EST / CST										

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 # SA 9354050 Exp: 12/20/20				
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD	☐ Ice ☐ HNO3* ☐ <2			
	Lot # Exp:				
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☐ Ice		1	
	Filter Lot # Exp:				
	Syringe Lot # Exp:				
Chlorophyll (BP-1L)	☐ CHLSUITE-W	☒ Ice		1	
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / ☒ W-F / ☒ W-TSS / ☒ TURBIDITY / ☒ W-CHC / ☒ W-COLOR / ☒ W-SO4-IC / ☒ W-TDS	☒ Ice		1	
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-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			
		☐ Ice			

Relinquished By: Ben	Date/Time: 6/15/2020	Shipping Method: Fed Ex	Number of Coolers Shipped: 1	Received By:	Date/Time: 6/15/2020
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*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Email Submittal form to : lab.receiving@floridadep.gov.



Waterbody:

County: Polk

Signature:

Date: 6/15/20Site Name: **Crystal Lake @ Center**

required. *Genera that may require lab verification*

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 (areal extent) for each unit. Use "D" to denote dominant taxon, or "C" for the 2 co-dominant taxa.

SPECIES (A-F)	1	4	7	10	Collected? (✓)	SPECIES (G-L)	1	4	7	10	Collected? (✓)
Acer rubrum				X		Gordonia lasianthus					
Alternanthera philoxeroides						Habenaria repens					
Andropogon sp.						Hymenachne amplexicaulis					
Azolla filiculoides (A. caroliniana)						Hydrilla verticillata					
Baccharis sp.						Hydrocotyle sp.	X				X
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				X		Juncus repens					
Chara sp.				X		*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)			X			Limnium spongia					
Cyperus articulatus						Limnophila sessiliflora					
Cyperus haspan						Liquidambar styraciflua					
*Cyperus lecontei						*Ludwigia arcuata					
*Cyperus polystachyos				X		*Ludwigia leptocarpa					
*Cyperus odoratus				X		*Ludwigia linearis					
*Cyperus surinamensis						*Ludwigia octovalvis					
Cyrilla racemiflora						*Ludwigia peruviana	X				X
Decodon verticillatus						*Ludwigia repens					
Diodia virginiana						*Ludwigia					
*Echinochloa crus-galli						Luziola fluitans (Hydrochloa carolinensis)					
*Echinochloa muricatum						Lyonia lucida					
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											

Site Name: **Crystal Lake @ Center**

LATITUDE: _____

LONGITUDE: _____

SAMPLING AGENCY: _____

WBID: _____

LAKE SIZE: Small RQ: _____

FIELD ID/NAME: _____

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)												
		10		80			10												
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					
6		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)					
8		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					
5		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) 0.3 Temp. (°C) 29.4 pH (SU) 8.57 D.O. (MG/L) 9.78 D.O. Sat. (%) 127.3 Cond. (UMHO/CM) 151 Salinity (PPT) 0.07 Mid-Depth: _____ Bottom: 3.9 27.5 6.77 0.48 6.1 164 0.08 Meter ID: <u>SWD</u>										Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Sediment Type: (may check more than one) ☒ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____										Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic									
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: Absent Rare Common Abundant Periphyton ☐ ☐ ☒ ☐ Nuisance Plants ☐ ☐ ☒ ☐ Submersed Plants ☒ ☐ ☐ ☐ Exotic Apple Snails ☐ ☐ ☒ ☐									
Weather Conditions:										Additional Notes:									

SAMPLING TEAM:

Ben Paswater, Judy Ashton

SIGNATURE:

Ben Paswater

DATE:

6/15/20



6: Lake Habitat Assessment Field Sheet

Site Name: **Crystal Lake @ Center**

ECO-REGION:		COUNTY: POLK	LAKE NAME: <u>Crystal Lake @ Center</u>		FIELD ID / NAME:	
PARAMETER	No surface inflow or outflow present, very long water residence time, groundwater seepage dominates		Surface water inflow present, but flow is rare, moderate to long water residence time		Surface water inflow and outflow present (or outflow only), sometimes with visible flow, short water residence time	
HYDROLOGY	☐		☒		☐	
Color	Very clear, uncolored water (benthic sampling appropriate) ☐		Water somewhat tannin stained (benthic sampling appropriate) ☒		Dark, discolored water (water color 20 PCU or higher) ☐	
	Optimal		Suboptimal		Marginal	
Secchi	Secchi >3 m Secchi(m)		3 2.6 2.2 1.8 1.4		1.0 0.9 0.8 0.7 0.6	
	Or VOB 20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Vegetation Quality	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa		Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants		Large masses (21%-40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats	
	20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
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	
	20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Bottom Substrate Quality	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present		Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present		Moderate layer of CPOM/mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom	
	20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Lakeside Adverse Human Alterations	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%)		Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected		Many structures, roads or other human disturbance visible (50%-70%) lakeside affected	
	20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Upland 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	
	20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Adverse Watershed Land Use	Score the potential effects from adverse human land uses, based on a continuum of amount and type, with least to most adverse as follows: Native vegetation, Silviculture, Pasture or Citrus, Low Density Residential, Row Crops, Commercial, High Density Residential, Urban, Industrial					
	20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
TOTAL SCORE	61		COMMENTS:			
ANALYSIS DATE:	6/15/20		ANALYST: Ben Pans water		SIGNATURE: Ben Pans	

LVIs_Crystal & Halloway

Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: SW-DIST

Requester: Judy Ashton

Field Report Prepared By: *Ben Paswater*

Project ID: SMP

Collected By: *Ben Paswater*Sampling Agency: *SWROC*

Location		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <i>6/15/20</i> Time <i>1100</i>		Eastern Central	Composite end Date _____ Time _____		Bottle Group(s) (See pg 2)
Field ID	Field ID/WIN G3SW0076	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen <i>9.78</i>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		<i>A</i>
WIN/STO		Temp (C) <i>29.4</i>	pH <i>8.57</i>	Sample Depth <i>0.3</i>	☐ ft ☒ m	Sp. Conductance (umho/cm) <i>151.7</i>		
Site Name: Crystal Lake @ Center		Salinity (ppt) ☐ dd ☐ dms		Comments				
Latitude								
Location		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <i>6/15/20</i> Time <i>1335</i>		Eastern Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID	Field ID/WIN G4SW0095	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen <i>7.94</i>	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		<i>A+B</i>
WIN/STO		Temp (C) <i>30.5</i>	pH <i>7.94</i>	Sample Depth <i>0.3</i>	☐ ft ☒ m	Sp. Conductance (umho/cm) <i>155.8</i>		
Site Name: Lake Isabell Center		Salinity (ppt) ☐ dd ☐ dms		Comments				
Latitude								
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____		Eastern Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms		Salinity (ppt) ☐ dd ☐ dms		Comments				
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date _____ Time _____		Eastern Central	Composite end Date _____ Time _____		Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)		
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)		
Latitude ☐ dd ☐ dms Longitude ☐ dd ☐ dms		Salinity (ppt) ☐ dd ☐ dms		Comments				

Relinquished By: <i>Ben Paswater</i>	Date/Time: <i>6/15/20 4A</i>	Shipping Method: <i>FedEx</i>	Number of Coolers Shipped: <i>1</i>	Received By: _____	Date/Time: _____
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Group: A Bottle Type: P-1L # of Bottles: 2 Preservative: ICE Enter Number of Bottles Sent to Lab 2

ALKALINITY
TURBIDITY
W-CL-IC
W-COLOR
W-F
W-SO4-IC
W-TDS
W-TSS

Group: A Bottle Type: BP-1L # of Bottles: 2 Preservative: ICE Enter Number of Bottles Sent to Lab 2

CHLSUITE-W

Group: A Bottle Type: P-500ML # of Bottles: 2 Preservative: ICE And H2SO4 Enter Number of Bottles Sent to Lab 2

W-NH3
W-NO2NO3
W-S-A-TP
W-TKN
W-TOC

Group: A Bottle Type: P-125ML # of Bottles: 2 Preservative: FILTER-ICE Enter Number of Bottles Sent to Lab 2

W-PO4-F

Group: B Bottle Type: BG-500ML # of Bottles: 1 Preservative: ICE Enter Number of Bottles Sent to Lab 1

~~W-E8321-01~~
~~W-E832~~

W-ICP
W-ICPMS
W-Hard