



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Lakes Park @ Center

Date: 9/29/2021

WIN/Field ID: G1SD0115

WBID: 3258X

ENR: -

Latitude: 26.5266

County: LEE

Org ID: 21FLFTM

Longitude: -81.88

Receiving Body of Water: Everglades West Coast

RQ: 2021-09-27-43

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒ Thomas Baker	☒	☒	☒		
☒ Nicole Reistad		☒		☒	☒
☐					
☐					

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

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded		Meter ID# PRO MOVE	
Photos: YES	Flow: NA	Tide:	Tide Times: High: Low:
Biological Samples Collected: ☐ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☒ LVI Other:			
SBIO ID Numbers:			
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_DDDMMYYY)
DI Source:	Location:		
DI Type:	Equipment ID:		
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets Migrate Data to WIN: Verify Data In WIN:



RQ-2021-09-27-43

Customer: WQAP

Project ID: SMP

Collected By: Thomas Baker, Nicole Reistad

Field Report Prepared By: Thomas Baker

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G1SD0115

Location: Lakes Park @ 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 _h)		
	910 EST	7.61	98.6	28.8	8.18	0.3	0.8 ☐ VOB (S)	2.4	640	0.31		
9/29/2021												
	915 EST	7.14	92.5	28.7	8.16	1.9			639	0.31		
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 #	SA1105060		Exp:	04/30/22						
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A		
		Lot #	NA1105100		Exp:	06/07/22						
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A		
		Filter Lot #	17162587									
		Syringe Lot #	1091364									
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 Lot #			☐ 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			1	A		
Pesticides (BG-500ML) (BG-1L)		W-E8321-DI	WE8321-MS	W-PSNP-TQ	W-CT-CL-R	☐ Ice						
Phytoplankton/Periphyton		W-PCL-TQ-R	W-CARB-AA (5 ml of MCAA** Buffer Solution)	DTY-QN-C	PKD-QN-BV	☐ Ice						
Name: Thomas Baker Nicole Reistad					Signature:				Date:			

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

VIS-7 IN: 83176

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

LIMSIN: 2279551

SAMPLE ID: _____

MACROPHYTE ID: 11959

LATITUDE: 26.52658755

COUNTY: Lee

STORET #: 61570115

LONGITUDE: 81.88034803

DATE: 09/29/21

TIME: _____

SAMPLING AGENCY: FDEP

SITE NAME: Lakes Park

WBID: 3258X

FIELD ID/NAME: 61570115

LAKE SIZE: mid RQ: 2021-09-27-43

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)								
20%				80%											
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				
13		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)				
9		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 # 841105260 Exp. Date: 9/30/22 Alkalinity Sample Taken? ☒ Yes ☐ No Water Level 83 ☒ Low ☒ Normal ☐ High										Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____				
Meter Readings: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: 0.3 28.8 8.18 7.61 98.6 640 0.31 Mid-Depth: _____ Bottom: 1.9 28.7 8.16 7.14 92.5 639 0.31 Meter ID: promote										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: Sunny 10 Dry										Additional Notes:				
SAMPLING TEAM: Nicole Reistad, Thomas Baker										SIGNATURE: <i>[Signature]</i>				
DATE: 09/29/2021														

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lakes Park</u>		County: <u>Lee</u>		Date: <u>09/29/21</u>							
Analyst: <u>Nicole Reistad, Thomas Baker</u>		Signature: <u>[Signature]</u>		STORET: <u>GISD0115</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 <u>3, 6, 9, 12</u>							
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	3*	6	9	12	Collected? (V)	SPECIES	3	6	9	12	Collected? (V)
Acer rubrum	P					Habenaria repens					
Alternanthera philoxeroides	P		P			Hydrilla verticillata					
Andropogon sp.	P	P	P	P		Hydrocotyle sp.		P	P	P	
Azolla filiculoides (A. caroliniana)						Hygrophila polysperma					
Baccharis sp.						*Hypericum fasciculatum					
Bacopa caroliniana						*Hypericum hypericoides					
Bacopa monnieri				P		*Hypericum myrtifolium					
Bidens laevis						Ilex cassine			P	P	
Bidens mitis						Ipomoea aquatica					
Blechnum serrulatum	P		P			Ipomoea sagittata					
Boehmeria cylindrica						Itea virginica					
Brasenia schreberi						Juncus effusus					
Cabomba caroliniana						*Juncus marginatus					
Casuarina equisetifolia	D	P	P	P		*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		P	P		
Crinum americanum				P		Limnophila sessiliflora					
* Cyperus alternifolius (C. involucratus)						Liquidambar styraciflua					
Cyperus articulatus						*Ludwigia arcuata					
Cyperus haspan						*Ludwigia leptocarpa					
*Cyperus lecontei						*Ludwigia linearis					
*Cyperus polystachyos						*Ludwigia octovalvis			P	P	
*Cyperus odoratus	P	P				*Ludwigia peruviana	P	P	P	P	
*Cyperus surinamensis						*Ludwigia repens			P		
Cyrilla racemiflora						*Ludwigia					
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					
Diodia virginiana						Lyonia lucida					
*Echinochloa crus-galli						Magnolia virginiana					
*Echinochloa muricatum						Mayaca fluviatilis					
Echinochloa walteri						Melaleuca quinquenervia	P		P	P	
Eclipta prostrata (E. alba)						Micranthemum glomeratum					
Egeria densa						Micranthemum umbrosum					
Eichhornia crassipes						Mikania scandens			P		
*Eleocharis baldwinii			P			Mimosa pigra					
*Eleocharis						Myrica cerifera			P	P	
Eleocharis cellulosa		D	P	P							
Eleocharis equisetoides						<i>Bidens alba</i>	P		P	P	
Eleocharis interstincta						<i>Annona glabra</i>	P		P		
*Eriocaulon compressum						<i>Dactyloctenium aegyptium</i>	P		P		✓
*Eriocaulon decangulare											
Eupatorium capillifolium	P			P							
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site:					Date:						
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Myriophyllum aquaticum						Salix caroliniana	P	P		P	
*Myriophyllum heterophyllum						Salvinia minima					
*Myriophyllum laxum						Sambucus canadensis					
*Myriophyllum pinnatum						Sapium sebiferum					
Myriophyllum spicatum						Saururus cernuus					
*Najas filifolia						Schinus terebinthifolius			P	P	
*Najas guadalupensis	P		P			*Schoenoplectus californicus		P		P	
*Najas minor						*Schoenoplectus pungens					
Nelumbo lutea						*Schoenoplectus tabernaemontani (Scirpus validus)					
Nitella spp.						Scirpus cubensis (Oxycaryon cubense)					
Nuphar sp.	P		P	D		Scirpus cyperinus					
Nymphaea odorata						*Sesbania					
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora						Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrrhiza					
Osmunda regalis						Taxodium sp.	P	P	P	P	
Panicum hemitomon						Thalia geniculata	P	P		P	
Panicum repens	P	P	P	P		Thelypteris palustris			P		
Paspalidium geminatum				P		Triadenum virginicum					
*Paspalum repens						Typha sp.	P		D	P	
Paspalum urvillei						Urochloa mutica (Brachiaria mutica)					
Peltandra sp.						*Utricularia gibba (U. biflora)					
Persea sp.						*Utricularia floridana					
Pennisetum purpureum						*Utricularia foliosa				P	
Phragmites australis			P			*Utricularia inflata					
Pinus elliotii	P		P			*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		P	P			Woodwardia virginica					
*Potamogeton diversifolius						Xyris sp.					
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)						Andropogon					
Proserpinaca pectinata						bracted grass (Andropogon)	P	P	P	P	
*Rhexia						grows dock					
*Rhynchospora corniculata						Dactyloctenium aegyptium					
*Rhynchospora inundata						saw palmetto (Serenoa repens)	P	P			
Rhynchospora tracyi						Quercus virginiana				P	
Ricciocarpus natans						paper tree? Mistletoe				P	
Sabal palmetto	P		P	P		leather fern (Acrostichum danieifolium)	P		P		
Sacciolepis striata						southern shrub fern				P	
*Sagittaria filiformis						Pinus australis (Casuarina)	D		P	P	
*Sagittaria graminea						frog's bit (Limnium spongiosa)	P	P	P		
*Sagittaria isoetiformis						purple spiker				P	
Sagittaria lancifolia	P	P	P	P		segmented grass				P	
Sagittaria latifolia						pointed sedge	P		P		
						seed grape (Coccoloba urifera)	P				
						IDENTIFIED	P				