



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes / No

WIN Station Name: Lake Wales @ Center

Date: 10/20/2020

WIN/Field ID: G4CE0110

WBID: 1619A

ENR:

Latitude: 27.9015

County: Polk

Org ID: 21FLCEN

Longitude: -81.5732

Receiving Body of Water: Kissimmee River

RQ: 2020-10-19-67

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Natalie Ayala		x	x	x	x
☒	Elizabeth Bates	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: NA		Tide Times: High: NA Low: NA					
Biological Samples Collected: ☐ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☒ LVI Other:											
SBIO ID Numbers: SBIO 81853 MACROPHYTE 11768						LIMS 2203927					
Notes:											

Duplicate Sample

Time Zone: EST	Time: N/A	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID:			

Blank

Time Zone:	Time: N/A	Field ID: N/A	(Blank Type_DDMMYYYY)
DI Source: N/A		Location: N/A	
DI Type: N/A		Equipment ID: N/A	

LIMS EVENT ID: CEN-DIST-2020-10-21-02

WIN Import ID: 22962

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 10/29/20

QC Station ID, Field Parameters In LIMS DMT: EB 10/30/20

(Initials/Date)

(Initials/Date)

Scan/Save Field Sheets KWM 12/2/20

(Initials/Date)

Migrate Data to WIN: KWM 12/2/20

(Initials/Date)

Verify Data In WIN:

(Initials/Date)



RQ-2020-10-19-67

Customer: WQAP

Project ID: SMP

Collected By: Natalie Ayala, Elizabeth Bates

Field Report Prepared By: Natalie Ayala

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4CE0110

Location: Lake Wales @ 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 (PPTH)
10/20/2020	11:36 EST	6.84	85.9	27	7.37	0.3	0.9 ☐ VOB (S)	6.3	122.7	0.06

Central Lab please use top row for login purposes

	11:40 EST	6.27	78.6	26.9	7.21	5.8			122.6	0.06
--	--------------	------	------	------	------	-----	--	--	-------	------

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 # SA0038110 Exp: 02/07/21	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD Lot # NA9301040 Exp: 10/28/2020	☒ Ice ☒ HNO3*	☒ <2	1	A
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 16930280 Syringe Lot # 9149785	☒ 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-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			
		☐ Ice			

Name:
Natalie Ayala
Elizabeth Bates

Signature:

Date:

10/20/2020

*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:** 27.9015
COUNTY: Polk **STORET #:** G4CE0110 **LONGITUDE:** -81.5732
DATE: 10/20/2020 **TIME:** _____ **SAMPLING AGENCY:** 21FLCEN
SITE NAME: Lake Wales **WBID:** 1619A
FIELD ID/NAME: G4CE0110 **LAKE SIZE:** _____ **RQ:** 2020-10-19-67

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : <u>Park/Natural</u> Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☒ Commercial ☐ Industrial ☐ Other (Specify) <u>80</u>						LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI:											
Local Watershed Erosion (select one) : ☒ None ☐ Slight ☐ Moderate ☐ Heavy						Artificially Impounded ☐ Yes ☒ No											
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy						Land Use Source & Year:											
STORMWATER INPUTS <u>15</u>		Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation 20 19 18 17 16				Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place <u>15</u> 14 13 12 11				Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6				Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place 5 4 3 2 1			
LAKESIDE ALTERATIONS <u>8</u>		Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected) 20 19 18 17 16				Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected) 15 14 13 12 11				Many structures, roads or other human disturbance visible (50%-70% lakeside affected) 10 9 <u>8</u> 7 6				Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1			
BUFFER ZONE <u>13</u>		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20 19 18 17 16				89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer 15 14 <u>13</u> 12 11				50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10 9 8 7 6				< 29% of shoreline with >18m buffer 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 # <u>SA</u> 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>27.0</u> <u>7.37</u> <u>6.84</u> <u>85.9</u> <u>122.7</u> <u>0.06</u> Mid-Depth: _____ Bottom: <u>5.8</u> <u>26.9</u> <u>7.21</u> <u>6.27</u> <u>78.6</u> <u>122.6</u> <u>0.06</u>								Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____							
Meter ID: <u>CrowDaddy</u>								Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly 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							
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								SECCHI (M) <u>0.9</u> Total Station Depth (M) <u>6.3</u> VOB ☐							
Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☐ ☐ Nuisance Plants ☐ ☐ ☒ ☐ Submersed Plants ☐ ☐ ☒ ☐ Exotic Apple Snails ☒ ☐ ☐ ☐								Sediment Odors: ☐ Normal ☐ Other (Specify): _____ ☐ Anaerobic							
Additional Notes:															
Weather Conditions :															
SAMPLING TEAM: <u>Natalie Ayala / Elizabeth Bates</u>								SIGNATURE: <u>[Signature]</u>				DATE: <u>10/20/2020</u>			

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Wales</u>	County: <u>Polk</u>	Date: <u>10/20/2016</u>	
Analyst: <u>Natalie Ryan, Liz Bates</u>	Signature: <u>[Handwritten Signature]</u>	STORET: <u>G4C60110</u>	
Except where noted as "sp." species level identification required. *Genera that may require lab verification*		Lake units sampled (circle one group):	
Plants in bold = FLEPPC invasive exotic.		<u>1, 4, 7, 10</u> 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	Collected? (✓)	SPECIES	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	
Cinnamomum camphora		*Juncus scirpoides	
Cladium jamaicense		Lachnanthes caroliniana	
Colocasia esculenta		Leersia hexandra	
*Commelina		Landoltia punctata (Spirodela punctata)	
Crinum americanum		Lemna sp.	
*Cyperus alternifolius (C. involucratus)		Leucothoe racemosa (Eubotrys racemosa)	
Cyperus articulatus		Limnobium spongia	
Cyperus haspan		Limnophila sessiliflora	
*Cyperus lecontei		Liquidambar styraciflua	
*Cyperus polystachyos		*Ludwigia arcuata	
*Cyperus odoratus	/	*Ludwigia grandiflora	
*Cyperus surinamensis		*Ludwigia hexapetala	
Cyrilla racemiflora		*Ludwigia leptocarpa	/
Decodon verticillatus		Ludwigia (native)	/
Diodia virginiana		*Ludwigia octovalvis	/
*Echinochloa crus-galli		*Ludwigia peruviana	/
*Echinochloa muricatum		*Ludwigia repens	/
Echinochloa walteri		Ludwigia suffruticosa	
Eclipta prostrata (E. alba)		Luziola fluitans (Hydrochloa carolinensis)	
Eichhornia crassipes		Magnolia virginiana	
*Eleocharis		Mayaca fluviatilis	
Eleocharis cellulosa		Melaleuca quinquenervia	
*Eleocharis elongata		Micranthemum glomeratum	
Eleocharis equisetoides	/	Micranthemum umbrosum	
Eleocharis interstincta	/	Mikania scandens	
Eleocharis submersed viviparous	/	Mimosa pigra	
*Eriocaulon compressum		Myrica cerifera	
*Eriocaulon decangulare			
Eupatorium capillifolium	/		
Fraxinus			

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Lake Wales</u>					Date: <u>10/20/2020</u>						
SPECIES	1	4	7	10	Collected? (✓)	SPECIES	1	4	7	10	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					
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 <u>glabrum (pink infloresc)</u>						Wolffiella spp.					
Pontederia cordata						Woodwardia virginica					
*Potamogeton diversifolius						Xyris sp.					
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora nitens											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

LVI Map for WBID 1619A, Lake Wales

