



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
☒ Yes / ☐ No

WIN Station Name: Lake Okahumpka at center **Date:** 8/18/2021
WIN/Field ID: G4CE0159 **WBID:** 1347 **ENR:** - **Latitude:** 28.8255
County: SUMTER **Org ID:** 21FLCEN **Longitude:** -82.01
Receiving Body of Water: Withlacoochee **RQ:** 2021-07-12-43

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Leif Boman		x		x	x
☒	Katie March	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 Airboat FWC	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# CRAW DADDY					
Photos: YES		Flow: NA		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers: Visit ID: 82986 Macrophyte ID: 11934						LIMS: 2270541					
Notes: WATER VERY CLOUDY, HYDRILLA LOOKS SPRAYED BUT FWC SAYS IT HAS NOT BEEN TREATED											

Duplicate Sample

Time Zone: EST	Time:	Field ID:	(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: CEN-DIST-2021-08-19-01 WIN Import ID: 28688
Enter Field Parameters, Verify Station ID In LIMS DMT: EB 9/1/21 QC Station ID, Field Parameters In LIMS DMT: KWM 9/21/21
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets Migrate Data to WIN: KWM 9/21/21 Verify Data In WIN:
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-07-12-43

Customer: WQAP

Project ID: SMP

Collected By: Leif Boman, Katie March

Field Report Prepared By: Leif Boman

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4CE0159

Location: Lake Okahumpka at 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)		
	1134 EST	6.58	85.7	29.5	7.68	0.3	1.3 ☐ VOB (S)	1.9	249.6	0.12		
8/18/2021												
	1138 EST	2.77	35.4	28.1	7.16	1.4			261.2	0.12		
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:	4/30/22						
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	A		
		Filter Lot #	17135566									
		Syringe Lot #	1112035									
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				☐ Ice						
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3				☐ Ice						
		☐ 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	☐ Ice						
Phytoplankton/Periphyton		W-PCL-TQ-R	W-CARB-AA (5 ml of MCAA** Buffer Solution)			☐ Ice						
				DTY-QN-C		☐ Ice						
				PKD-QN-BV								
Name: Leif Boman Katie March					Signature: Kathryn March				Date: 8/18/21			

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Okahumpka</u>	County: <u>Sumter</u>	Date: <u>8/18/21</u>	
Analyst: <u>Kate March, Leif Boman</u>	Signature: <u>K March</u>	STORET: <u>64CE0159</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 <u>2, 5, 8, 11</u> 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	D D D D
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	
Cladium jamaicense		*Juncus scirpoides	
Colocasia esculenta	/	Lachnanthes caroliniana	
*Commelina		Leersia hexandra	
Crinum americanum		Landoltia punctata (Spirodela punctata)	
*Cyperus alternifolius (C. involucratus)		Lemna sp.	
Cyperus articulatus		Leucothoe racemosa (Eubotrys racemosa)	
Cyperus haspan	/	Limnium spongia	/
*Cyperus lecontei	/	Limnophila sessiliflora	X
*Cyperus polystachyos		Liquidambar styraciflua	
*Cyperus odoratus		*Ludwigia arcuata	
*Cyperus surinamensis		*Ludwigia grandiflora	
Cyrtilla racemiflora		*Ludwigia hexapetala	
Decodon verticillatus		*Ludwigia leptocarpa	/
Diodia virginiana		Ludwigia (native)	/
*Echinochloa crus-galli		*Ludwigia octovalvis	/
*Echinochloa muricatum		*Ludwigia peruviana	/
Echinochloa walteri		*Ludwigia repens	/
Eclipta prostrata (E. alba)		Ludwigia suffruticosa	
Eichhornia crassipes		Luziola fluitans (Hydrochloa carolinensis)	
*Eleocharis		Magnolia virginiana	
Eleocharis cellulosa		Mayaca fluviatilis	
*Eleocharis elongata		Melaleuca quinquenervia	
Eleocharis equisetoides		Micranthemum glomeratum	
Eleocharis interstincta		Micranthemum umbrosum	
Eleocharis submersed viviparous		Mikania scandens	/
*Eriocaulon compressum		Mimosa pigra	
*Eriocaulon decangulare		Myrica cerifera	/
Eupatorium capillifolium		<u>Kosteletzkya pent.</u>	/
Fraxinus			

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site:					Date:				
SPECIES				Collected? (✓)	SPECIES				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					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									

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
 COUNTY: Sumter STORET #: 646E0159 LONGITUDE: _____
 DATE: 8/18/21 TIME: _____ SAMPLING AGENCY: _____
 SITE NAME: Lake Oklawaha 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)														
<u>35</u>				<u>65</u>																	
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy						Artificially Impounded				LDI:											
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy						☐ Yes ☒ No				Land Use Source & Year:											
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>13</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>11</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: <u>0.3</u> <u>29.5</u> <u>7.68</u> <u>4.58</u> <u>85.7</u> <u>249.6</u> <u>0.12</u> Mid-Depth: _____ Bottom: <u>1.4</u> <u>28.1</u> <u>7.14</u> <u>2.77</u> <u>35.4</u> <u>261.2</u> <u>0.12</u> Meter ID: _____								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): _____								Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☐ Tannic ☐ Green <u>white?</u> SECCHI (M) <u>1.3</u> Total Station Depth (M) <u>1.9</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								Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☐ ☐ ☐ ☒ Submersed Plants ☐ ☐ ☐ ☒ Exotic Apple Snails ☒ ☐ ☐ ☐			
Sediment Odors: ☐ Normal ☐ Other (Specify): _____ ☐ Anaerobic								Additional Notes: <u>New/ongoing Development on lake, SW side. Lake very cloudy in middle.</u>			
Weather Conditions: <u>hot, sunny, calm.</u>											
SAMPLING TEAM: <u>Kate Mandy, Lef Roman</u>						SIGNATURE: <u>KMandy</u>		DATE: <u>8/18/21</u>			

Lake Okahumpka, WBID 1347

