

LVI

Site Name Lake Weohyakapka Sample Date 6/20/19
WBID 1573E WIN ID G4CE0171 RQ 2019-05-20-27

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	LMD 6/27/19	MKL 6/27/19
Create SBIO station visit 79878	LMD 6/27/19	n/a
Vascular Entry (add LIMS ID)	LMD 6/27/19	MKL 6/27/19
Lake Observation Sheet Entry	LMD 6/27/19	MKL 6/27/19
Authorize SBIO data	MKL 6/27/19	n/a
Scan all sheets to 21FLCEN folder	LMD 6/28/19	n/a
LIMS/WIN migration	LMD 8/23/19	n/a
File in cabinet		n/a

Comments/notes:

Concurrent Status LL benthic sampling/WQ



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?
Yes / No

WIN Station Name: Lake Weohyakapka @ Center

Date: 06/20/2019
(mm/dd/yyyy)

WIN/ Field ID: G4CE0171

WBID: 1573E

Latitude: 27.820462

County: Polk

ORG ID: 21FLCEN

Longitude: -81.414489

Receiving Body of Water: _____

RQ-2019- 05-20-27

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Mike Linger										☒ Sample Container	☐ Van Dorn	☐ Pole		
Mike Drennan										☐ Carboy	☒ Syringe			
										☐ Dipper	☐ Other			
										Depth Measured with <u>Secchi Disk Line</u> Meter				
										Equipment ID <u>Leadfoot, Knothead, Crusty/Bucket, Mucky/Trap</u>				
										Collection Method				
										☐ Wading	☐ Canoe/Kayak			
										☐ From Shore	☐ Electric Motor			
										☐ Other	☐ Gasoline Motor			
Water Level: <u>Dry</u> / Pooled / Low / <u>Normal</u> / High / Flooded					Motor ID# <u>Shrimp / Trap</u>					Matrix: <u>Fresh</u> / Marine / DI				
Photos: <u>Yes</u> / No					Flow: <u>No Flow</u> / Intestinal / Flowing <u>NA</u>					Tide: <u>Rising</u> / Falling / Slack <u>NA</u>				
Tide Times: High _____ Low _____														
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)				
EST	1317	2.3	0.3	0.7	8.03	104.0	7.58	0.06	134.1	28.8				
CEN			1.8		7.68	99.0	7.39	0.06	134.3	28.4				
Biological Samples Collected: <u>None</u> <u>HA</u> SCI RPS Algae ID LVS <u>LVI</u> Other: _____														
SBIO ID Numbers: SBIO-ID: <u>79878</u> HA-ID: <u>16115</u> RPS-ID: _____ Macrophyte-ID: <u>11398</u> LIMS#: <u>2097268</u>														
Parameter Suite	Parameter Methods					Preservation	Lot#	Expiration	pH Check					
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP					☒ Ice ☒ H2SO4	<u>SA9010030</u>	<u>04/10/2020</u>	☒ <2					
Metals	☐ W-ICPMS ☐ W-ICP					☐ Ice ☐ HNO3			☐ <2					
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter					☒ Ice	<u>13615055</u>							
Chlorophyll	☒ CHLSUITE-W					☒ Ice								
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS					☒ Ice								
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY					☐ Ice								
Macroinvertebrates	☐ MI-FW-QLDC					☐ Formalin								
Periphyton	☐ ALGAE-ID					☐ Ice								
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci					☐ Ice								
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2					☐ Ice								
	☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD					☐ Ice								
Tracers	☐ W-E8321-DI ☐ W-E8321-MS					☐ Ice								
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI					☐ Ice								
	☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA					☐ Other								
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C					☐ Ice								

Notes:

Ramp
27.813702, -81.438892

WIN ID / Field ID →

Lake Weohyakapka @ Center



G4CE0171

Signature: _____

Date: _____

LIMS EVENT ID: CEN-DIST-2019-06-21-02

Enter Field Parameters, Verify Station ID In LIMS DMT: LMD 06/27/19

QC Station ID, Field Parameters In LIMS DMT: MKL 6/27/19

Scan/Save Field Sheets LMD 6/28/19

(Initials/Date)

Migrate Data to WIN: LMD 8/23/19

(Initials/Date)

Verify Data In WIN: _____

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 79878 MACROPHYTE ID: 11398 LATITUDE: 27.820462
 COUNTY: Polk STORET #: 64CE0171 LONGITUDE: -81.414489
 DATE: 6/20/19 TIME: 1317 SAMPLING AGENCY: PDEP-CEROL
 SITE NAME: Lake Wedhyakapka @ Center WBID: 1573E
 FIELD ID/NAME: 64CE0171 LAKE SIZE: 7565 Acres RQ: 2019-05-20-27

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>65</u> Silviculture <u> </u> Field/Pasture <u>10</u> Agricultural <u>5</u> Residential <u>20</u> Commercial <u> </u> Industrial <u> </u> Other (Specify) <u> </u>					LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: <u> </u> Land Use Source & Year: <u> </u>				
Local Watershed Erosion (select one) : ☒ None ☐ Slight ☐ Moderate ☐ Heavy					Artificially Impounded ☐ Yes ☒ No				
Local Watershed NPS Pollution : ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy									
STORMWATER INPUTS <u>15</u>		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	
		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6		5 4 3 2 1	
LAKESIDE ALTERATIONS <u>13</u>		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)	
		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6		5 4 3 2 1	
BUFFER ZONE <u>15</u>		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	
		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 # <u> </u> Exp. Date: <u> </u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High						Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other <u> </u>					
						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other <u> </u>					
Meter Readings: Top: <u>0.3</u> <u>28.8</u> <u>7.58</u> <u>8.03</u> <u>104.0</u> <u>134.1</u> <u>0.06</u> Mid-Depth: <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> <u> </u> Bottom: <u>1.8</u> <u>28.4</u> <u>7.39</u> <u>7.68</u> <u>99.0</u> <u>134.3</u> <u>0.06</u>		Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT)		Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green							
Meter ID: <u>Shrimp Trap</u>		SECCHI (M) <u>0.7</u>		Total Station Depth (M) <u>2.3</u>							
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☒ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): <u> </u>		Sample Taken? ☒ Yes ☐ No		Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): <u> </u>							
Biological Communities: LVI Conducted? ☒ Yes ☐ No Phytoplankton Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot #: <u> </u> Exp Date: <u> </u> 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 ☐ ☒ ☐ ☐		Additional Notes: <u>SMP status Sampling</u>							
Weather Conditions: <u>90's clear</u>											
SAMPLING TEAM: <u>Mike Linger, Mike Drennan</u>			SIGNATURE: <u>[Signature]</u>		DATE: <u>6/20/19</u>						

DEP Form FD 9000-6: Lake Habitat Assessment Field Sheet

STORET STATION NUMBER: <i>64CE0171</i>	DATE (M/D/Y) <i>6/20/19</i>	LAKE NAME <i>Lake Weohyakapka</i>	FIELD ID / NAME: <i>64CE0171</i>
ECO-REGION: <i>S. coastal plain</i>	COUNTY: <i>Polk</i>	SAMPLING LOCATION/DESCRIPTION: <i>@ Center</i>	LAKE SIZE: <i>LL - 7565 Acres</i>
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			Impounded, hydrology of system artificially controlled ☐
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 <i>7</i>	Secchi > 3 m Or VOB 20 19 18 17 16	3 2.6 2.2 1.8 1.4 15 14 13 12 11	1.0 0.9 0.8 0.7 0.6 10 9 8 7 6
Vegetation Quality <i>17</i>	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa 20 19 18 17 16	Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants 15 14 13 12 11	Large masses (21%-40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats 10 9 8 7 6
Stormwater Inputs <i>15</i>	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 15 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
Bottom Substrate Quality <i>15</i>	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present 20 19 18 17 16	Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present 15 14 13 12 11	Moderate layer of CPOM/mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom 10 9 8 7 6
Lakeside Adverse Human Alterations <i>13</i>	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%) 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 8 7 6
Upland Buffer Zone <i>15</i>	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 13 12 11	50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10 9 8 7 6
Adverse Watershed Land Use <i>15</i>	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		
TOTAL SCORE <i>97</i>	COMMENTS: <i>SMP + status sampling even +</i>		
ANALYSIS DATE: <i>6/20/19</i>	ANALYST: <i>Mike Linger, Mike Dreunan</i>	SIGNATURE: <i>[Signature]</i>	

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Weohyakapka</u>		County: <u>Polk</u>		Date: <u>6/20/19</u>							
Analyst: <u>Mike Linger, Mike Drennon</u>		Signature: <u>[Signature]</u>		STORET: <u>GYC0171</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? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Acer rubrum	/	/	/	/		Fraxinus					
Alternanthera philoxeroides						Fuirena scirpoides					
Amaranthus australis						Gordonia lasianthus					
Andropogon sp.						Habenaria repens					
Azolla filiculoides (A. caroliniana)						Hibiscus coccineus					
Baccharis sp.	/					Hibiscus grandiflora					
Bacopa caroliniana						Hydrilla verticillata					
Bacopa monnieri						Hydrocotyle sp.	/	/			
Bidens alba			/			Hygrophila polysperma					
Bidens laevis	/					Hymenocallis sp.					
Bidens mitis						*Hypericum fasciculatum					
Blechnum serrulatum						*Hypericum hypericoides					
Boehmeria cylindrica						*Hypericum myrtifolium					
Brasenia schreberi						Ilex cassine					
Cabomba caroliniana						Ipomoea aquatica					
Canna						Ipomoea sagittata					
Centella asiatica		/				Itea virginica					
Cephalanthus occidentalis	/		/			Juncus effusus					
Ceratophyllum demersum						*Juncus marginatus					
Chara sp.						*Juncus megacephalus					
Cicuta maculata						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						Limnium spongia					
Cyperus haspan	/		/			Limnophila sessiliflora	/				/
*Cyperus lecontei	/		/			Liquidambar styraciflua					
*Cyperus polystachyos	/		/			*Ludwigia arcuata					
*Cyperus odoratus	/		/			*Ludwigia grandiflora					
*Cyperus surinamensis						*Ludwigia hexapetala					
Cyrtilla 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	/	/	/	/							

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: Lake Weohyakapka

Date: 6/20/19

SPECIES	Collected?				SPECIES	Collected?			
	3	6	9	12		3	6	9	12
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 polyrhiza				
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 gibba (U. biflora)				
Persea sp.					*Utricularia foliosa				
Pennisetum purpureum					*Utricularia inflata				
Phragmites australis					*Utricularia purpurea				
Pinus elliotii					*Utricularia radiata				
Pistia stratioides					*Utricularia resupinata				
Pluchea sp.					Vallisneria americana				
*Polygonum glabrum (densiflorum)					Vitis sp.				
Polygonum hirsutum					*Websteria confervoides				
*Polygonum hydropiperoides					Wedelia trilobata (Sphagneticola trilobata)				
*Polygonum punctatum					Wolffiella spp.				
*Polygonum					Woodwardia virginica				
Pontederia cordata					Xyris sp.				
*Potamogeton diversifolius					Zizania aquatica				
*Potamogeton illinoensis					Zizaniopsis milacea				
*Potamogeton pusillus					<i>Reed grass -> Sarcobatus giganteus</i>				
*Potamogeton pectinatus (Stuckenia pectinatus)					<i>3 Cyperus lecontei?</i>				
Proserpinaca pectinata					<i>Polygonum lapathifolium</i>				
*Rhexia					<i>Erechtites hieracifolius</i>				
*Rhynchospora corniculata					<i>Kosteletia pentacarpos</i>				
*Rhynchospora inundata									
Rhynchospora nitens									
Ricciocarpus natans									
Sabal palmetto									
Sacciolepis striata									
*Sagittaria filiformis									
*Sagittaria graminea									
*Sagittaria isoetiformis									
Sagittaria lancifolia									
Sagittaria latifolia									

Weohyakapka

ZS-LL-13008



point

27 49 42.4767

-81 23 33.05557