

LVI

Site Name Lake McCoy Sample Date 7/18/18
WBID 2993C WIN ID G2UDD098 RQ2018-07-14-46

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	KWM JUL 27 2018	HO 8/21/18
Create SBIO station visit	KWM JUL 27 2018	n/a
Vascular Entry (add LIMS ID)	KWM JUL 27 2018	HO 8/21/18
Lake Observation Sheet Entry	KWM JUL 27 2018	HO 8/21/18
Authorize SBIO data	HO 8/21/18	n/a
Scan all sheets to 21FLCEN folder		n/a
LIMS/WIN migration		n/a
File in cabinet		n/a

Comments/notes:

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
COUNTY: Orange STORET #: G2CE0098 LONGITUDE: _____
DATE: 7/18/16 TIME: _____ SAMPLING AGENCY: _____
SITE NAME: Lake McCoy WBID: 2993C
FIELD ID/NAME: _____ LAKE SIZE: _____ RQ: 2016-07-16-46

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>25</u>				<u>75</u>																	
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		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>6</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>6</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>6</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: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>30.93</u> <u>7.31</u> <u>6.44</u> <u>89.3</u> <u>171</u> <u>0.08</u> Mid-Depth: _____ Bottom: <u>1.5</u> <u>30.49</u> <u>7.14</u> <u>6.58</u> <u>87.7</u> <u>172</u> <u>0.08</u> Meter ID: <u>Betty 67</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): _____										Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☐ Tannic ☒ Green SECCHI (M) <u>1.4</u> Total Station Depth (M) <u>2.0</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 ☒ ☐ ☐ ☐									
Weather Conditions:										Additional Notes: <u>Water level very high / flooded.</u> <u>Hydrilla abundant.</u>									
SAMPLING TEAM: <u>Katie March, Leif Boman</u>										SIGNATURE: <u>KMarch</u>									
DATE: <u>7/18/16</u>																			



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

April 2018

Data Qualified?

Yes / No

WIN Station Name: Lake McCoy @ Center of Southern Lobe Date: 7/18/18
(mm/dd/yyyy)
WIN/ Field ID: G2CE0098 WBID: 2993C Latitude: 28.68834222
(Decimal Degrees)
County: Orange ORG ID: 21 FL CEN Longitude: -81.49738351
(Decimal Degrees)
Receiving Body of Water: _____ RQ-2018- 07-16-46

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Lif Boman									
Katie March									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with <u>SECCHI DISK LINE/ METER</u>		
Equipment ID (KNOTHEAD/67 LEADFOOT/INON, RUSTY/SCUD)		

Collection Method		
☐ Wading	☐ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☒ Gasoline Motor	

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded Meter ID# Betty 6 Matrix: Fresh / Marine / DI
Photos: Yes / No Flow: No Flow / Intestinal / Flowing / NA Tide: Rising/ Falling/ Slack/ NA 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	1043	2.0	0.3	1.4	6.64	89.3	7.31	0.08	171	30.93
CEN			1.5		6.58	82.7	7.14	0.08	172	30.49

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:

SBIO ID Numbers: SBIO-ID: 78654 HA-ID: _____ RPS-ID: _____ Macrophyte-ID: 11001 LIMS#: 2009225

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>SA8095170</u>	<u>3/26/19</u>	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☐ HNO3	<u>NA8067020</u>	<u>3/8/19</u>	☒ <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-CI-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 Coll ☐ Enterococci	☒ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA	☐ Ice ☐ Other			

Notes:

WIN ID / Field ID →

Lake McCoy @ Center
of Southern Lobe
(2993C)



G2CE0098

Signature: K March

Date: 7/18/18

Enter Field Parameters, Verify Station ID in LIMS DMT: KVMM JUL 27 2018 QC Station ID, Field Parameters in LIMS DMT: _____

Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data in WIN: _____

(Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake McCoy</u>		County: <u>Orange</u>		Date: <u>7/18/18</u>							
Analyst: _____		Signature: <u>K. March</u>		STORET: <u>G24E0098</u>							
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold = FLEPPC invasive exotic. 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.				Lake units sampled (circle one group): 1, 4, 7, 10 2, 5, 8, 11 3, 6, 9, 12							
SPECIES	2	5	8	11	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						Limnium spongia					
Cyperus haspan						Limnophila sessiliflora					
*Cyperus lecontei						Liquidambar styraciflua	/	/	/	/	
*Cyperus polystachyos						*Ludwigia arcuata					
*Cyperus odoratus						Ludwigia hex-grand-uruguayensis complex**					
*Cyperus surinamensis	/					*Ludwigia leptocarpa					
Cyrtilla racemiflora						Ludwigia (native)					
Decodon verticillatus						*Ludwigia octovalvis	/	/	/	/	
Diodia virginiana				/		*Ludwigia peruviana					
*Echinochloa crus-galli						*Ludwigia repens					
*Echinochloa muricatum						Ludwigia suffruticosa					
Echinochloa walteri						Luziola fluitans (Hydrochloa carolinensis)					
Eclipta prostrata (E. alba)	/	/	/	/		Magnolia virginiana					
Eichhornia crassipes	/	/	/	/		Mayaca fluviatilis					
*Eleocharis						Melaleuca quinquenervia					
Eleocharis cellulosa						Micranthemum glomeratum					
*Eleocharis elongata						Micranthemum umbrosum					
Eleocharis equisetoides						Mikania scandens					
Eleocharis interstincta						Mimosa pigra					
Eleocharis submersed viviparous	/	/	/	/		Myrica cerifera					
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium	/	/	/	/							
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 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>Signa</i>				
*Potamogeton pectinatus (Stuckenia pectinatus)					<i>Melaleuca viminalis</i>				
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									

Lake McCoy (Orange County)

