

LVI

Site Name Lake Drawdy Sample Date 8/15/18
WBID 3033D WIN ID 62CE0078 RQ 2018-08-06-29

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	LMD 8/22/18	MKL 9/10/18
Create SBIO station visit 78771	LMD 8/23/18	n/a
Vascular Entry (add LIMS ID) 11032	LMD 8/23/18	MKL 9/10/18
Lake Observation Sheet Entry	LMD 8/23/18	MKL 9/10/18
Authorize SBIO data	MKL 9/10/18	n/a
Scan all sheets to 21FLCEN folder	LMD 10/10/18	n/a
LIMS/WIN migration		n/a
File in cabinet		n/a

Comments/notes:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Lake Drawdy @ 150m S of Center

Date: 08/15/2018

(mm/dd/yyyy)

WIN/ Field ID: G2CE0078

WBID: 3033 D Latitude: 28.59017

(Decimal Degrees)

County: Orange

ORG ID: 21 FL CEN Longitude: -81.12493

(Decimal Degrees)

Receiving Body of Water: _____

RQ-2018- 08-06-29

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
<u>Mike Linger</u>					☒	☒	☒	☒	☒	☒ Sample Container	☐ Van Dorn	☐ Pole		
										☐ Carboy	☒ Syringe			
<u>Mike Drennan</u>					☐	☐	☐	☐	☐	☐ Dipper	☐ Other			
										Depth Measured with <u>[Secchi Disk Line] / Meter</u>				
											Equipment ID <u>[KNOTHEAD (67) / LEADFOOT (NON)]</u>			
										Collection Method				
					☐ Wading			☒ Canoe/Kayak						
					☐ From Shore			☒ Electric Motor						
					☐ Other			☐ Gasoline Motor						
Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded					Meter ID# <u>Boop/nan</u>					Matrix: <u>(Fresh)</u> Marine / DI				
Photos: Yes / No		Flow: No Flow / Intestinal / Flowing / <u>(NA)</u>			Tide: Rising/ 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 (µmhos/cm)	Temp. (C°)				
<u>EST</u>	<u>1030</u>	<u>6.0</u>	<u>0.3</u>	<u>0.5</u>	<u>5.18</u>	<u>67.4</u>	<u>5.51</u>	<u>0.04</u>	<u>97</u>	<u>29.85</u>				
<u>CEN</u>			<u>5.5</u>		<u>0.48</u>	<u>5.2</u>	<u>6.17</u>	<u>0.07</u>	<u>152</u>	<u>22.76</u>				
Biological Samples Collected: None HA SCI RPS Algae ID LVS <u>(LVI)</u> LAD Other:														
SBIO ID Numbers:		SBIO-ID: <u>78771</u>		HA-ID: _____		RPS-ID: _____		Macrophyte-ID: <u>78771/11032</u>		LIMS#: <u>2017637</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>SA9101020</u>		<u>4/11/19</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 µm Filter					☒ Ice		<u>13615055</u>					
Chlorophyll		☒ CHLSUITE-W					☒ Ice							
Physical/Aggregate (Fresh)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-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-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD					☐ Ice							
Tracers		☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA					☐ Ice							
Pesticides		☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R					☐ Ice ☐ Other							

Notes:

LVI

WIN ID / Field ID →

Lake Drawdy @ 150m
S of Center (3033D)



G2CE0078

Signature: _____

Date: 8/15/18

Enter Field Parameters, Verify Station ID in LIMS DMT: LMD 8/22/18

(Initials/Date)

QC Station ID, Field Parameters in LIMS DMT: MKL 9/10/18

(Initials/Date)

Scan/Save Field Sheets _____

Migrate Data to WIN: _____

Verify Data in WIN: _____

(Initials/Date)

(Initials/Date)

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 78771 MACROPHYTE ID: 11032 LATITUDE: 28.59017
COUNTY: Orange STORET #: 62CE0078 LONGITUDE: -81.12493
DATE: 8/15/18 TIME: 1030 SAMPLING AGENCY: FDEP - CEROC
SITE NAME: Lake Drawdy @ 150m S of Center WBID: 3033D
FIELD ID/NAME: 62CE0078 LAKE SIZE: 52 acre RQ: 2018-08-06-29

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural 10 Silviculture Field/Pasture Agricultural Residential 90 Commercial Industrial Other (Specify)						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>13</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>6</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>10</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>SA8101020</u> Exp. Date: <u>4/11/19</u> Alkalinity Sample Taken? ☒ Yes ☐ No <u>NA8067020</u> <u>4/11/19</u> Water Level ☐ Low ☒ Normal ☐ High								Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other							
Meter Readings: Top: <u>0.3</u> <u>29.85</u> <u>5.51</u> <u>5.18</u> <u>67.4</u> <u>97</u> <u>0.04</u> Mid-Depth: Bottom: <u>5.5</u> <u>22.76</u> <u>6.17</u> <u>0.48</u> <u>5.20</u> <u>152</u> <u>0.07</u>								Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other							
Meter ID: <u>Beep / Iron</u>								Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green							
Sediment Type: (may check more than one) ☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify):								SECCHI (M) <u>0.5</u> Total Station Depth (M) <u>6.0</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								Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☐ ☐ ☐ ☒ Submersed Plants ☐ ☒ ☐ ☐ Exotic Apple Snails ☐ ☒ ☐ ☐							
Weather Conditions: <u>upper 80's clear</u>								Additional Notes: <u>Recent higher than Normal H₂O levels</u>							
SAMPLING TEAM: <u>Mike Linger / Mike Drannan</u>								SIGNATURE: <u>[Signature]</u> DATE: <u>8/15/18</u>							

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lake Draddy</u>		County: <u>Orange</u>		Date: <u>8/15/18</u>							
Analyst: <u>Mike Linger, Mike Drennan</u>		Signature: <u>[Signature]</u>		STORET: <u>62CE0078</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	2	5	8	10	Collected? (✓)	SPECIES	2	5	8	10	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 <u>flaccida</u>						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. involutus)						Leucothoe racemosa (Eubotrys racemosa)					
Cyperus articulatus						Limnobia 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 <u>baldwinii</u>						Mayaca fluviatilis					
Eleocharis cellulosa						Melaleuca quinquenervia					
*Eleocharis elongata						Micranthemum glomeratum					
Eleocharis equisetoides						Micranthemum umbrosum					
Eleocharis interstincta						Mikania scandens					
Eleocharis submersa viviparous						Mimosa pigra					
*Eriocaulon compressum						Myrica cerifera					
*Eriocaulon decangulare											
Eupatorium capillifolium											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Lake Drandy</u>						Date: <u>8/15/18</u>					
SPECIES	2	5	8	10	Collected? (✓)	SPECIES	2	5	8	10	Collected? (✓)
Myriophyllum aquaticum						<i>Salix caroliniana</i>					
* <i>Myriophyllum heterophyllum</i>						<i>Salvinia minima</i>					
* <i>Myriophyllum laxum</i>						<i>Sambucus canadensis</i>					
* <i>Myriophyllum pinnatum</i>						<i>Sapium sebiferum</i>					
<i>Myriophyllum spicatum</i>						<i>Saururus cernuus</i>					
* <i>Najas filifolia</i>						<i>Schinus terebinthifolius</i>					
* <i>Najas guadalupensis</i>						* <i>Schoenoplectus californicus</i>					
* <i>Najas minor</i>						* <i>Schoenoplectus pungens</i>					
<i>Nelumbo lutea</i>						* <i>Schoenoplectus tabernaemontani</i> (<i>Scirpus validus</i>)					
<i>Nitella</i> spp.						<i>Scirpus cubensis</i> (<i>Oxycaryon cubense</i>)					
<i>Nuphar</i> sp.						<i>Scirpus cyperinus</i>					
<i>Nymphaea mexicana</i>						* <i>Sesbania</i>					
<i>Nymphaea odorata</i>						<i>Solidago</i> sp.					
<i>Nymphoides aquatica</i>						<i>Sparganium americanum</i>					
<i>Nyssa sylvatica</i> var. <i>biflora</i>						<i>Spartina bakeri</i>					
<i>Orontium aquaticum</i>						<i>Spirodela polyrhiza</i>					
<i>Osmunda cinnamomea</i>						<i>Taxodium</i> sp.					
<i>Osmunda regalis</i>						<i>Thalia geniculata</i>					
<i>Panicum hemitomon</i>						<i>Thelypteris interrupta</i>					
<i>Panicum repens</i>						<i>Thelypteris palustris</i>					
<i>Paspalidium geminatum</i>						<i>Triadenum virginicum</i>					
* <i>Paspalum repens</i>						<i>Typha</i> sp.					
<i>Paspalum urvillei</i>						<i>Urochloa mutica</i> (<i>Brachiaria mutica</i>)					
<i>Peltandra</i> sp.						* <i>Utricularia gibba</i> (<i>U. biflora</i>)					
<i>Persea</i> sp.						* <i>Utricularia foliosa</i>					
<i>Pennisetum purpureum</i>						* <i>Utricularia inflata</i>					
<i>Phragmites australis</i>						* <i>Utricularia purpurea</i>					
<i>Pinus elliotii</i>						* <i>Utricularia radiata</i>					
<i>Pistia stratioides</i>						* <i>Utricularia resupinata</i>					
<i>Pluchea</i> sp.						<i>Vallisneria americana</i>					
* <i>Polygonum glabrum</i> (<i>densiflorum</i>)						<i>Vitis</i> sp.					
<i>Polygonum hirsutum</i>						* <i>Websteria confervoides</i>					
* <i>Polygonum hydropiperoides</i>						<i>Wedelia trilobata</i> (<i>Sphagneticola trilobata</i>)					
* <i>Polygonum punctatum</i>						<i>Wolffiella</i> spp.					
* <i>Polygonum</i>						<i>Woodwardia virginica</i>					
<i>Pontederia cordata</i>						<i>Xyris</i> sp.					
* <i>Potamogeton diversifolius</i>						<i>Zizania aquatica</i>					
* <i>Potamogeton illinoensis</i>						<i>Zizania milacea</i>					
* <i>Potamogeton pusillus</i>						<i>Cyperus prolifer</i>					
* <i>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)											
<i>Proserpinaca pectinata</i>											
* <i>Rhexia cubensis</i>											
* <i>Rhynchospora corniculata</i>											
* <i>Rhynchospora inundata</i>											
<i>Rhynchospora nitens</i>											
<i>Ricciocarpus natans</i>											
<i>Sabal palmetto</i>											
<i>Sacciolepis striata</i>											
* <i>Sagittaria filiformis</i>											
* <i>Sagittaria graminea</i>											
* <i>Sagittaria isoetiformis</i>											
<i>Sagittaria lancifolia</i>											
<i>Sagittaria latifolia</i>											

✓
END
MKL

LVI Map for LAKE DRAWDY, WBID 3033D

