

data entry 9/14/2018 AD
Dcamme 1/29/2019 SEP

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 78833 MACROPHYTE ID: 11047 LATITUDE: 30°21' 50.383"
COUNTY: Leon STORET #: 7090 LEOLIA LONGITUDE: -84°22' 55.0076"
DATE: 8/23/2018 TIME: 1505 SAMPLING AGENCY: FDEP
SITE NAME: Lost Lake Alt. WBID: 1006
FIELD ID/NAME: LOSTLKALT LAKE SIZE: 4.3 Acres RQ: 2018-08-20-62
WATERSHED / LAKESIDE FEATURES RQ-2018-08-20-62 (17 km²)

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)	LDI: not available				
40	60							Land Use Source & Year:				
Local Watershed Erosion (select one): ☒ None ☐ Slight ☐ Moderate ☐ Heavy								Artificially Impounded				
Local Watershed NPS Pollution: ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy								☐ Yes ☒ No				
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				
18		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)				
16		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				
20		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:								Water Odors:			
Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No								☐ Sewage ☐ Petroleum ☐ Other			
Color Sample Taken? ☒ Yes ☐ No Lot # _____ Exp. Date: _____								Water Surface Oils: ☒ None			
Alkalinity Sample Taken? ☒ Yes ☐ No								☐ Sheen/Slick ☐ Glob ☐ Other			
Water Level ☐ Low ☐ Normal ☒ High								Clarity: ☒ Clear			
Meter Readings:								☐ Opaque ☐ Turbid ☒ Tannic ☐ Green			
Top: .13 31.8 5.71 5.67 77 12.3								☐ Slightly Turbid			
Mid-Depth: 1.5 30.4 5.55 5.42 72 12.2								SECCHI (M) 3.0			
Bottom: 2.0 30.4 5.49 3.4 36 14.8								Total Station Depth (M) 3.0			
Meter ID: 154185								VOB ☒			

Sediment Type: (may check more than one)				Sample Taken? ☐ Yes ☒ No				Sediment Odors:			
☐ Sandy	☒ Organic fibrous (peaty, CPOM)	☐ Vegetated		☒ Normal	☐ Other (Specify):						
☐ Sand/Silt	☐ Organic smooth (muck)	☐ Other (Specify):		☐ Anaerobic							
Biological Communities:				Abundance:				Contains 1.1 Sulfuric Acid			
LVI Conducted? ☒ Yes ☐ No				Absent Rare Common Abundant				Lot No.: SA7163030			
Phytoplankton Sample Taken? ☒ Yes ☐ No				Periphyton ☐ ☐ ☐ ☒				Expires: 06/12/18			
Sample Preserved? ☒ Yes ☐ No				Nuisance Plants ☒ ☐ ☐ ☐				See Safety Data Sheet (SDS)			
Lot #: _____ Exp. Date: _____				Submersed Plants ☐ ☐ ☒ ☐				Contains 1.1 Sulfuric Acid Lot No.: SA7163030 Expires: 06/12/18 See Safety Data Sheet (SDS) Contains 1.1 Nitric Acid Lot No.: NA-7341010 EXP: 12/7/18 See SDS			
Algal Bloom/Algal ID Sample Taken? Yes ☐ No ☒				Exotic Apple Snails ☒ ☐ ☐ ☐							
Active Vegetation Mgmt? ☐ Yes ☒ No ☐ Don't Know											

Weather Conditions:		SAMPLING TEAM:		SIGNATURE:		DATE:	
hot, sunny, high humidity		J. Paton's, A. O'Neal		Ashley Pham		8/23/2018	

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Lost Lake alternate</u>	County: <u>Leon</u>	Date: <u>8/23/2018</u>
Analyst: <u>AONCAL J Patonis</u>	Signature: <u>AONCAL J Patonis</u>	STORET: <u>LEOLA</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): <u>1, 4, 7, 10</u> 2, 5, 8, 11 3, 6, 9, 12

SPECIES	1	4	7	10	Collected? (✓)	SPECIES	1	4	7	10	Collected? (✓)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides						Hydrilla verticillata					
Andropogon sp.						Hydrocotyle sp.					
Azolla filiculoides (A. caroliniana)						Hygrophila polysperma					
Baccharis sp.						*Hypericum fasciculatum					
Bacopa caroliniana						*Hypericum hypericoides					
Bacopa monnieri						*Hypericum myrtifolium					
Bidens laevis						Ilex cassine					
Bidens mitis						Ipomoea aquatica					
Blechnum serrulatum						Ipomoea sagittata					
Boehmeria cylindrica						Itea virginica					
Brasenia schreberi						Juncus effusus					
Cabomba caroliniana						*Juncus marginatus					
Casuarina equisetifolia						*Juncus megacephalus					
Centella asiatica						Juncus repens <u>tenuis abortivus</u>					
Cephalanthus occidentalis						*Juncus scirpoides					
Ceratophyllum demersum						Lachnanthes caroliniana					
Chara sp.						Leersia hexandra					
Cladium jamaicense						Landoltia punctata (Spirodela punctata)					
Cliftonia monophylla						Lemna sp.					
Colocasia esculenta						Leucothoe racemosa (Eubotrys racemosa)					
*Commelina						Limnium spongia					
Crinum americanum						Limnophila sessiliflora					
*Cyperus alternifolius (C. involucratus)						Liquidambar styraciflua					
Cyperus articulatus						*Ludwigia arcuata					
Cyperus haspan						*Ludwigia leptocarpa					
*Cyperus lecontei						*Ludwigia linearis					
*Cyperus polystachyos						*Ludwigia octovalvis					
*Cyperus odoratus						*Ludwigia peruviana					
*Cyperus surinamensis						*Ludwigia repens					
Cyrtilla racemiflora						*Ludwigia <u>suffruticosa</u>					
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					
Diodia virginiana						Lyonia lucida					
*Echinochloa crus-galli						Magnolia virginiana					
*Echinochloa muricatum						Mayaca fluviatilis					
Echinochloa walteri						Melaleuca quinquenervia					
Eclipta prostrata (E. alba)						Micranthemum glomeratum					
Egeria densa						Micranthemum umbrosum					
Eichhornia crassipes						Mikania scandens					
*Eleocharis baldwinii <u>elongata</u>						Mimosa pigra					
*Eleocharis <u>long submerged</u>						Myrica cerifera					
Eleocharis cellulosa						<u>Lachnocaulon minus</u>					
Eleocharis equisetoides						<u>small white flower dicot</u>					
Eleocharis interstincta						<u>unknown</u>					
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium <u>capillifolium leptophyllum</u>											
*Fuirena <u>primita</u>											
Fuirena scirpoides											
Gordonia lasianthus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <i>Lost Lake Alternate</i>					Date: <i>2/23/18</i>						
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 odorata						*Sesbania					
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora						Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrhiza					
Osmunda regalis						Taxodium sp.					
Panicum hemitomon						Thalia geniculata					
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 floridana					
Pennisetum purpureum						*Utricularia foliosa					
Phragmites australis						*Utricularia inflata					
Pinus elliotii						*Utricularia purpurea					
Pistia stratioides						*Utricularia cornuta					
Pluchea sp.						*Utricularia radiata					
*Polygonum glabrum (densiflorum)						Vallisneria americana					
*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 <i>synonym</i>					
*Potamogeton pectinatus (Stuckenia pectinatus)						Potamogeton <i>nitens</i>					
Proserpinaca pectinata						<i>Rhynchospora</i>					
*Rhexia <i>mariana</i> <i>AO</i>											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

SITE NAME: Lost Lake AlternateDATE: 8/23/18TIME 1505 (EST) CST DEPTH: 0.13 ft (m) FIELD ID: LOSTLKALTtop
sample

SAMPLING TEAM MEMBERS	WQ MEASUREMENTS	DOCUMENTATION	SAMPLE COLLECTION	PRESERVATION	PRESERVATION CHECK
A. Neal			X	X	X
J. Patronis	X				

SAMPLING EQUIPMENT	
☐ Sample Container	☐ Tubing type: _____
☐ Pole	☐ Other: _____
☐ Pump ID#: _____	☐ Other: _____
WATER QUALITY MEASUREMENTS	
Instrument ID: <u>154185 (new meter)</u>	
COLLECTION MODE	
☐ Wading	☒ Via Boat
☐ Diving	☒ Canoe
☐ From Shore	☐ Electric Motor
☐ Other	☐ Gasoline Motor

Parameter Suite	Parameter(s)/Method	Matrix Code*	Preservation**	Preservative Lot #	pH Check	# Bottles ***
Preserved Nutrients	☒ TKN ☒ TP ☒ NOx ☒ NH3 ☐ TOC ☐ Total N	S W	☒ Ice ☒ H2SO4	5A71b3030	☒ <2	1
Filtered Nutrients	☒ oP ☐ Other: _____	S W	☒ Ice ☒ 45 um Filter			1
Unpreserved Nutrients	☐ NO2 ☐ NO3 ☐ SO4 ☐ Other: _____	W	☐ Ice			
Physical/Aggregate Properties + IONS	☐ TDS ☐ TSS ☐ TS ☐ Turbidity ☒ Alk ☒ Color W-SO4-IC ☒ W-F ☒ W-BR-IC ☒ W-CL-IC	S W	☒ Ice			1
Chlorophyll	☒ CHL-PPTN-W	S W	☒ Ice			1
BOD	☐ BOD-INHB ☐ BOD-UNIN	W	☐ Ice			
Microbiology	MF: ☐ E coli ☐ T Coli ☐ F Coli ☐ Entero ☐ F Strep	W	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC ☐ MI-FW-QLBR ☐ MI-FW-QNNC ☐ MI-MN-QNNC	W	☐ Formalin			
Phytoplankton	☒ PKD-QN-C ☒ DTY-QN-C	S W	☐ Lugol's in lab			1
Periphyton	☐ PRN-QL-C ☐ DTM-QL-C ☐ PRN-QN-C ☐ DTM-QN-C	W	☐ Formalin			
AGP	☐ AA-AGP ☐ AA-LIM-NUT	W	☐ Ice			
Metals	☐ W-ICP ☐ W-FIAS ☐ W-ICPMS ☐ W-ICP-Tr	W	☐ HNO3		☐ <2	
Filtered Metals	☐ W-ICP-F ☐ W-FIAS-F ☐ W-ICPMS-F ☐ W-ICP-Tr-F	W	☐ HNO3 ☐ 45 um Filter		☐ <2	
Mercury	☐ W-HG-AF	W				
Base/Neutral / Acid Extractable	☐ W-BNA ☐ W-AE ☐ W-BN ☐ W-PAH ☐ W-FL-PRO ☐ W ☐ Other: _____	W	☐ Ice ☐ H2SO4		☐ <2	
Pesticides	☐ W-PEST-CL ☐ W-PCB ☐ W-PEST-NP ☐ W-PSCL-PCB ☐ W-NP-AA-SF ☐ W-PC-AA-SF ☐ W-PSHRB-NP ☐ W-SLFN-UREA ☐ W-SULFN-LC ☐ Other: _____ ☐ W-ACIDHERB ☐ W-CARB	W	☐ Ice ☐ H2SO4 ☐ MCAA			
Purgeables	☐ W-VOC-MS ☐ W-VOC-MS-A	W	☐ Ice ☐ HCl			
Bioassay	Specify Test: _____	W	☐ Ice			
OTHER		W	☐ Other: _____			

Notes: lake chosen (unnamed on maps, we named Lost Lake Alternate)
as alternative to Lost Lake because access too difficult for Lost Lake

Use one line for each set of sample (as supplied by the laboratory) containers. Use separate sheet for field or laboratory duplicate or blank or different water depth

*Enter "S" for surface if collected at a depth less than or equal to 1 foot

*Matrix Codes (Insert prefix): SW = Surface Water GW = Groundwater DW = Drinking Water WW = Wastewater O = Other: _____

**PRESERVATIVES: 1 ml added unless otherwise noted

***Enter number of containers supplied by the laboratory for the test (e.g., 3 for volatile organics, etc.)

DEP Bureau of Laboratories Water Sample Collection Record

(Use with FDEP SOP-001/01 Form FD 9000-3 Physical/Chemical Characterization Field Sheet)