

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 83276 MACROPHYTE ID: _____ LATITUDE: 30.2752
 COUNTY: LIBERTY CO STORET #: 3101083 LONGITUDE: -84.9893
 DATE: 9/1/2021 TIME: 12:35 SAMPLING AGENCY: FDEP
 SITE NAME: CAMEL LAKE WBID: 1039A
 FIELD ID/NAME: CAMEL REF LAKE SIZE: 40 ACRES 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>50</u>	<u>50</u>													
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			
<u>19</u>		20 <u>19</u> 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>19</u>		20 <u>19</u> 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>20</u>		20 <u>19</u> 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 ☒ 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>0.2</u> <u>29.4</u> <u>4.77</u> <u>6.41</u> <u>83.7</u> <u>14.2</u> _____ Mid-Depth: <u>2.1</u> <u>28.2</u> <u>4.35</u> <u>5.82</u> <u>75.4</u> <u>14.5</u> _____ Bottom: <u>3.9</u> <u>28.7</u> <u>4.04</u> <u>5.24</u> <u>67.8</u> <u>21.4</u> _____ Meter ID: <u>154185</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			
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: Periphyton ☐ Absent ☒ Rare ☐ Common ☐ Abundant Nuisance Plants ☒ Absent ☐ Rare ☐ Common ☐ Abundant Submersed Plants ☐ Absent ☐ Rare ☐ Common ☒ Abundant Exotic Apple Snails ☒ Absent ☐ Rare ☐ Common ☐ Abundant			
Weather Conditions: _____								Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____			
SAMPLING TEAM: <u>J. Jackson</u>								SIGNATURE: <u>J. Jackson</u>			

Contains: 1.1 HNO3
 Lot No: NAD344080
 Expires: 01/04/22
 See Safety Data Sheet (SDS)

Contains: Conc. H2SO4
 Lot No: SA1105060
 Expires: 04/30/22
 See Safety Data Sheet (SDS)

Contains: 20.70%
 Lot No: NAD344080
 Expires: 01/04/22
 See Safety Data Sheet (SDS)

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>CAMEL LAKE</u>				County: <u>LIBERTY</u>				Date: <u>9/1/2021</u>			
Analyst: <u>J. JACKSON J. PATRONIS</u>				Signature: <u>[Signature]</u>				STORET:			
Except where noted as "sp." species level identification required. *Genera that may require lab verification*								Lake units sampled (circle one group):			
Plants in bold = FLEPPC invasive exotic.								1, 4, 7, 10 2, 5, 8, 11			
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.								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. <u>leave at sp.</u>	1				✓	Hydrocotyle sp.					
Azolla filiculoides (A. caroliniana)						Hygrophila polysperma					
Baccharis sp.						*Hypericum fasciculatum <u>yes ID</u>	1	0	0	0	ID
Bacopa caroliniana						*Hypericum hypericoides					
Bacopa monnieri						*Hypericum myrtifolium					
Bidens laevis						Ilex cassine <u>sp glabra</u>	1				ID
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					
Cephalanthus occidentalis						*Juncus scirpoides					
Ceratophyllum demersum						Lachnanthes caroliniana <u>sp.</u>	1				ID
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 ✓	1				ID
* Cyperus odoratus						* Ludwigia peruviana					
* Cyperus surinamensis						*Ludwigia repens					
Cyrilla racemiflora	1	1				*Ludwigia					
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					
Diodia virginiana	1				✓	Lyonia lucida					
*Echinochloa crus-galli						Magnolia virginiana					
*Echinochloa muricatum						Mayaca fluviatilis	1	1	1		
Echinochloa walteri						Melaleuca quinquenervia					
Eclipta prostrata (E. alba)						Micranthemum glomeratum					
Egeria densa						Micranthemum umbrosum					
Eichhornia crassipes						Mikania scandens					
*Eleocharis <u>Sub vivip</u>	1	1	1	1	ID	Mimosa pigra					
*Eleocharis <u>sp? Robensii? (E. boryi)</u>	1	1	1	1	ID	Myrica cerifera					
Eleocharis cellulosa						<u>Juncus sp abortiva</u> (pelocarpus)	1				✓
Eleocharis equisetoides						<u>Brachiaria mutica</u> sp	1	1	1		✓
Eleocharis interstincta						<u>Ilex myrtifolia? glabra</u>					
*Eriocaulon compressum						<u>Ilex myrtifolia</u>					
*Eriocaulon decangulare											
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea <u>2 simplex sp</u>	1				✓ ID						
Gordonia lasianthus											

PD doesn't think it's 2 sp.
both panicum hemitomon

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: CAMEL LAKE

Date: 9/1/21

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						Sapum 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.	1	1	1	1		Scirpus cyperinus					
Nymphaea odorata	1	1	1	1		*Sesbania					
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora				1		Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrhiza					
Osmunda regalis						Taxodium sp. ascendens	1	1	1		
Panicum hemitomon	1	1	1	1	✓	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)	1				
Persea sp.						*Utricularia floridana	1	1	1	1	
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					
*Potamogeton pectinatus (Stuckenia pectinatus)						Rhynchospora 2 sp. microcephala					✓ ID
Proserpinaca pectinata						Salvinia sp. reticularis					✓ ID
*Rhexia sp.	1				✓						
*Rhynchospora comiculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea - 3 sp leave at sp	1				✓						ID
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											
Rhynchospora sp inundata	1				✓						ID
Myriophyllum sp laxum	1	1	1	1	✓						Des
Vase-like fruits - Rhexia	1				✓						ID
Sp.											