

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 77280 MACROPHYTE ID: 10331 LATITUDE: 30.27521 (N)
COUNTY: Liberty STORET #: 31010183 LONGITUDE: -84.9893 (W)
DATE: 10/28/16 TIME: _____ SAMPLING AGENCY: FDEP
SITE NAME: Camel Lake WBID: 1039A
FIELD ID/NAME: Camel Lake LAKE SIZE: _____ RQ: _____

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>60</u> Silviculture <u>40</u> Field/Pasture _____ Agricultural _____ Residential _____ Commercial _____ Industrial _____ Other (Specify) _____					LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: <u>not calculate</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 <u>19</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>18</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>20 19</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: <u>no WQ sampling</u> 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: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: _____ Mid-Depth: _____ Bottom: _____						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter ID: _____						Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☒ Tannic ☐ Green ☐ Slightly Turbid					
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☒ Organic smooth (muck) (middle) ☐ Other (Specify): _____						Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic					
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: <u>sun, mild, 70s. Would be good to return to collect WQ and meter parameters for Ref. project.</u>						Additional Notes: <u>sections 11 + 8</u> <u>sections 5 + 2</u> <u>no periphyton observed</u>					
SAMPLING TEAM: <u>D. Neal, Panek</u>						SIGNATURE: <u>Ashtynical</u>					
DATE: <u>10/28/16</u>											

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Camel Lake</u>	County: <u>Liberty</u>	Date: <u>10/28/16</u>
Analyst: <u>O'Neal, Panek</u>	Signature: <u>[Signature]</u>	STORET: <u>310/0183</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	11	Collected? (✓)	SPECIES	2	5	8	11	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					
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					
Cyrilla racemiflora						*Ludwigia					
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						Mimosa pigra					
*Eleocharis <u>Submersed vivip</u>						Myrica cerifera					
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis <u>intermedia</u> <u>angled, long</u>											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Camel Lake</u>					Date: <u>10/28/16</u>						
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	Collected? (✓)
Myriophyllum aquaticum						Salix caroliniana					
*Myriophyllum heterophyllum						Salvinia minima					
*Myriophyllum laxum <u>Native - 10/28/16</u>						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. <u>ascendens</u>					
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					
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea <u>AO confirmed</u>					✓						
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											