

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
 COUNTY: Orange STORET #: 20020505 LONGITUDE: _____
 DATE: 9/22/16 TIME: _____ SAMPLING AGENCY: 2IFL UEN
 SITE NAME: Johns Lake @ 0.23 mi. NW of center of Eastern Half WBID: 2473C
 FIELD ID/NAME: _____ LAKE SIZE: large RQ: n/a

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>35</u> Silviculture _____ Field/Pasture _____ Agricultural <u>15</u> Residential <u>50</u> Commercial _____ Industrial _____ Other (Specify) _____								LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: _____									
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy						Artificially Impounded ☐ Yes ☒ No			Land Use Source & Year: _____								
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy																	
STORMWATER INPUTS <u>7</u>		Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation 20 19 18 17 16				Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place 15 14 13 12 11				Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6				Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place 5 4 3 2 1			
LAKESIDE ALTERATIONS <u>9</u>		Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected) 20 19 18 17 16				Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected) 15 14 13 12 11				Many structures, roads or other human disturbance visible (50%-70% lakeside affected) 10 9 8 7 6				Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1			
BUFFER ZONE <u>7</u>		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20 19 18 17 16				89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer 15 14 13 12 11				50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10 9 8 7 6				< 29% of shoreline with >18m buffer 5 4 3 2 1			

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water: <u>Water samples associated w/ 20020277</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 _____ Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ 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: _____						Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☒ Clear ☐ Tannic ☐ Green SECCHI (M) _____ Total Station Depth (M) _____ VOB _____					
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☒ Sand/Silt ☐ Organic smooth (muck) Sample Taken? ☐ Yes ☐ No ☒ Vegetated ☐ Other (Specify): _____						Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____					
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 ☒ ☐ ☐ ☐					
Additional Notes: <u>Appears to be veg. management from homeowners, hyrilla in lake does not appear to be managed - kmw</u>											
Weather Conditions : <u>90's, clear</u>											
SAMPLING TEAM: <u>Mike Linger, Katie Williams, Julie Espy, Jordan Skaggs</u>						SIGNATURE: <u>K Williams</u>			DATE: <u>9/22/16</u>		

Waterbody: Johns Lake County: Orange Date: 9/22/14
 Analyst: Mike Linger, Katie Williams, J. Skaggs, J. Espy Signature: Mike Linger STORET: 20020277
 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	1	4	7	10	Collected? (✓)	SPECIES	1	4	7	10	Collected? (✓)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides		✓	✓	✓		Hydrilla verticillata	D/D/D/D				
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					
Cyrtilla 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 viviparous - fine flecked	✓		✓			Myrica cerifera					✓
Eleocharis cellulosa											
Eleocharis equisetoides						Sesbania herbacea		✓	✓		
Eleocharis interstincta						Cassia weed	✓				MKL
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium	✓										
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

* LVI conducted on east portion of Lake.

MKL

9/22/16
Johns Lake

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					
*Potamogeton pectinatus (Stuckenia pectinatus)						Vitis			✓	✓	
Proserpinaca pectinata						Vigna luteola (Peanut)				✓	
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia	✓	✓	✓	✓							
Sagittaria latifolia	✓	✓	✓	✓							

John's_Lake-2_(East Lobe)_vWBID_2873C

John's Lake 1 1, 4, 7, 10

