

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Jaddie bags</u>		County: <u>Highlands</u>		Date: <u>9/1/23</u>							
Analyst: <u>Andrew Luerig</u>		Signature: <u>Andrew Luerig</u>		STORET:							
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 <u>3, 6, 9, 12</u>							
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Acer rubrum	P					Gordonia lasianthus					
Acrostichum danaeifolium						Habenaria repens					
Alternanthera philoxeroides	P					Hydrilla verticillata					
Andropogon sp.						Hydrocotyle sp.	P				
Annona glabra						Hygrophila polysperma					
Azolla filiculoides (A. caroliniana)						*Hypericum fasciculatum					
Baccharis sp.						*Hypericum hypericoides					
Bacopa caroliniana						*Hypericum myrtifolium					
Bacopa monnieri						Ilex cassine					
Bidens laevis						Ipomoea aquatica					
Bidens mitis						Ipomoea sagittata					
Blechnum serrulatum						Itea virginica					
Boehmeria cylindrica						Juncus effusus					
Brasenia schreberi						*Juncus marginatus					
Cabomba caroliniana						*Juncus megacephalus					
Casuarina equisetifolia						Juncus repens					
Centella asiatica						*Juncus scirpoides					
Cephalanthus occidentalis						Lachnanthes caroliniana					
Ceratophyllum demersum						Leersia hexandra					
Chara sp.						Landoltia punctata (Spirodela punctata)					
Cladium jamaicense						Lemna sp.					
Cliftonia monophylla						Leucothoe racemosa (Eubotrys racemosa)					
Colocasia esculenta						Limnium spongia					
*Commelina						Limnophila sessiliflora					
Crinum americanum						Liquidambar styraciflua					
*Cyperus alternifolius (C. involucratus)						*Ludwigia arcuata					
Cyperus articulatus						*Ludwigia leptocarpa					
Cyperus blepharoleptos						*Ludwigia linearis					
Cyperus haspan						*Ludwigia octovalvis					
*Cyperus lecontei						*Ludwigia peruviana	P	P	P	P	
*Cyperus polystachyos						*Ludwigia repens					
*Cyperus odoratus						*Ludwigia					
*Cyperus surinamensis						Luziola fluitans (Hydrochloa carolinensis)					
Cyrtia racemiflora						Lyonia lucida					
Decodon verticillatus						Magnolia virginiana					
Diodia virginiana						Mayaca fluviatilis					
*Echinochloa crus-galli						Melaleuca quinquenervia					
*Echinochloa muricatum						Micranthemum glomeratum					
Echinochloa walteri						Micranthemum umbrosum					
Eclipta prostrata (E. alba)						Mikania scandens	P				
Egeria densa						Mimosa pigra					
Eichhornia crassipes						Myrica cerifera					
*Eleocharis baldwinii						<u>Sarya aquatica</u>				P	
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
Eleocharis vivipara											
*Eleocharis											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea											

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Site:						Date:					
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Myriophyllum aquaticum						Sapium sebiferum					
*Myriophyllum heterophyllum						Saururus cernuus					
*Myriophyllum laxum						Schinus terebinthifolius			P	P	
*Myriophyllum pinnatum						*Schoenoplectus californicus					
Myriophyllum spicatum						*Schoenoplectus pungens					
*Najas filifolia						*Schoenoplectus tabernaemontani (Scirpus validus)					
*Najas guadalupensis	P		P		✓	Scirpus cyperinus					
*Najas minor						*Sesbania					
Nelumbo lutea						Solidago sp.					
Nitella spp.						Sparganium americanum					
Nuphar sp.						Spartina bakeri					
Nymphaea odorata	P	P	P			Spirodela polyrhiza					
Nymphoides aquatica						Taxodium sp.					
Nyssa sylvatica var. biflora						Thalia geniculata					
Orontium aquaticum						Thelypteris palustris					
Osmunda cinnamomea						Triadenum virginicum					
Osmunda regalis						Typha sp.	P	P	P	P	
Panicum hemitomon			P			Urochloa mutica (Brachiaria mutica)					
Panicum repens	P	P	P			*Utricularia gibba (U. biflora)					
Paspalidium geminatum						*Utricularia floridana					
*Paspalum repens						*Utricularia foliosa					
Paspalum urvillei						*Utricularia inflata					
Peltandra sp.						*Utricularia purpurea					
Persea sp.						*Utricularia cornuta					
Pennisetum purpureum						*Utricularia radiata					
Phragmites australis						Vallisneria americana	P	P			
Pinus elliotii						*Websteria confervoides					
Pistia stratioides						Wedelia trilobata (Sphagneticola trilobata)					
Pluchea sp.						Wolffiella spp.					
*Persicaria glabrum (densiflorum)						Woodwardia virginica					
*Persicaria hydropiperoides						Xyris sp.					
*Persicaria punctatum						Zizania aquatica					
*Persicaria						Zizaniopsis milacea					
Pontederia cordata			P								
*Potamogeton diversifolius											
*Potamogeton illinoensis	P		P		✓						
*Potamogeton pusillus											
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											
Salix caroliniana			P								
Salvinia minima											
Sambucus canadensis											

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 27.29444
 COUNTY: Highlands STORET #: _____ LONGITUDE: -81.35452
 DATE: 9/7/2023 TIME: _____ SAMPLING AGENCY: SE-DISI
 SITE NAME: Saddlebags Lake Near Center WBID: 1932L
 FIELD ID/NAME: 64SE0179 LAKE SIZE: _____ RQ: 2023-06-05-30

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>10</u> Silviculture _____ Field/Pasture <u>20</u> Agricultural _____ Residential <u>60</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											
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy										Land Use Source & Year: _____											
STORMWATER INPUTS <u>6</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>5</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>8</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 ☒ 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: _____ Mid-Depth: _____ Bottom: _____										Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Meter: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: _____ Mid-Depth: _____ Bottom: _____										Clarity: ☐ Clear ☒ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☒ Green									
Meter ID: _____										SECCHI (M) <u>1.7</u> Total Station Depth (M) <u>3.8</u> VOB ☐									
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☒ Vegetated ☒ Sand/Silt ☐ Organic smooth (muck) ☐ 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 ☒ ☐ ☐ ☐									
Weather Conditions : _____										Additional Notes: _____									
SAMPLING TEAM: _____										SIGNATURE: _____									
DATE: _____										DATE: _____									

DEP Form FD 9000-6: Lake Habitat Assessment Field Sheet

STORET STATION NUMBER:	DATE (M/D/Y) 9/7/2023	LAKE NAME Lake Saddlebags		FIELD ID / NAME: 645E0179	
ECO-REGION:	COUNTY: Highlands	SAMPLING LOCATION/DESCRIPTION: Saddlebags Lake Near Center		LAKE SIZE:	
PARAMETER	No surface inflow or outflow present, very long water residence time, groundwater seepage dominates ☒	Surface water inflow present, but flow is rare, moderate to long water residence time ☐		Surface water inflow and outflow present (or outflow only), sometimes with visible flow, short water residence time ☐	
HYDROLOGY				Impounded, hydrology of system artificially controlled ☐	
Color	Very clear, uncolored water (benthic sampling appropriate) ☐	Water somewhat tannin stained (benthic sampling appropriate) ☐		Dark, discolored water (water color 20 PCU or higher) ☒	
	Optimal	Suboptimal		Marginal	
Secchi	Secchi >3 m Or VOB	Secchi(m)		Poor	
☐ 12	20 19 18 17 16	15 14 13 12 11		10 9 8 7 6	
Vegetation Quality	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa ☐ 8	Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants		Large masses (21%-40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats	
	20 19 18 17 16	15 14 13 12 11		10 9 8 7 6	
Stormwater Inputs	Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation ☐ 6	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	
	20 19 18 17 16	15 14 13 12 11		10 9 8 7 6	
Bottom Substrate Quality	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present ☐ 10	Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present		Moderate layer of CPOM/mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom	
	20 19 18 17 16	15 14 13 12 11		10 9 8 7 6	
Lakeside Adverse Human Alterations	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%) ☐ 5	Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected		Many structures, roads or other human disturbance visible (50%-70%) lakeside affected	
	20 19 18 17 16	15 14 13 12 11		10 9 8 7 6	
Upland Buffer Zone	Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer ☐ 8	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	
	20 19 18 17 16	15 14 13 12 11		10 9 8 7 6	
Adverse Watershed Land Use	Score the potential effects from adverse human land uses, based on a continuum of amount and type, with least to most adverse as follows: Native vegetation, Silviculture, Pasture or Citrus, Low Density Residential, Row Crops, Commercial, High Density Residential, Urban, Industrial ☐ 11				
	20 19 18 17 16	15 14 13 12 11		10 9 8 7 6	
TOTAL SCORE	COMMENTS: Lots of algae mats but SAV present				
ANALYSIS DATE:	ANALYST:	SIGNATURE:			
9/7/2023	Andrew Luerig				