

15E0163 Lake Placid 07/20/2023 W810 1938C

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Placid</u>	County: <u>Highlands</u>	Date:
Analyst: <u>SKOGGS, LUCING</u>	Signature: <u>[Signature]</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 3, 6, 9, 12

SPECIES	1	4	7	10	Collected? (✓)	SPECIES					Collected? (✓)
Acer rubrum	P		P			Gordonia lasianthus					
Acrostichum danaeifolium						Habenaria repens					
Alternanthera philoxeroides						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	P					Itea virginica					
Boehmeria cylindrica						Juncus effusus					
Brasenia schreberi						*Juncus marginatus					
Cabomba caroliniana						*Juncus megacephalus					
Casuarina equisetifolia						Juncus repens					
Centella asiatica						*Juncus scirpoides					
Cephalanthus occidentalis	P	P	P			Lachnanthes caroliniana					
Ceratophyllum demersum						Leersia hexandra		P			
Chara sp.						Landoltia punctata (Spirodela punctata)					
Cladium jamaicense						Lemna sp.					
Cliftonia monophylla						Leucothoe racemosa (Eubotrys racemosa)					
Colocasia esculenta						Limnobium spongia					
*Commelina						Limnophila sessiliflora					
Crinum americanum						Liquidambar styraciflua					
*Cyperus alternifolius (C. involucratus)						*Ludwigia arcuata					
Cyperus articulatus						*Ludwigia leptocarpa					
Cyperus blepharoleptos	P	P				*Ludwigia linearis					
Cyperus haspan						*Ludwigia octovalvis					
*Cyperus lecontei						*Ludwigia peruviana	P	P	P	P	
*Cyperus polystachyos						*Ludwigia repens					
*Cyperus odoratus				P		*Ludwigia					
*Cyperus surinamensis						Luziola fluitans (Hydrochloa carolinensis)					
Cyrtilla racemiflora						Lyonia lucida					
Decodon verticillatus						Magnolia virginiana			P		
Diodia virginiana						Mayaca fluviatilis					
*Echinochloa crus-galli						Melaleuca quinquenervia	P	P			
*Echinochloa muricatum						Micranthemum glomeratum					
Echinochloa walteri						Micranthemum umbrosum					
Eclipta prostrata (E. alba)						Mikania scandens	P				
Egeria densa						Mimosa pigra					
Eichhornia crassipes						Myrica cerifera	P				
*Eleocharis baldwinii											
Eleocharis cellulosa	P		P	P							
Eleocharis equisetoides											
Eleocharis interstincta											
Eleocharis vivipara											
*Eleocharis											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium	P	P	P	P							
*Fuirena											
Fuirena scirpoidea	P	P	P	P							

-glass-like conditions, high 80s

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FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

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

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

STORET STATION NUMBER:	DATE (M/D/Y) <u>7/20/23</u>	LAKE NAME <u>Lake Placid</u>		FIELD ID / NAME: <u>64SE0162</u>
ECO-REGION:	COUNTY: <u>Highlands</u>	SAMPLING LOCATION/DESCRIPTION:		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 ☐	Impounded, hydrology of system artificially controlled ☐
HYDROLOGY				
Color	Very clear, uncolored water (benthic sampling appropriate) ☐	Water somewhat tannin stained (benthic sampling appropriate) ☒	Dark, discolored water (water color 20 PCU or higher) ☐	Visibility extremely reduced due to high color ☐
	Optimal	Suboptimal	Marginal	Poor
Secchi 10	Secchi >3 m Or VOB 20 19 18 17 16	3 2.6 2.2 1.8 1.4 15 14 13 12 11	1.0 0.9 0.8 0.7 0.6 10 9 8 7 6	0.5 0.4 0.3 0.2 0.1 5 4 3 2 1
Vegetation Quality 10	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa 20 19 18 17 16	Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants 15 14 13 12 11	Large masses (21%- 40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats 10 9 8 7 6	Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed) 5 4 3 2 1
Stormwater Inputs 10	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
Bottom Substrate Quality 18	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present 20 19 18 17 16	Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present 15 14 13 12 11	Moderate layer of CPOM/ mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom 10 9 8 7 6	Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom 5 4 3 2 1
Lakeside Adverse Human Alterations 5	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%) 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
Upland Buffer Zone 8	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
Adverse Watershed Land Use 7	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 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1			
TOTAL SCORE				
COMMENTS:				
ANALYSIS DATE:		ANALYST:		SIGNATURE:

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 87368 MACROPHYTE ID: _____ LATITUDE: 27.24257
 COUNTY: Highlands STORET #: _____ LONGITUDE: -81.36425
 DATE: 7/24/2023 7/20/23 TIME: _____ SAMPLING AGENCY: DEP SEROC
 SITE NAME: Lake Placid near Center WBID: 1938C
 FIELD ID/NAME: 645E0163 LAKE SIZE: _____ RQ: 2023-07-17-SP

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural ☐ 23 ☐ Silviculture ☐ Field/Pasture ☐ 33 ☐ Agricultural ☐ 33 ☐ Residential ☐ 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 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 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 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: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: 0.3 30.9 8.00 7.74 103.7 137.6 0.06 Mid-Depth: 2.0 30.5 7.21 7.21 96.2 137.3 0.06 Bottom: 14.04 27.7 7.54 0.4 5.1 145.5 6.07				Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____			
Meter ID: <u>Hodor</u>				Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green			
Sediment Type: (may check more than one) ☒ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Sand/Silt ☐ Organic smooth (muck) ☐ 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 ☐ ☒ ☐ ☐			
Weather Conditions :				Additional Notes:			
SAMPLING TEAM: <u>Andrew Laering / Jordan Skaggs</u>				SIGNATURE: _____		DATE: <u>7/20/2023</u>	