



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV
Yes / No

WIN Station Name:	LAKE PLACID NEAR CENTER				Sample Date:	7/20/2023	
WIN / Field ID:	G4SE0163	ORG ID:	21FLWPB	ENR:	-	Latitude:	27.24257
County:	HIGHLANDS	WBID:	1938C	LAKE	3F	Longitude:	-81.36425
Receiving Body of Water:	-				RQ-	2023-07-17-58	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Andrew Luering	x		x		
Jordan Skaggs		x		x	x

Sampling Equipment				
x	Sample Container		Carboy	
	Dipper		Van Dorn	
	Syringe		Pole	
	Syringe Lot#	2298556	Filter Lot#	17441866
	Secchi Equipment ID:	Secchi Disc 1		
Collection Method				
	Wading		Canoe/Kayak	
	From Shore		Electric Motor	
		x	Gasoline Motor	
	Depth Measured With	Meter		

Water Level:	Normal
Flow:	NA
Matrix:	Fresh
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	No
Meter ID:	Hodor
Depth Gauge ID:	depth_gauge

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTth)
EST	1045	14.54	0.3	7.74	103.7	30.9	8	1.2	137.6	0.06
	1048		2	7.21	96.2	30.5	7.49		137.3	0.06
	1046		14.04	0.4	5.1	27.7	6.54		145.5	0.07

Biological Samples Collected: LVI

SBIO Visit ID:87368 HA ID:18552 RPS ID: Macrophyte ID:12491 LIMS Sample ID 2425969
In The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation				
	Type	Lot#	Expiration Date	pH Check				
Microbiology								
Chlorophyll	CHLSUITE-W	ICE						
Physical/Aggregate	ALKALINITY, TURBIDITY, W-F, W-TSS	ICE						
Nutrients	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS	ICE						
Filtered Nutrients	W-PO4-F	Field Filtered 0.45 µm Filter	ICE		Syringe Lot#:2298556; Filter Lot#:17441866			
Acid Preserved Nutrients	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	ICE	H2SO4*	SA3013020	01/25/2024	H2SO4 pH<2		
Metals	W-ICPMS	W-ICP	W-HARD	ICE	HNO3**	NA2230040	09/01/2023	HNO3 pH<2
Organics (LC)	W-E8321-DI	W-E8321-MS						
Macroinvertebrates								
Organics (GC)	W-PSNP-TQ	W-TR-SQ-R		Ice	*2.0 ml of H2SO4 Used Unless Noted Otherwise **2.0 ml of HNO3 Used Unless Noted Otherwise			
Molecular								
Periphyton								
Phytoplankton								
BOD								
DOC					SyringeLot#		FilterLot#	
Other(s)								
Field Comments:								
Comments on COC:								
Relinquish Date:	07/20/2023	Signature:						

LIMS EVENT ID: SE-DIST-2023-07-21-03

WIN Import ID: 42421

Enter Field Parameters, Verify Station ID In LIMS DMT: CH 07/26/2023

QC Station ID, Field Parameters In LIMS DMT: AL 08/30/2023

Save Field Sheets on Network: CH 07/26/2023 (Initials/Date)

Migrate Data to WIN: AL 08/30/2023 (Initials/Date)

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

1

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) 7/20/23	LAKE NAME Lake Placid		FIELD ID / NAME: 64SE0162	
ECO-REGION:	COUNTY: Highlands	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	Secchi >3 m Or VOB	3 2.6 2.2 1.8 1.4	1.0 0.9 0.8 0.7 0.6	0.5 0.4 0.3 0.2 0.1	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	
Vegetation Quality	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa ☐	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 ☐	Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed) ☐	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	
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	
Bottom Substrate Quality	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present ☐	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 ☐	Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom ☐	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	
Lakeside Adverse Human Alterations	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%) ☐	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	
Upland 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	
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 ☐				
	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:**
COUNTY: Highlands **STORET #:**
DATE: 7/24/2023 7/20/23 **TIME:**
SITE NAME: Lake Placid near Center **SAMPLING AGENCY:** DEP SEROC
FIELD ID/NAME: 645E0163 **WBID:** 1938C
LAKE SIZE: **RQ:** 2023-07-17-56

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)														
33			33	33																	
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										
		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 _____ 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: 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								Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green SECCHI (M) 1.2 Total Station Depth (M) 14.54 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:															
Weather Conditions :															
SAMPLING TEAM: Andrew Laering / Jordan Skaggs								SIGNATURE:				DATE: 7/20/2023			