



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter
Passed End
of Day CCV

Yes / No

WIN Station Name:	Lake Sampson Center				Sample Date:	8/30/2022	
WIN / Field ID:	G1NE0936	ORG ID:	21FLA	ENR:	-		
County:	Bradford	WBID:	3598D	LAKE	3F		
Receiving Body of Water:	Sampson River				RQ-	2022-08-15-31	
Latitude:	29.92799				Longitude:	-82.18759	

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Jeremy Parrish		x		x	x
Katherine Halbert	x		x		

Sampling Equipment			
x	Sample Container	Carboy	
	Dipper	Van Dorn	
	Syringe	x	Pole NA
Syringe Lot#		Filter Lot#	R1eb01329
Secchi Equipment ID:		D#4	
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:	Desi

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	1020	3.004	0.3	7.03	93	29.9	7.32	0.5	115.3	0.05
	1021		2	5.09	66.2	29	6.83		105.8	0.05
	1018		2.504	3.27	42.4	28.6	6.47		94.8	0.04

Biological Samples Collected: None

SBIO Visit ID: HA ID: RPS ID: Macrophyte ID: LIMS Sample ID Entered Into The Macrophyte Module:

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation			
				Type	Lot#	Expiration Date	pH Check
Microbiology							
Chlorophyll	CHLSUITE-W			ICE			
Physical/Aggregate Nutrients	ALKALINITY, TURBIDITY, W-F, W-TSS			ICE			
Filtered Nutrients	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			ICE			
Acid Preserved Nutrients	W-PO4-F Field Filtered 0.45 µm Filter			ICE			
Metals	W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP			ICE	H2SO4*	Sa2145160	6/3/23
Organics (LC)	W-ICPMS	W-ICP	W-HARD	ICE	HNO3**	Na1105100	6/7/23
Macroinvertebrates	W-E8321-DI	W-E8321-MS					
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							
Other(s)							
Field Comments:							
Comments on COC:							
Relinquish Date:	08/30/2022	Signature:					

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Save Field Sheets on Network: Migrate Data to WIN:

DEP FORM PD 9096-27 LAKE VEGETATION INDEX FIELD SHEET

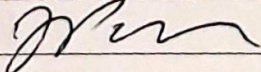
Watershed <u>Simpson Lake</u>		County <u>Franklin</u>		Date <u>06/23/2011</u>							
Analyst <u>Tony Lamb / B. Pans</u>		Signature <u>[Signature]</u>		STORE # <u>6</u>							
Excerpt where noted as "sp." species level identification required. "Genera that may require lab verification" Plants in bold: FLEPPC invasive exotic.				Lake units sampled (circle one group) 1 2 3 4 5 6 7 8 9 10 <u>1 2 3 4 5</u>							
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	3	6	9	12	Collected?	SPECIES	3	6	9	12	Collected?
<i>Acer rubrum</i>	✓	✓	✓	✓	(1)	<i>Habenaria repens</i>					
<i>Alternanthera philoxeroides</i>						<i>Hydrilla verticillata</i>	✓	✓	✓	✓	
<i>Andropogon</i> sp.				✓		<i>Hydrocotyle</i> sp.					
<i>Azolla filiculoides</i> (A. caroliniana)				✓		<i>Hygrophila polysperma</i>					
<i>Baccharis</i> sp.						<i>*Hypericum fasciculatum</i>					
<i>Bacopa caroliniana</i>	✓					<i>*Hypericum hypericoides</i>					
<i>Bacopa monnieri</i>						<i>*Hypericum myrsinifolium</i>					
<i>Bidens laevis</i>						<i>Ilex cassine</i>					
<i>Bidens miss</i>						<i>Ipomoea aquatica</i>					
<i>Blechnum serrulatum</i>						<i>Ipomoea sagittata</i>					
<i>Boehmeria cylindrica</i>						<i>Itea virginica</i>					
<i>Brasenia schreberi</i>						<i>Juncus effusus</i>					
<i>Cabomba caroliniana</i>						<i>*Juncus marginatus</i>					
<i>Casuarina equisetifolia</i>						<i>*Juncus megacephalus</i>					
<i>Centella asiatica</i>	✓					<i>Juncus repens</i>					
<i>Cephalanthus occidentalis</i>	✓	✓	✓	✓		<i>*Juncus scirpoides</i>					
<i>Ceratophyllum demersum</i>	✓		✓	✓		<i>Lachnanthes caroliniana</i>					
<i>Chara</i> sp.						<i>Leersia hexandra</i>					
<i>Cladium jamacense</i>						<i>Landoltia punctata</i> (<i>Spirodela punctata</i>)					
<i>Citronia monophylla</i>						<i>Lemna</i> sp.					
<i>Colocasia esculenta</i>						<i>Leucothoe racemosa</i> (<i>Eubotrys racemosa</i>)					
<i>*Commelina</i>						<i>Limnium spongia</i>					
<i>Cyrtus americanum</i>						<i>Limnophila sessiliflora</i>					
<i>*Cyperus alternifolius</i> (C. involutus)						<i>Liquidambar styraciflua</i>					
<i>Cyperus articulatus</i>						<i>*Ludwigia arcuata</i>					
<i>Cyperus haspan</i>	✓	✓	✓	✓		<i>*Ludwigia leptocarpa</i>					
<i>*Cyperus lecontei</i>	✓			✓		<i>*Ludwigia linearis</i>					
<i>*Cyperus polystachyos</i>						<i>*Ludwigia octovalvis</i>					
<i>*Cyperus odoratus</i>				✓		<i>*Ludwigia peruviana</i>				✓	
<i>*Cyperus surinamensis</i>						<i>*Ludwigia repens</i>					
<i>Cynila racemiflora</i>						<i>*Ludwigia</i>					
<i>Decodon verticillatus</i>						<i>Luzula fluitans</i> (<i>Hydrochloa carolinensis</i>)					
<i>Drosera virginiana</i>						<i>Lyonia lucida</i>					
<i>*Echinocloa crus-galli</i>						<i>Magnolia virginiana</i>					
<i>*Echinocloa muricata</i>						<i>Mayaca fluviatilis</i>					
<i>Echinocloa walteri</i>	✓	✓	✓			<i>Melaleuca quinquenervia</i>					
<i>Eclipta prostrata</i> (E. alba)						<i>Micranthemum glomeratum</i>					
<i>Egeria densa</i>						<i>Micranthemum umbrosum</i>					
<i>Eichhornia crassipes</i>	✓		✓	✓		<i>Mikania scandens</i>					
<i>*Eleocharis baltica</i>						<i>Mimosa pigra</i>					
<i>*Eleocharis vivipara</i>		✓				<i>Myrica perfoliata</i>					
<i>Eleocharis cellulosa</i>		✓	✓			<i>Ludwigia linearis</i>	✓	✓	✓	✓	
<i>Eleocharis equisetifolia</i>						<i>Eleocharis</i> sp.					✓
<i>Eleocharis intermedia</i>											
<i>*Eleocharis longicaulis</i>											
<i>*Eleocharis longicaulis</i>											
<i>Eupatorium capillifolium</i>	✓		✓								
<i>*Furra</i>											
<i>Furra purpurea</i>				✓							
<i>Gentiana lasiantha</i>											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Sampson Lake</u>						Date: <u>08/30/2022</u>					
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	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 sp.					
Nymphoides aquatica						Solidago sp.		✓			
Nyssa sylvatica var. biflora						Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrhiza					
Osmunda regalis						Taxodium sp.	✓	✓	✓	✓	
Panicum hemitomon	C	✓	✓	✓		Thalia geniculata					
Panicum repens	C	✓	✓	C		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	✓	D	✓	C	✓	Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata						Scirpus validus		✓	✓		
*Rhexia						Sesbania herb.	✓			✓	
*Rhynchospora corniculata						Sesbania Puni.	✓				
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans				✓							
Sabal palmetto											
Sacciolepis striata	✓										
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis				✓							
Sagittaria lancifolia											
Sagittaria latifolia											

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

STORET STATION NUMBER: GIN E0936	DATE (M/D/Y) 08/30/2022	LAKE NAME Sampson Lake		FIELD ID / NAME:	
ECO-REGION:	COUNTY: Bradford	SAMPLING LOCATION/DESCRIPTION: 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 ☒	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 10	Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants 10	Large masses (21%-40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats 10	Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed) 5	
	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 10	Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place 10	Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10	Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place 5	
	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 15	Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present 15	Moderate layer of CPOM/mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom 10	Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom 5	
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	
Lakeside Adverse Human Alternations	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%) 16	Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected 16	Many structures, roads or other human disturbance visible (50%-70%) lakeside affected 10	Highly developed or disturbed (>70% of lakeside affected) 5	
	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 16	89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer 16	50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10	< 29% of shoreline with >18m buffer 5	
	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 16				
	20 19 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1	

TOTAL SCORE 88	COMMENTS: Strong inflow from connect corrector ditch
ANALYSIS DATE: 08/30/2022	SIGNATURE: 

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
 COUNTY: _____ STORET #: 61NE0936 LONGITUDE: _____
 DATE: 8/30/22 TIME: 1020 SAMPLING AGENCY: _____
 SITE NAME: Simpson Lake Center WBID: 3598D
 FIELD ID/NAME: _____ LAKE SIZE: _____ RQ: _____

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)														
☐	☐	☐	☐	☐	☐	☐	☐														
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										
<u>10</u>		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)										
<u>16</u>		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										
<u>16</u>		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 # <u>SA2145160</u> Exp. Date: <u>06/02/23</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☐ Normal ☒ High										Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____									
Meter Readings: Top: <u>3</u> <u>29.9</u> <u>7.32</u> <u>7.03</u> <u>93</u> <u>115.3</u> <u>0.05</u> Mid-Depth: <u>2.0</u> <u>29.0</u> <u>6.83</u> <u>5.09</u> <u>66.2</u> <u>105.8</u> <u>0.05</u> Bottom: <u>2.504</u> <u>28.6</u> <u>6.47</u> <u>3.27</u> <u>42.4</u> <u>94.8</u> <u>0.04</u>										Water Surface Oils: ☐ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Meter ID: _____										Clarity: ☐ Clear ☒ Turbid ☐ Slightly Turbid Color: ☒ Tannic ☐ Clear ☐ Green									
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☒ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____										SECCHI (M) <u>0.5</u> Total Station Depth (M) <u>2.5</u> VOB ☐									
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 ☐ ☒ ☐ ☐										Additional Notes:									

Weather Conditions:

James / B Davis / Fortnn Vilhzen / Katie Harber
 SAMPLING TEAM: James SIGNATURE: James DATE: 8/30/22