



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DRING PROGRAM FIELD SHEET

PAGE 1 OF 1

Field ID:



G1NE0581 08302017

March 2017

Data Qualified?

Yes / No

Alligator Lake
south lobe

STORET



21030102

WBID: 3516A

Latitude: 30.154444

Date: 8/30/2017
(mm/dd/yyyy)

County: Columbia RQ - 2017 - 08 21-43 ORG ID: 21FLA

Longitude: 82.63583333

(Decimal Degrees)

(Decimal Degrees)

Receiving Body of Water:

Field ID: See Label

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Parrish								
A. Kalmbacher								

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Equipment ID OrthoKit # 3		

Collection Method	
☐ Wading	☐ Via Boat
☐ From Shore	☐ Canoe/Kayak
☐ Other (note below)	☒ Electric Motor
	☐ Gasoline Motor

Water Level: Dry / Pooled / Low / Normal / High / Flooded	Matrix: Fresh / Marine / DI
Meter ID# 4514	Photos: Yes / No
	Tide Falling: Yes / No / NA

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1030	0.3	1.6	5.9	75.3	7.46	0.04	1.0L	81	27.4
CEN										

Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other

SBIO ID Numbers: SBIO-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4			☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Notes:

Overgrowth of hydrilla
> 50% coverage

Place Label Here
(If Available)

Signature:

A. Kalmbacher

Date:

8-30-2017

Field Parameters Entered into LIMS:

JP 9/5/17
(Initials/Date)

Field Parameters QC in LIMS:

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

Contains 1:1 Sulfuric Acid
Lot No. SA7163030
Expires: 06/12/18
See Safety Data Sheet (SDS)

5010 77890

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Alligator Lake, South Lobe</u>		County: <u>Columbia</u>		Date: <u>8-30-2017</u>							
Analyst: <u>J. Parrish / A. Kalmbacher</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 <u>3, 6, 9, 12</u>							
SPECIES	9	12	3	6	Collected? (✓)	SPECIES	9	12	3	6	Collected? (✓)
Acer rubrum	X	X	X	X		Habenaria repens					
Alternanthera philoxeroides	X	X	X	X		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	X	X	X	X		*Juncus scirpoides					
Ceratophyllum demersum	X	X	X	X		Lachnanthes caroliniana					
Chara sp.						Leersia hexandra					
Cladium jamaicense						Landoltia punctata (Spirodela punctata)					
Cliftonia monophylla						Lemna sp.	X	X	X	X	
Colocasia esculenta	X			X		Leucothoe racemosa (Eubotrys racemosa)					
*Commelina						Limnium spongia	X	X	X	X	
Crinum americanum						Limnophila sessiliflora					
*Cyperus alternifolius (C. involucratus)						Liquidambar styraciflua					X
Cyperus articulatus						*Ludwigia arcuata					
Cyperus haspan						*Ludwigia leptocarpa	X	X	X	X	
*Cyperus lecontei						*Ludwigia linearis					
*Cyperus polystachyos						*Ludwigia octovalvis					
*Cyperus odoratus						*Ludwigia peruviana					
*Cyperus surinamensis						*Ludwigia repens					X
Cyrilla racemiflora						*Ludwigia hexandra	X	X	X	X	
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					X
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	X	X	X	X		Mikania scandens					
*Eleocharis baldwinii						Mimosa pigra					
*Eleocharis						Myrica cerifera	X	X	X	X	
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium				X							
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Alligator Lake South Lobe</u>					Date: <u>8-30-2017</u>						
SPECIES	9	12	3	6	Collected? (✓)	SPECIES	9	12	3	6	Collected? (✓)
Myriophyllum aquaticum	X	X	X			Salix caroliniana	X	X	X	X	
*Myriophyllum heterophyllum						Salvinia minima	X	X	X		
*Myriophyllum laxum						Sambucus canadensis					
*Myriophyllum pinnatum						Sapium sebiferum	X				
Myriophyllum spicatum						Saururus cernuus					
*Najas filifolia						Schinus terebinthifolius					
*Najas guadalupensis						*Schoenoplectus californicus					
*Najas minor						*Schoenoplectus pungens					
Nelumbo lutea	X			X		*Schoenoplectus tabernaemontani (Scirpus validus)			X		
Nitella spp.						Scirpus cubensis (Oxycaryon cubense)	X	X	X		
Nuphar sp.						Scirpus cyperinus			X		
Nymphaea odorata			X			*Sesbania					
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora						Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrhiza					
Osmunda regalis						Taxodium sp.	X	X	X	X	
Panicum hemitomon	X	X	X	X		Thalia geniculata					
Panicum repens						Thelypteris palustris					
Paspalidium geminatum						Triadenum virginicum					
*Paspalum repens	X					Typha sp.	X	X	X	X	
Paspalum urvillei				X		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	X	X				*Utricularia cornuta					
Pluchea sp.						*Utricularia radiata					
*Polygonum glabrum (densiflorum)	X	X	X	X		Vallisneria americana					
*Polygonum hydropiperoides						*Websteria confervoides					
*Polygonum punctatum						Wedelia trilobata (Sphagneticola trilobata)					
*Polygonum						Wolffiella spp.					
Pontederia cordata	X	X	X	X		Woodwardia virginica					
*Potamogeton diversifolius						Xyris sp.					
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata	X	X	X	X							
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
Lake Habitat Assessment Field Sheet

Shio 77590

STORET STATION NUMBER:	DATE (M/D/Y) 8-30-2017	LAKE NAME Alligator Lake S. Lake		FIELD ID / NAME:
ECO-REGION: Peninsula	COUNTY: Columbia	SAMPLING LOCATION/DESCRIPTION:		LAKE SIZE:
PARAMETER HYDROLOGY	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 ☐
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	71			
COMMENTS:	Overgrowth of hydrilla > 50% navigation difficult			
ANALYSIS DATE:	ANALYST:		SIGNATURE:	
8-30-2017	J. Parrish / A. K. Imbacher		A. K. Imbacher	

SAMPLE ID: 77890 MACROPHYTE ID: _____
 COUNTY: Columbia STORET #: 21030102
 DATE: 8-30-2017 TIME: 1000
 SITE NAME: Alligator Lake
 FIELD ID/NAME: GN20581

LATITUDE: ~~30.9~~ 30.154444
 LONGITUDE: 82.63583333
 SAMPLING AGENCY: FDEP/NE ROC
 WBID: _____
 LAKE SIZE: _____ RQ: 2017-08-21-43

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)														
10				40			Wetland 30						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>13</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>11</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>10</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: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No 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: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat. (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td>0.3</td> <td>27.4</td> <td>7.46</td> <td>5.9</td> <td>75.3</td> <td>81</td> <td>0.009</td> </tr> <tr> <td>Mid-Depth:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bottom:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Meter ID: <u>YSI #4</u>			Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)	Top:	0.3	27.4	7.46	5.9	75.3	81	0.009	Mid-Depth:								Bottom:								Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green <i>very slight</i> SECCHI (M) <u>> 1.0</u> Total Station Depth (M) <u>1.6</u> VOB ☐	
	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)																												
Top:	0.3	27.4	7.46	5.9	75.3	81	0.009																												
Mid-Depth:																																			
Bottom:																																			
Sediment Type: (may check more than one) ☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____		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: <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>Absent</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Nuisance Plants</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>Submersed Plants</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>Exotic Apple Snails</td> <td>☐</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>			Absent	Rare	Common	Abundant	Periphyton	☐	☐	☒	☐	Nuisance Plants	☐	☐	☐	☒	Submersed Plants	☐	☐	☐	☒	Exotic Apple Snails	☐	☐	☐	☐							
	Absent	Rare	Common	Abundant																															
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Submersed Plants	☐	☐	☐	☒																															
Exotic Apple Snails	☐	☐	☐	☐																															
Weather Conditions: <i>Partly Cloudy ~90°</i>		Additional Notes: 																																	
SAMPLING TEAM: <i>J. Parrish / A. Kalmbacher</i>		SIGNATURE: <i>[Signature]</i> DATE: <i>8-30-2017</i>																																	