FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

February 2016

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Data Qualified? Yes / No

STORET Station Name: Alligator Lake - Center of North Half of Lake Date: 04/20/2016 (mm/dd/yyyy)

STORET Station ID: 26010038 Latitude: 28.21111 (Decimal Degrees)

WBID: 1619A RQ - 2016-04-18-30 ORG ID: 21 FL CEN Longitude: 81.20667 (Decimal Degrees)

Receiving Body of Water: _____ Field ID: G4CE0111 County: Osceola

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Mike Liner	✓		✓		
Mike Brennan	✓	✓		✓	✓

Sampling Equipment

- [x] Sample Container
- [ ] Carboy
- [ ] Dipper
- [ ] Van Dorn
- [ ] Syringe
- [ ] Other _____
- [ ] Pole

Equipment ID _____

Collection Method

- [ ] Wading
- [ ] From Shore
- [ ] Other (note below)

Via Boat
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [x] Gasoline Motor

Water Level: Dry / Low / (Normal) / High / Flooded

Matrix: (Fresh) / Marine / DI

Meter ID# 11C / 11E **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)	12:37	0.3	7.9	8.8	105	6.9	0.06	1.2	133	24.3
CEN		7.4		8.5	100	6.6	0.06		133	23.3

Biological Samples Collected: None HA SCI LVS RPS LVI Other _____

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[x] Ice [x] H_2SO_4			[x] <2
Metals	[ ] W-ICPMS [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
BOD	[ ] BOD-UNIN	[ ] Ice			
Physical/Aggregate (Kit A/C)	[x] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[x] Ice			
Physical/Aggregate (Kit B/D)	[ ] Alkalinity / W-F / W-TSS / TURBIDITY	[ ] Ice			
Macroinvertebrates	[ ] MI-FW-QLDC	[ ] Formalin			
Microbiology	[ ] E Coli [ ] F Coli [ ] Entero [ ] QPCR	[ ] Ice			
Periphyton	[ ] ALGAE-ID	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-AHERB-AA [ ] W-PYR-AA-R [ ] W-PC-AA-SF [ ] W-UHERB-AA [ ] W-GLYPH	[ ] Ice [ ] Other			

Contains 1:1 Sulfuric Acid SA-5259020 EXP: 09/16/16 Warning! See MSDS

Sticker(s) Here

Notes:

RQ-2016-04-18-30
Date: 04/20/16
Time:

G4CE0111
Field ID
STORET
26010038

Signature: Mike Liner Date: 4/20/16

Field Parameters Entered into LIMS: CMD 4/22/16 (Initials/Date) Field Parameters QC in LIMS: KMW 4/22/16 (Initials/Date)

Date Migrated to STORET: JR 6-1-16 (Initials/Date) Field Sheets Scanned/Saved: JR 6-1-16 (Initials/Date)

SAMPLE ID: 76365 MACROPHYTE ID: 9862 LATITUDE:

COUNTY: Osceola STORET #: 26010038 LONGITUDE:

DATE: 4/20/16 TIME: 11:00 SAMPLING AGENCY: FDEP - CEROC

SITE NAME: Alligator Lake - Center of North Half of Lake WBID: 1619A

FIELD ID/NAME: G4CEO111 LAKE SIZE: Med - Large RQ: 2016-04-18-30

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS):

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)

LDI:

Land Use Source & Year:

Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy

Artificially Impounded ☐ Yes ☒ No

STORMWATER INPUTS 13	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 11	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 14	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 # 52-5702-0 Exp. Date: 9/16/16

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	24.3	6.9	8.8	105	133	0.06
Mid-Depth:							
Bottom :	7.4	23.3	6.6	8.5	100	133	0.06

Meter ID: 11C / 11E

Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid

Color: ☐ Clear ☒ Tannic ☐ Green

SECCHI (M) 1.2

VOB ☐

Total Station Depth (M) 7.9

Sediment Type: (may check more than one)

☒ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated

☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify):

Sample Taken? ☐ Yes ☒ No

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 : 80's partly cloudy

SAMPLING TEAM: Mike Linger, Mike Drennan **SIGNATURE:** **DATE:** 4/20/16

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

STORET STATION NUMBER:	DATE (M/D/Y): 4/20/16	LAKE NAME: Alligator		FIELD ID / NAME:
ECO-REGION: Peninsula	COUNTY: Osceola	SAMPLING LOCATION/DESCRIPTION: Lake Center		LAKE SIZE: 3K+ acres
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 10	Secchi >3 m / Secchi(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 12	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 (duck-weed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed) 5 | 4 | 3 | 2 | 1
Stormwater Inputs 13	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 Alternations 11	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 14	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 14	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	92	COMMENTS:

ANALYSIS DATE:	ANALYST:	SIGNATURE:

Form FD9000-27 **Lake Vegetation Index Data Sheet** (04-21-11)

Waterbody: Alligator Lake - Center of North Half	County: Osceola		Date: 4/20/16
Analyst: Mike Liyer, Mike Dreamer, ?? of Lake	Signature: [signature]		STORET: 26010038

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) [circled] / 3, 6, 9, 12

SPECIES	1 (8)	2 (5)	3 (2)	4 (11)	Collected? (√)
Acer rubrum	/	/	/	/	
Alternanthera philoxeroides	/				
Andropogon sp.				/	
Azolla filiculoides (A. caroliniana)					
Baccharis sp.					
Bacopa caroliniana				/	
Bacopa monnieri					
Bidens laevis				/	
Bidens mitis					
Blechnum serrulatum				/	
Boehmeria cylindrica					
Brasenia schreberi					
Cabomba caroliniana					
Casuarina equisitifolia					
Centella asiatica					
Cephalanthus occidentalis		/	/	/	
Ceratophyllum demersum					
Chara sp.					
Cladium jamaicense			/		
Cliftonia monophylla					
Colocasia esculenta					
*Commelina					
Crinum americanum					
***Cyperus alternifolius** (C. involucratus)					
Cyperus articulatus					
Cyperus haspan					
*Cyperus lecontei					
*Cyperus polystachyos					
*Cyperus odoratus					
*Cyperus surinamensis					
Cyrilla racemiflora					
Decodon verticillatus					
Diodia virginiana					
*Echinochloa crus-galli					
*Echinochloa muricatum					
Echinochloa walteri					
Eclipta prostrata (E. alba)					
Egeria densa					
Eichhornia crassipes					
*Eleocharis baldwinii					
*Eleocharis Viviparous - Free floating	/				
Eleocharis cellulosa					
Eleocharis equisetoides					
Eleocharis interstincta					
*Eriocaulon compressum				/	
*Eriocaulon decangulare					
Eupatorium capillifolium					
*Fuirena					
Fuirena scirpoidea	/	/	/	/	
Gordonia lasianthus					

SPECIES	1 (8)	2 (5)	3 (2)	4 (11)	Collected? (√)
Habenaria repens					
Hydrilla verticillata					
Hydrocotyle sp.		/		/	
Hygrophila polysperma					
*Hypericum fasciculatum					
*Hypericum hypericoides					
*Hypericum myrtifolium					
Ilex cassine					
Ipomoea aquatica					
Ipomoea sagittata					
Itea virginica					
Juncus effusus					
*Juncus marginatus					
*Juncus megacephalus					
Juncus repens					
*Juncus scirpoides					
Lachnanthes caroliana					
Leersia hexandra					
Landoltia punctata (Spirodela punctata)					
Lemna sp.					
Leucothoe racemosa (Eubotrys racemosa)					
Limnobium spongia					
Limnophila sessiliflora					
Liquidamber styraciflua			/		
*Ludwigia arcuata					
*Ludwigia leptocarpa					
*Ludwigia linearis					
*Ludwigia octovalvis					
***Ludwigia peruviana**					
*Ludwigia repens	/				
*Ludwigia native	/		/	/	
Luziola fluitans (Hydrochloa carolinensis)					
Lyonia lucida					
Magnolia virginiana					
Mayaca fluviatilis	/	/	C	/	
Melaleuca quinquenervia					
Micranthemum glomeratum					
Micranthemum umbrosum					
Mikania scandens					
Mimosa pigra					
Myrica cerifera	/	/	/	/	
Hibiscus grandiflorus			/	/	
~~Unknown rhizome/separate w. ??~~	/		/	~~[illegible]~~ CAD	/ MKL
~~Sagittaria subulata?~~ Val					

SPECIES	8	5	2	11	Collected? (√)
	1	2	3	4	
Myriophyllum aquaticum					
*Myriophyllum heterophyllum					
*Myriophyllum laxum					
*Myriophyllum pinnatum					
Myriophyllum spicatum					
*Najas filifolia					
*Najas guadalupensis	/	/	/	/	
*Najas minor					
Nelumbo lutea					
Nitella spp.					
Nuphar sp.	/	/	/	/	
Nymphaea odorata	/	/	/	/	
Nymphoides aquatica	/	/	/	/	
Nyssa sylvatica var. biflora					
Orontium aquaticum					
Osmunda cinnamomea					
Osmunda regalis					
Panicum hemitomon					
Panicum repens	/D	/D	/C	/	
Paspalidium geminatum					
*Paspalum repens					
Paspalum urvillei					
Peltandra sp.					
Persea sp.					
Pennisetum purpureum					
Phragmites australis					
Pinus elliottii					
Pistia stratioides					
Pluchea sp.					
*Polygonum glabrum (densiflorum)					
*Polygonum hydropiperoides					
*Polygonum punctatum					
*Polygonum					
Pontederia cordata	/	/	/	/	
*Potamogeton diversifolius					
*Potamogeton illinoensis					
*Potamogeton pusillus					
*Potamogeton pectinatus (Stuckenia pectinatus)					
Proserpinaca pectinata					
*Rhexia					
*Rhynchospora corniculata					
*Rhynchospora inundata					
Rhynochospora tracyi					
Ricciocarpus natans					
Sabal palmetto					
Sacciolepis striata	/	/	/	/	
*Sagittaria filiformis					
*Sagittaria graminea					
*Sagittaria isoetiformis					
Sagittaria lancifolia	/	/	/	/	
Sagittaria latifolia					

SPECIES	8	5	2	1	Collected? (√)
	1	2	3	4	
Salix caroliniana	/	/	/	/	
Salvinia minima				/	
Sambucus canadensis					
Sapium sebiferum					
Saururus cemuus					
Schinus terebinthifolius					
*Schoenoplectus californicus	[illegible]	/	/		
*Schoenoplectus pungens					
*Schoenoplectus tabernaemontani (Scirpus validus)					
Scirpus cubensis (Oxycaryon cubense)					
Scirpus cyperinus					
*Sesbania					
Solidago sp.					
Sparganium americanum					
Spartina bakeri		/	/	/	
Spirodela polyrhiza					
Taxodium sp.	/	/	/	/	
Thalia geniculata					
Thelypteris palustris					
Triadenum virginicum					
Typha sp.	/		/	/	
Urochloa mutica (Brachiaria mutica)					
*Utricularia gibba (U. biflora)					
*Utricularia floridana					
*Utricularia foliosa	/				
*Utricularia inflata					
*Utricularia purpurea					
*Utricularia cornuta					
*Utricularia radiata					
Vallisneria americana	/		/		
*Websteria confervoides					
Wedelia trilobata (Sphagneticola trilobata)					
Wolffiella spp.					
Woodwardia virginica					
Xyris sp.					
Zizania aquatica					
Zizaniopsis milacea					

Alligator Lake 3176

Ramp: 28.173723
-81.236598
★ = WQ