DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 814716 | MACROPHYTE ID: | LATITUDE: 30° 21' 50.383"
COUNTY: Leon | STORET #: LEOLLA1 | LONGITUDE: -84° 22' 55.0076"
DATE: 8/17/2020 | TIME: 1240 | SAMPLING AGENCY: AEQA
SITE NAME: Lost Lake Alternate | WBID: 1006
FIELD ID/NAME: LOSTLKALT | LAKE SIZE: 4.3 acres | RQ: 2020-08-17-25

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)
40	60						

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer): LDI: not avail.

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: 17	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: 16	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: 20	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 # SA9354050 Exp. Date: 12/20/2020

Alkalinity Sample Taken? ☑ Yes ☐ No

Water Level ☑ Low ☐ Normal ☐ High very low

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:	.2m	33.0	5.25	6.74	93.7	18.2	
Mid-Depth:	1.0m	31.8	5.19	7.20	98.1	18.0	
Bottom:	1.9m	31.7	5.23	6.21	84.6	18.1	

Meter ID: YSI 154185

Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☑ Slightly Turbid

Color: ☐ Clear ☐ Tannic ☑ Green

SECCHI (M): 2.2 | VOB ☐

Total Station Depth (M): 2.4

Sediment Type: (may check more than one) Sample Taken? ☐ Yes ☑ No

☐ 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:

	Absent	Rare	Common	Abundant
Periphyton	☐	☑	☐	☐
Nuisance Plants	☑	☐	☐	☐
Submersed Plants	☐	☐	☑	☐
Exotic Apple Snails	☑	☐	☐	☐

Additional Notes:

→ silty + floccy

→ water levels low compared to 2018, 19

→ lots of detritus on frotus; dead Hyp. f.a.s. stalks

→ fewer taxa than 2018, 19

Weather Conditions : hot, sun, high 80s

SAMPLING TEAM: A. ONeal J. Jackson | **SIGNATURE:** Ashley Oneal | **DATE:** 8/17/2020

Contains: 1:1 H2SO4
Lot No.: SA9354050
Expires: 12/20/20
See Safety Data Sheet (SDS)

SULFURIC ACID <51%

DANGER
7664-93-9
7732-18-5

THERMO FISHER SCIENTIFIC
520 NORTH MAIN STREET
MIAMI, OK 74354
1-828-658-2711

Contains: 1:1 H2SO4

May be corrosive to metals. Causes severe skin burns and eye damage. Do not breathe fume/mist/vapours. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated clothing before reuse. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes

rinsing. Store locked up. Store in corrosive resistant container with a resistant inner liner.

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Lost Lake Alternate	County: Leon	Date: 8/17/2020
Analyst: O'Neal, Jackson	Signature: [signature]	STORET: LEOLLA1

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	1	4	7	10	Collected? (√)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides						**Hydrilla verticillata**					
Andropogon sp.						Hydrocotyle sp.					
Azolla filiculoides (A. caroliniana)						**Hygrophila polysperma**					
Baccharis sp.						*Hypericum fasciculatum	1	1	1	1	
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 equisitifolia						*Juncus megacephalus					
Centella asiatica						Juncus repens					
Cephalanthus occidentalis						*Juncus scirpoides					
Ceratophyllum demersum						Lachnanthes caroliniana					
Chara sp.						Leersia hexandra					
Cladium jamaicense						**Landoltia punctata (Spirodela punctata)**					
Cliftonia monophylla						Lemna sp.					
Colocasia esculenta						Leucothoe racemosa (Eubotrys racemosa)					
*Commelina						Limnobium spongia					
Crinum americanum						**Limnophila sessiliflora**					
***Cyperus alternifolius** (C. involucratus)						Liquidamber styraciflua					
Cyperus articulatus						*Ludwigia arcuata					
Cyperus haspan						*Ludwigia leptocarpa					
*Cyperus lecontei						*Ludwigia linearis					
*Cyperus polystachyos						*Ludwigia octovalvis					
*Cyperus odoratus						***Ludwigia peruviana**					
*Cyperus surinamensis						*Ludwigia repens					
Cyrilla racemiflora						*Ludwigia					
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					
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						Mikania scandens					
*Eleocharis ~~baldwinii~~ elongata	1		1	1		**Mimosa pigra**					
*Eleocharis sub vivipar-ous	1	1	1	1		Myrica cerifera					
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon ~~compressum~~ sp. (no tops)	1	1		1							
*Eriocaulon decangulare											
Eupatorium capillifolium AO	1	1				AO					
*Fuirena pumila		1			✓						
Fuirena scirpoidea											
Gordonia lasianthus											

1/2

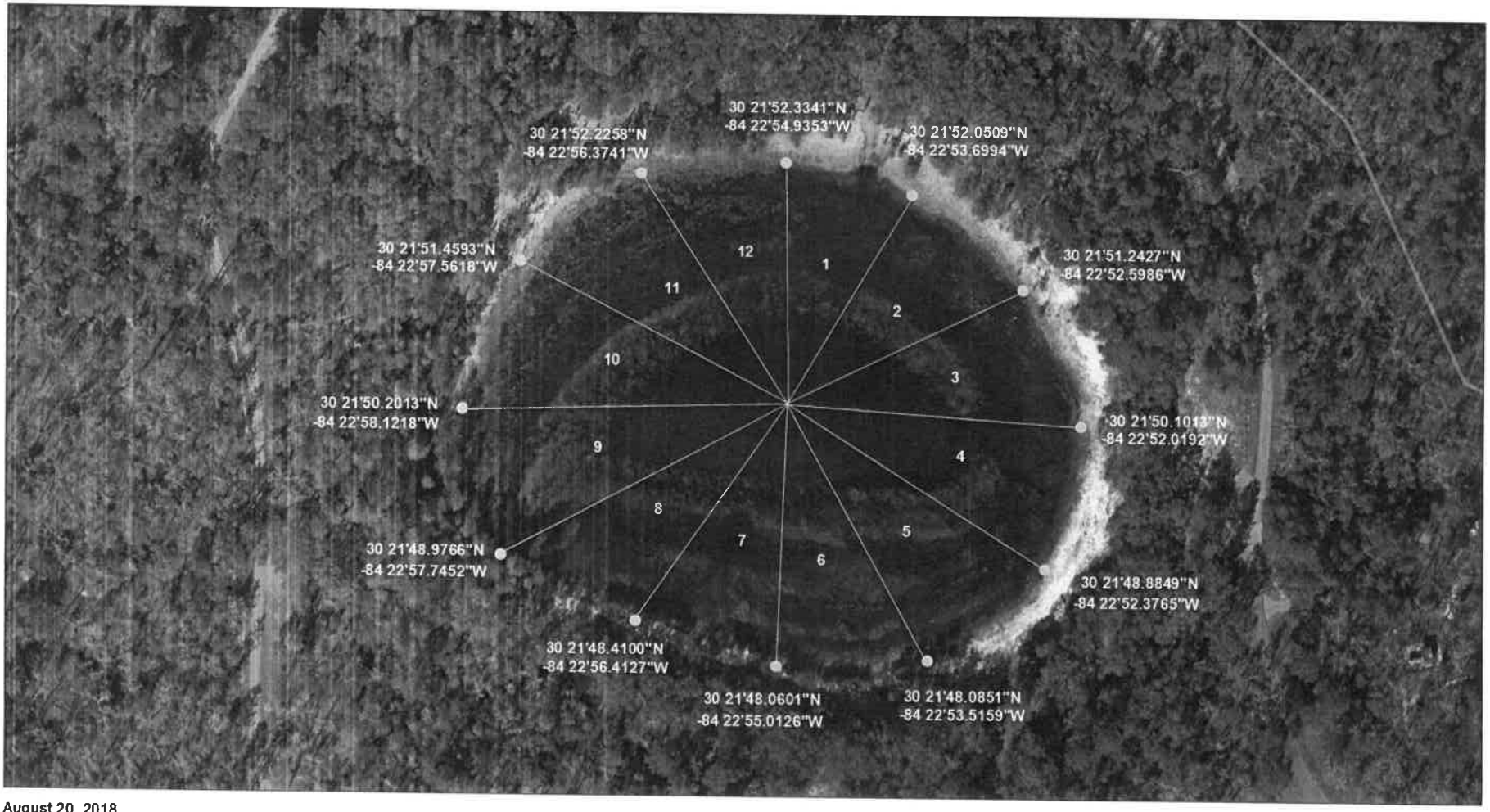
FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: Lost Lake Alternate | Date: 8/17/2020

SPECIES	1	4	7	10	Collected? (√)	SPECIES	1	4	7	10	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					
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	C	D	D		Thalia geniculata					
Panicum repens						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 elliottii						*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.	C	1	1	1	
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata											
*Rhexia											
*Rhynchospora corniculata AO						AO					
*Rhynchospora ~~inundata~~ nitens	1	C	1	1	✓						
Rhynochospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

2/2

Lost #2, WBID 1006 (Leon Co.)



August 20, 2018

Waterbody IDs (WBIDs)

- Group 1
- Group 2
- Group 3
- Group 4
- Group 5

1:1,128

0 0.0125 0.025 0.05 mi

0 0.02 0.04 0.08 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community FDEP,DEAR

Request Number: RQ-2020-08-17-25

Reference Lake Sampling

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: BSSP

Project ID: LAKESREF

Requester: Sarah Noble

Collected By: O'Neal / Jackson

Field Report Prepared By: A. O'Neal

Sampling Agency: FDEP

Location ~~Lost Lake #2~~ Lost Lake Alternate	☐ Comp ☒ Grab	Collection (comp begin or grab) Date 8/17/2020 Time 12:40	Eastern Central	Composite end Date ~~8/17/20~~ Time ~~12:40~~			Bottle Group(s) (See pg 2) A
Field ID ~~LOSTLKLEON~~ LOSTLKALT		Matrix (type, e.g., Salt, Fresh, etc) Fresh surface water		Diss. Oxygen 93.7	☐ mg/L ☒ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET # LEOLLA1		Temp (C) 33.0	pH 5.25	Sample Depth .2	☐ ft ☒ m	Sp. Conductance (umho/cm) 18.2	
Latitude 30° 21' 50.10" N ☐ dd ☒ dms	Longitude -84° 22' 52.019" W ☐ dd ☒ dms	Salinity (ppt)	Comments				
Location ~~30° 21' 50.395 -84° 22~~	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time			Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time			Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				
Location	☐ Comp ☐ Grab	Collection (comp begin or grab) Date Time	Eastern Central	Composite end Date Time			Bottle Group(s)
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)	pH	Sample Depth	☐ ft ☐ m	Sp. Conductance (umho/cm)	
Latitude ☐ dd ☐ dms	Longitude ☐ dd ☐ dms	Salinity (ppt)	Comments				

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Ashley O'Neal	8/17/2020	hand delivery		IM	8/17/20 14:25

Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY W-CL-IC W-COLOR W-F W-SO4-IC						
Group: A	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	Lugols	Enter Number of Bottles Sent to Lab	1
	DTY-QN-C PKD-QN-C						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-ICP W-ICPMS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN						
Group: A	Bottle Type:	P-125ML	# of Bottles: 2	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
Group: B	Bottle Type:	P-250ML	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	
	W-CL-IC W-F W-SO4-IC						
Group: B	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	
	W-ICP W-ICPMS						
Group: B	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN						

Group: B Bottle Type: P-125ML # of Bottles: 1 Preservative: FILTER-ICE **Enter Number of Bottles Sent to Lab** _____

W-PO4-F