

data entry 8/5/2019 SN

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 80054

MACROPHYTE ID: 11440

LATITUDE: 30.5888

COUNTY: Jackson

STORET #: WAS10POR

LONGITUDE: -85.27763

DATE: 7/24/2019

TIME: 1230 EST

SAMPLING AGENCY: FDEP

SITE NAME: Porter Pond Ref.

WBID: 518

FIELD ID/NAME: PORTER POND

LAKE SIZE: 21 acres RQ: 2019-07-22-61

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)	LDI: no LDI	
40	60							Land Use Source & Year:	
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	
18		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)	
lots of logging trucks - exp 16		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	
19		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:								Water Odors:				
Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No								☒ Normal				
Color Sample Taken? ☒ Yes ☐ No Lot # 10232 Exp. Date: 10/13/19								☐ Sewage ☐ Petroleum ☐ Other				
Alkalinity Sample Taken? ☒ Yes ☐ No metals: nitric acid lot # 101246 exp. 8/20/20								☒ None				
Water Level ☐ Low ☐ Normal ☒ High								☐ Sheen/Slick ☐ Glob ☐ Other				
Meter Readings:		Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)	Clarity:		Color:	
Top:		35	30.4	5.32	5.8	77.2	11.7	0	☒ Clear		☒ Clear	
Mid-Depth:		3.3	30.1	5.37	5.06	66.2	11.8	0	☐ Opaque ☐ Turbid		☐ Tannic ☐ Green	
Bottom:		16.0	26.8	5.5	0.33	4.2	52.7	0	☐ Slightly Turbid			
Meter ID: YSI 154185/186								SECCHI (M) 3.8		Total Station Depth (M) 3.8		
Sediment Type: (may check more than one)								VOB ☒ 6.6		6.0		
☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated								☒ Normal ☐ Other (Specify):				
☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify):								☐ Anaerobic				
Biological Communities:				Abundance:				Additional Notes:				
LVI Conducted? ☒ Yes ☐ No				Absent Rare Common Abundant				lots of hurricane damage in the area (from H. Michael) Oct. 2018 but Stewart Property OK, some trees down				
Phytoplankton Sample Taken? AO ☒ Yes ☒ No				Periphyton ☐ ☐ ☒ ☐								
Sample Preserved? lab ☐ Yes ☒ No				Nuisance Plants ☒ ☐ ☐ ☐								
Lot #: Exp Date:				Submersed Plants ☐ ☐ ☐ ☒								
Algal Bloom/Algal ID Sample Taken? Yes ☐ No ☒				Exotic Apple Snails ☒ ☐ ☐ ☐								
Active Vegetation Mgmt? ☐ Yes ☒ No ☐ Don't Know												
Weather Conditions: cloud cover n 80° breeze sunny at the end of sampling												
SAMPLING TEAM: A. O'Neil J. Patonis						SIGNATURE: Ashley Chap			DATE: 7/24/2019			

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Porter Pond</u>		County: <u>Jackson</u>		Date: <u>7/24/19</u>							
Analyst: <u>O'Neal, Patricia</u>		Signature: <u>Ashley O'Neal</u>		STORET: <u>WAS11690R</u>							
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 <u>2, 5, 8, 11</u> 3, 6, 9, 12							
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	Collected? (✓)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides						Hydrilla verticillata					
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						*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						Limnobia spongia					
Crinum americanum						Limnophila sessiliflora					
* Cyperus alternifolius (C. involucratus)						Liquidambar 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						Mimosa pigra					
*Eleocharis <u>sub vivip</u>						Myrica cerifera					
Eleocharis cellulosa						<u>Ilex magnifolia</u>					
Eleocharis equisetoides						<u>Eleocharis elongata</u>					
Eleocharis interstincta						<u>Nia sals</u>					
*Eriocaulon compressum						<u>robinsonii</u>					
*Eriocaulon decangulare											
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Porter Pond</u>						Date: <u>7/24/2019</u>					
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	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						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 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						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)						Rhexia (photo)					
Proserpinaca pectinata						Amphicarpium					
*Rhexia						Muhlenbergia					
*Rhynchospora corniculata						Ludwigia (native)					
*Rhynchospora inundata						Sagittaria					
Rhynchospora tracyi						(no flowers or fruits)					
Ricciocarpus natans						Syngonanthus flavidulus					
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isectiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

SITE NAME:

Porter Pond

DATE:

7/24/19

TIME

1230

EST. CST

DEPTH: 35 ft

FIELD ID:

Porter Pond

SAMPLING TEAM MEMBERS	WQ MEASUREMENTS	DOCUMENTATION	SAMPLE COLLECTION	PRESERVATION	PRESERVATION CHECK
Ashley D. Neal	+	✓	✓	✓	✓
Jessica Patronis	✓	+			

SAMPLING EQUIPMENT	
☒ Sample Container	☐ Tubing type: _____
☐ Pole	☐ Other: _____
☐ Pump ID#: _____	☐ Other: _____
WATER QUALITY MEASUREMENTS	
Instrument ID: VSI 154185/186	
COLLECTION MODE	
☐ Wading	☒ Via Boat
☐ Diving	☒ Canoe
☐ From Shore	☐ Electric Motor
☐ Other	☐ Gasoline Motor

Parameter Suite	Parameter(s)/Method	Matrix Code	Preservation**	Preservative Lot #	pH Check	# Bottles ***
Preserved Nutrients	☒ TKN ☒ IP ☒ NO _x ☒ NH ₃ ☐ TOC ☐ Total N ☐ Other: _____	SW	☒ Ice ☒ H ₂ SO ₄	101232	☒ <2	1
Filtered Nutrients	☒ ToP ☐ Other: _____	SW	☒ Ice ☒ 45 um Filter			
Unpreserved Nutrients	☐ NO ₂ ☐ NO ₃ ☐ SO ₄ ☐ Other: _____	W	☐ Ice			
Physical/Aggregate Properties	☐ TDS ☐ TSS ☐ TS ☐ Turbidity ☒ Alk ☒ Color ☐ Other: 304, F, CL	SW	☒ Ice			1
Chlorophyll	☒ CHL-PPTN-W	SW	☒ Ice			
BOD	☐ BOD-INHB ☐ BOD-UNIN	W	☐ Ice			
Microbiology	MF: ☐ E coli ☐ T Coli ☐ F Coli ☐ Entero ☐ F Strep	W	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC ☐ MI-FW-QLBR ☐ MI-FW-QNNC ☐ MI-MN-QNNC	W	☐ Formalin			
Phytoplankton	☒ PKD-QN-C ☒ QTY-QN-C	SW	☐ Lugol's lab			1
Periphyton	☐ PRN-QL-C ☐ DTM-QL-C ☐ PRN-QN-C ☐ DTM-QN-C	W	☐ Formalin			
AGP	☐ AA-AGP ☐ AA-LIM-NUT	W	☐ Ice			
Metals	☒ W-ICP ☐ W-FIAS ☒ W-ICPMS ☐ W-ICP-Tr	SW	☒ HNO ₃	101246	☒ <2	1
Filtered Metals	☐ W-ICP-F ☐ W-FIAS-F ☐ W-ICPMS-F ☐ W-ICP-Tr-F	W	☐ HNO ₃ ☐ 45 um Filter		☐ <2	
Mercury	☐ W-HG-AF	W				
Base/Neutral / Acid Extractable	☐ W-BNA ☐ W-AE ☐ W-BN ☐ W-PAH ☐ W-FL-PRO ☐ W ☐ Other: _____	W	☐ Ice			
Pesticides	☐ W-PEST-CL ☐ W-PCB ☐ W-PEST-NP ☐ W-PSCL-PCB ☐ W-NP-AA-SF ☐ W-PC-AA-SF ☐ W-PSHRB-NP ☐ W-SLFN-UREA ☐ W-SULFN-LC ☐ Other: _____ ☐ W-ACIDHERB	W	☐ Ice ☐ H ₂ SO ₄		☐ <2	
Purgeables	☐ W-VOC-MS ☐ W-VOC-MS-A	W	☐ Ice ☐ MCAA			
Bioassay	Specify Test: _____	W	☐ Ice ☐ HCl			
OTHER		W	☐ Other: _____			

Notes: 10 NS sulfate, fluoride, + chloride collected
same bottle as alk + color

W-504-1C

W-F

W-CL-1C

Use one line for each set of sample (as supplied by the laboratory) containers. Use separate sheet for field or laboratory duplicate or blank or different water depth

*Enter "S" for surface if collected at a depth less than or equal to 1 foot

*Matrix Codes (Insert prefix): SW = Surface Water GW = Groundwater DW = Drinking Water WW = Wastewater O = Other: _____

**PRESERVATIVES: 1 ml added unless otherwise noted

**Enter number of containers supplied by the laboratory for the test (e.g., 3 for volatile organics, etc.)

Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: BSSP

Requester: Sarah Panek

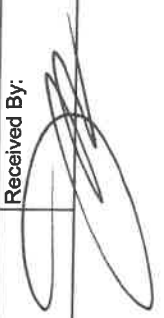
Field Report Prepared By: A O'Neal

Project ID: LAKESREF

Collected By: A O'Neal J. Patrovis

Sampling Agency: FDEP

Location Porter Pond Reference		Collection (comp begin or grab) Date 7/24/19 Time 1230		Composite end Date		Bottle Group(s) (See pg 2)	
Field ID	PORTERPOND	Matrix (type, e.g., Salt, Fresh, etc) Fresh surface water		Diss. Oxygen 77.2		Total Res. Chlorine (mg/L)	
WIN/STORET #	WAS16POR	Temp (C) 30.4		pH 5.32		Sample Depth 0.35	
Latitude	30.5888	Longitude -85.27763		Salinity (ppt)		Sp. Conductance (umho/cm) 11.7	
Location Camel Lake Reference		Collection (comp begin or grab) Date 7/24/19 Time 1410		Composite end Date		Bottle Group(s) (See pg 2)	
Field ID	CAMELREF	Matrix (type, e.g., Salt, Fresh, etc) Fresh surface water		Diss. Oxygen 6.39		Total Res. Chlorine (mg/L)	
WIN/STORET #	31010183	Temp (C) 30.9		pH 5.23		Sample Depth 0.2	
Latitude	30.27521	Longitude -84.9893		Salinity (ppt)		Sp. Conductance (umho/cm) 14.6	
Location		Collection (comp begin or grab) Date		Composite end Date		Bottle Group(s) (See pg 2)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)		pH		Sample Depth	
Latitude		Salinity (ppt)		Comments		Sp. Conductance (umho/cm)	
Location		Collection (comp begin or grab) Date		Composite end Date		Bottle Group(s) (See pg 2)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)		pH		Sample Depth	
Latitude		Salinity (ppt)		Comments		Sp. Conductance (umho/cm)	
Location		Collection (comp begin or grab) Date		Composite end Date		Bottle Group(s) (See pg 2)	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen		Total Res. Chlorine (mg/L)	
WIN/STORET #		Temp (C)		pH		Sample Depth	
Latitude		Salinity (ppt)		Comments		Sp. Conductance (umho/cm)	

Relinquished By: Ashley O'Neal	Date/Time 7/25/19 8:56	Shipping Method hand delivery	Number of Coolers Shipped: 1	Received By: 	Date/Time 7/25/19	Bottle Group(s) 856
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Group: A	Bottle Type: ALKALINITY W-CL-IC W-COLOR W-F W-SO4-IC	P-500ML	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
Group: A	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
Group: A	Bottle Type: DTY-QN-C PKD-QN-C	BP-1L	# of Bottles: 2	Preservative:	Lugols	Enter Number of Bottles Sent to Lab	2
Group: A	Bottle Type: W-ICP W-ICPMS	P-500ML	# of Bottles: 2	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	2
Group: A	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN	P-500ML	# of Bottles: 2	Preservative: ICE And H2SO4		Enter Number of Bottles Sent to Lab	2
Group: A	Bottle Type: W-PO4-F	P-125ML	# of Bottles: 2	Preservative: FILTER-ICE		Enter Number of Bottles Sent to Lab	2