

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

Field ID/WIN

G3SW0050

SAMPLE ID: see sticker in upper right

MACROPHYTE ID:

COUNTY: POLK

WBID: 16174

LAKE SIZE: L

TIME: 1500

Site Name: Lake Effie @ Center

SAMPLING AGENCY: FLDEP SW ROC

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:				
10		30	10	10	10	30		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				
6		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)				
6		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				
15		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 # _____ Exp. Date: _____ Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High						Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____					
Meter Readings: Top: Depth (M) 0.3 Temp. (°C) 29.0 pH (SU) 9.15 D.O. (MG/L) 11.30 D.O. Sat. (%) 147.2 Cond. (UMHO/CM) 353.3 Salinity (PPT) 0.17 Mid-Depth: _____ Bottom: _____						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Clarity: ☐ Clear ☒ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☐ Clear ☐ Tannic ☒ Green						SECCHI (M) 0.2 Total Station Depth (M) 1.2 VOB ☐					
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: Absent Rare Common Abundant Periphyton ☐ ☐ ☒ ☐ Nuisance Plants ☐ ☐ ☐ ☒ Submersed Plants ☐ ☐ ☒ ☐ Exotic Apple Snails ☐ ☐ ☒ ☐					
Additional Notes:											
Weather Conditions:											
SAMPLING TEAM: J. Ashton, S. Meyer						SIGNATURE:			DATE: 5-23-19		

STORET STATION NUMBER: SEE STICKER UPPER RIGHT	LAKE SIZE: C	LAKE NAME EFFIE		FIELD ID / NAME: PUT STICKER ^	
ECO-REGION:	COUNTY: POLK	SAMPLING LOCATION/DESCRIPTION:			
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 2	Secchi >3 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 B	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 (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed) 5 4 3 2 1	
Stormwater Inputs 4	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 3	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 Alterations 4	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 15	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 6	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 43	COMMENTS:				

ANALYSIS DATE: **5-23-19**ANALYST: **J. ASHTON, S. ALLEN**SIGNATURE: 



Site Name: Lake Effie @ Center

Waterbody:

County: POUL

Signature: *[Signature]*

Date: 5-23-19

required. *Genera that may require lab verification*

Lake units sampled (circle one group):

1, 4, 7, 10 2, 5, 8, 11
3, 6, 9, 12

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 (A-F)	1	4	7	10	Collected? (✓)	SPECIES (G-L)	1	4	7	10	Collected? (✓)
Acer rubrum	X			X		Gordonia lasianthus					
Alternanthera philoxeroides	X	X				Habenaria repens					
Andropogon sp.						Hymenachne amplexicaulis					
Azolla filiculoides (A. caroliniana)						Hydrilla verticillata					
Baccharis sp.	X	X				Hydrocotyle sp.	X	X	X		
Bacopa caroliniana						Hygrophila polysperma					
Bacopa monnieri		X				*Hypericum fasciculatum					
Bidens laevis						*Hypericum hypericoides					
Bidens mitis						*Hypericum myrtifolium					
Blechnum serrulatum						Ilex cassine					
Boehmeria cylindrica						Ipomoea aquatica					
Brasenia schreberi						Ipomoea sagittata					
Cabomba caroliniana						Itea virginica					
Casuarina equisetifolia						Juncus effusus					
Centella asiatica						*Juncus marginatus					
Cephalanthus occidentalis						*Juncus megacephalus					
Ceratophyllum demersum						Juncus repens					
Chara sp.						*Juncus scirpoides					
Cladium jamaicense						Lachnanthes caroliniana					
Cliftonia monophylla						Leersia hexandra					
Colocasia esculenta						Landoltia punctata (Spirodela punctata)					
*Commelina						Lemna sp.	X	X	X	X	
Crinum americanum						Leucothoe racemosa (Eubotrys racemosa)					
*Cyperus alternifolius (C. involucratus)						Limnium spongia					
Cyperus articulatus						Limnophila sessiliflora					
Cyperus haspan						Liquidambar styraciflua					
*Cyperus lecontei						*Ludwigia arcuata					
*Cyperus polystachyos						*Ludwigia leptocarpa	X			X	
*Cyperus odoratus	X	X				*Ludwigia linearis					
*Cyperus surinamensis						*Ludwigia octovalvis					
Cyrilla racemiflora						*Ludwigia peruviana	X	X	X	X	
Decodon verticillatus						*Ludwigia repens					
Diodia virginiana						*Ludwigia					
*Echinochloa crus-galli						Luziola fluitans (Hydrochloa carolinensis)					
*Echinochloa muricatum						Lyonia lucida					
Echinochloa walteri											
Eclipta prostrata (E. alba)						Imperata cylindrica	X				
Egeria densa						Mock Bishop Weed Ptilimnium	X	X			
Eichhornia crassipes	X	X	X	X							
*Eleocharis baldwinii		X	X	X							
*Eleocharis											
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium		X									
*Fuirena											
Fuirena scirpoidea											

LVI Map for , WBID 1617A



Florida Department of Environmental Protection

Central Laboratory Submittal Form

LVIs

Customer: SW-DIST

Requester: Judy Ashton

Field Report Prepared By: S Meyer

Project ID: SMP

Collected By: J Ashton & S Meyer

Sampling Agency: FDEP SW ROC

Location		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 05/23/2019 Time 1140		Eastern Central		Composite end Date _____ Time _____		Bottle Group(s) (See pg 2)	
Field ID/WIN G3SW0045		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 8.12		☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L) _____		A	
Field ID		Temp (C) 29.0		pH 7.26		Sample Depth 0.3		Sp. Conductance (umho/cm) 131.7			
WIN		Salinity (ppt) 0.06		Comments		ft m					
Site Name: Lake Pansy @ Center		☐ dd ☐ dms		☐ dd ☐ dms							
Latitude											
Location		☐ Comp ☒ Grab		Collection (comp begin or grab) Date 05/23/2019 Time 1500		Eastern Central		Composite end Date _____ Time _____		Bottle Group(s)	
Field ID/WIN G3SW0050		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 11.30		☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L) _____		A	
Field ID		Temp (C) 29.0		pH 9.15		Sample Depth 0.3		Sp. Conductance (umho/cm) 353.3			
WIN/ST		Salinity (ppt) 0.17		Comments		ft m					
Site Name: Lake Effie @ Center		☐ dd ☐ dms		☐ dd ☐ dms							
Latitude											
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		Sp. Conductance (umho/cm)			
Latitude		☐ dd ☐ dms		☐ dd ☐ dms		Salinity (ppt)		Comments			
Longitude											
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		Sp. Conductance (umho/cm)			
Latitude		☐ dd ☐ dms		☐ dd ☐ dms		Salinity (ppt)		Comments			
Longitude											

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
Judy Ashton	5-23-19 1700	FED EX	1		

Group: A	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
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ALKALINITY
TURBIDITY
W-CL-IC
W-COLOR
W-F
W-SO4-IC
W-TDS
W-TSS

Group: A	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
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CHLSUITE-W

Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	2
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W-NH3
W-NO2NO3
W-S-A-TP
W-TKN
W-TOC

Group: A	Bottle Type:	P-125ML	# of Bottles: 2	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	2
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W-PO4-F