

RQ-2019-04-29-13.

Z1-LL-13016; Deer Point Lake

Data Management (to be completed by field personnel)

- ☒ Date sampled Date: 06/04/2019 initials: FB
- ☒ Entered into MAT Date: 06/05/2019 initials: FB
- ☐ In SMP Tracker Date: N/A initials: FB
- ☐ RQ Sheet – from LIMS (display/print request) N/A

Ready for folder system (top)

LIMS processing (to be completed by field/office personnel)

- ☐ Field Sheets scanned into local folder and
initialed/dated on Field Sheets Date: _____ initials: _____
- ☐ New Field IDs created (when appropriate) Date: _____ initials: _____ ☐ NA
- ☐ Field parameters entered into LIMS Date: _____ initials: _____
- ☐ Date submitted for QA/QC Date: _____ initials: _____
- ☐ Create entry in SMP Station Creation File if new station is used

Digital Archiving

- ☐ Digital field Sheets put into archive Date: _____ initials: _____
- ☐ Photos put into archive Date: _____ initials: _____ ☐ NA
- ☐ Lab results put into archive (CB/WB) Date: _____ initials: _____

WINS processing (Cheryl)

- ☐ Field parameters QA/QC in LIMS Date: _____ initials: _____
- ☐ Data migrated to WINS Date: _____ initials: _____
- ☐ Update "Data Tracker" in SMP Tracker

Notes:

Water Quality, Sediment, and YSI collected by NWF-WMD on separate trip.

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: N 30.32098
 COUNTY: Bay (Panama City) STORET #: _____ LONGITUDE: W -85.58602
 DATE: 6/04/19 TIME: 11:00 AM - 11:50 AM SAMPLING AGENCY: FL DEP - NWROC
 SITE NAME: Z1-LL-13016 (Deer Point Lake) WBID: 553A
 FIELD ID/NAME: Z1-LL-13016 LAKE SIZE: 2458 RQ: 2019-04-29-13

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)														
☒	☒	☒	☒	☒	☒	☒	☒														
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										
10		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)										
12		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										
11		20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

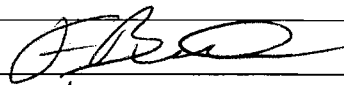
WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

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 _____ Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter Readings: Top: _____ Mid-Depth: _____ Bottom: _____						Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green SECCHI (M) 1.3 Total Station Depth (M) 1.8 VOB ☐					
Sediment Type: (may check more than one) ☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☒ Vegetated ☒ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____						Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____					
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: Invasive Plant Mgmt. spraying herbicide on oxycarm Coel Survey in Am in FWC											
Weather Conditions: HOT! 95+ sunny, NO rain in our months. 18 days OVERNIGHT from NW-ON. Hurricane Michael Debays in lake											
SAMPLING TEAM: Frank Butera, Mike King						SIGNATURE: <i>[Signature]</i> DATE: 6/04/2019					

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

STORET STATION NUMBER:	DATE (M/D/Y) 06/04/2019	LAKE NAME Z1-LL-13416		FIELD ID / NAME:	
ECO-REGION:	COUNTY:	SAMPLING LOCATION/DESCRIPTION:		LAKE SIZE: 2458	
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 10	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 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 (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed) 5 4 3 2 1	
Stormwater Inputs 10	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 10	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 12	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 11	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 9	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	74	COMMENTS: Hurricane Michael Debris in & around lake
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ANALYSIS DATE: 06/04/2019	ANALYST: F. Butera	SIGNATURE: 
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Pomacea paludosa eggs seen throughout Deer Point Lake.

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Z1-LL-13016 (Deer Point Lake)					County: Bay (Panama City)					Date: 06/04/2019				
Analyst: F. Butera					Signature: <i>[Signature]</i>					STORET:				
Except where noted as "sp." species level identification required. *Genera that may require lab verification*										Lake units sampled (circle one group):				
Plants in bold = FLEPPC invasive exotic.										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.														
SBIO ID	2	5	8	11	Collect ed? (✓)	Macro ID	2	5	8	11	Collect ed? (✓)			
SPECIES						SPECIES								
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 (Spiro. puncta)								
Cliftonia monophylla						Lemna sp.								
Colocasia esculenta						Leucothoe racemosa (E. racemosa)								
*Commelina						Limnium spongia								
Crinum americanum						Limnophila sessiliflora								
*Cyperus alternifolius (C. involucratus)						Liquidambar styraciflua								
Cyperus articulatus						*Ludwigia arcuata								
Cyperus haspan						*Ludwigia leptocarpa								
*Cyperus lecontei						*Ludwigia linearis								
*Cyperus polytachyos						*Ludwigia octovalvis								
*Cyperus odoratus						*Ludwigia peruviana								
*Cyperus surinamensis						*Ludwigia repens								
Cynilla racemiflora						*Ludwigia								
Decodon verticillatus						Luziola fluitans (H. 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						Myrica cerifera								
Eleocharis cellulosa						Eriocaulon								
Eleocharis equisetoides						Alnus								
Eleocharis interstincta						Juncus pulcherrimus								
*Eriocaulon compressum						Hypericum bracteatum								
*Eriocaulon decangulare						Beckmannia								
Eupatorium capillifolium						Liriodendron								
*Fuirena						Serrula ciliolata								
Fuirena scirpoidea						Carex straminea (C2)								
Gordonia lasianthus						Unknown "bushy" flower								

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Z1-LL-13016 (Deer Point Lake) Storet:						Date: 06/04/2019	SBIO ID		Macro ID		
SPECIES	2	5	8	11	Collect ed? (✓)	SPECIES	2	5	8	11	Collect ed? (✓)
Myriophyllum aquaticum						Salix caroliniana					
*Myriophyllum heterophyllum						Salvinia minima					
*Myriophyllum laxum						Sambucus canadensis					
*Myriophyllum pinnatum						Sapium sebiferum					
Myriophyllum spicatum		1				Saururus cernuus	1	1	1	1	
*Najas filifolia						Schinus terebinthifolius					
*Najas guadalupensis						*Schoenoplectus californicus					
*Najas minor						*Schoenoplectus pungens					
Nelumbo lutea	1	1	1			*Schoenoplectus tabernaemontani					
Nitella spp.						Scirpus cubensis (Oxycaryon cubense)					
Nuphar sp.	1	1	1			Scirpus cyperinus					
Nymphaea odorata	1	1	1			*Sesbania					
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora						Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea	1	1	1			Spirodela polyrhiza					
Osmunda regalis						Taxodium sp.	1	1	1		
Panicum hemitomon						Thalia geniculata					
Panicum repens	1	1	1			Thelypteris palustris					
Paspalidium geminatum						Triadenum virginicum	1		1		
*Paspalum repens						Typha sp.	1	1	1	1	
Paspalum urvillei	1	1	1			Urochloa mutica (Brachiaria mutica)					
Peltandra sp.	1	1	1			*Utricularia gibba (U. biflora)					
Persea sp.						*Utricularia floridana		1			
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			1		✓	*Websteria confervoides					
*Polygonum punctatum						Wedelia trilobata (Sphag. trilobata)					
*Polygonum						Wolffia spp.					
Pontederia cordata	1	1	1			Woodwardia virginica					
*Potamogeton diversifolius						Xyris sp.	1		1		✓
*Potamogeton illinoensis						Zizania aquatica	1		1		
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuck. pectinatus)						Vitis	1	1	1	1	
Proserpinaca pectinata						Hedera	1	1	1	1	
*Rhexia						Oxycaryon cubense	1				
*Rhynchospora corniculata						Swamp Canna					
*Rhynchospora inundata						Pinus palustris	1	1	1	1	
Rhynchospora tracyi						Live Vine	1	1	1	1	
Ricciocarpus natans						Canna Lily	1	1	1	1	
Sabal palmetto		1	1	1		Carex stricta					
Sacciolepis striata						Winged Sycamore					✓
*Sagittaria filiformis						Tree					
*Sagittaria graminea						Bob Chees		1			
*Sagittaria isoetiformis						Magnolia grandiflora				1	
Sagittaria lancifolia	1	1	1			Cornum					
Sagittaria latifolia						Cudwisa sp.	1				
Ptilinimum capillifolium		1	1								
Liquidambar											
Albizia		1	1								

*Schoenoplectus tabernaemontani = Scirpus validus

DEP-SOP-001/01
FS 7000 General Biological Community Sampling

Form FD 9000-2: COMPOSITE LAKE SAMPLING SHEET (< 1000 ACRES)

Date: <u>6/4/19</u>		Name of Lake: <u>Oyster Lake</u> <u>Deer Point</u>		Gear used: <u>PONAR</u> <u>EKMAN</u> <u>OTHER</u>	
Comments:					
Drop #	Depth (m)	Sediment Type (circle all that apply)	Drop #	Depth (m)	Sediment Type (circle all that apply)
1		sand, silt/clay, CPOM, muck, SAV	7		sand, silt/clay, CPOM, muck, SAV
2		sand, silt/clay, CPOM, muck, SAV	8	<u>1.8</u>	sand, silt/clay, CPOM, <u>muck</u> , SAV
3		sand, silt/clay, CPOM, muck, SAV	9		sand, silt/clay, CPOM, muck, SAV
4		sand, silt/clay, CPOM, muck, SAV	10		sand, silt/clay, CPOM, muck, SAV
5		sand, silt/clay, CPOM, muck, SAV	11		sand, silt/clay, CPOM, muck, SAV
6		sand, silt/clay, CPOM, muck, SAV	12		sand, silt/clay, CPOM, muck, SAV

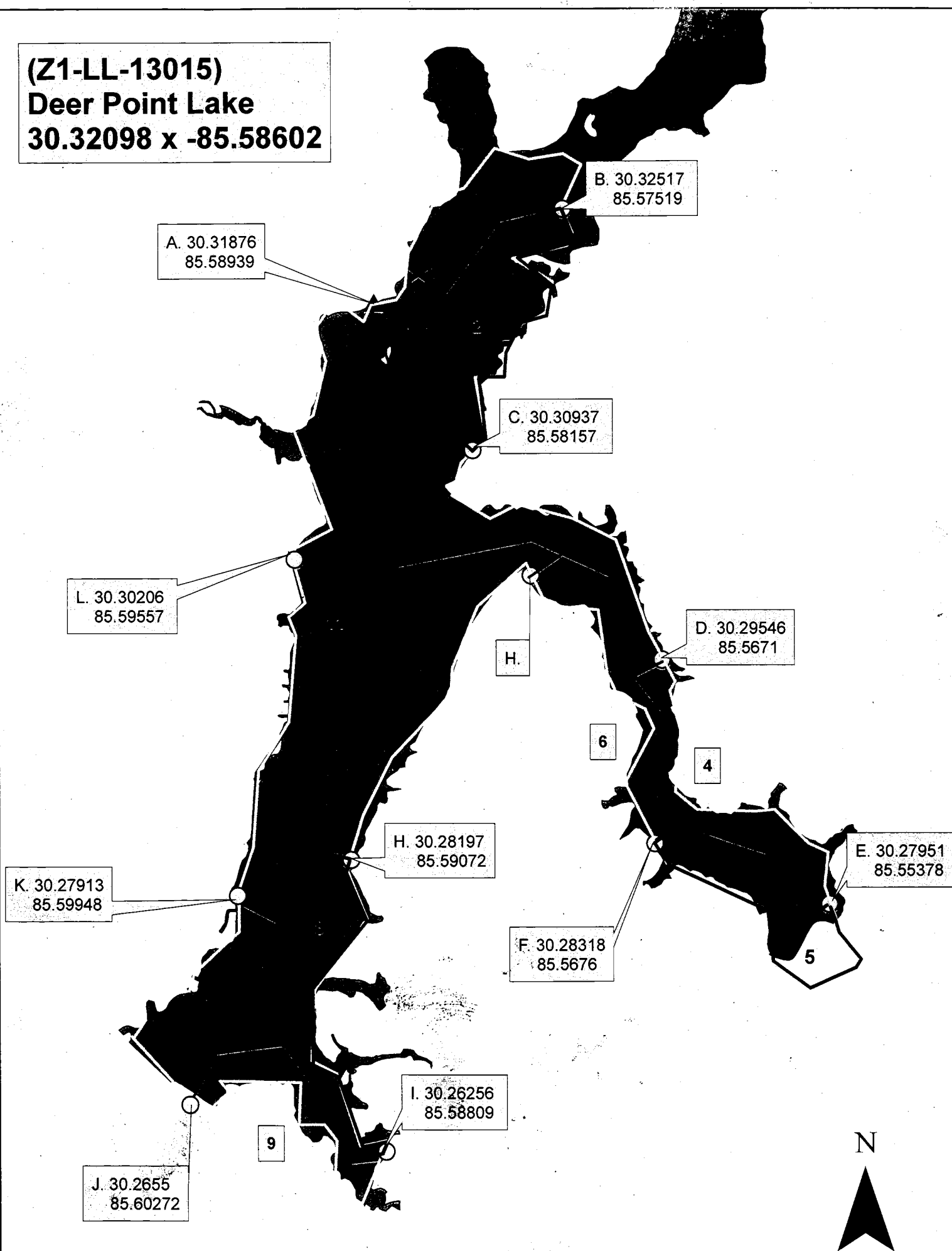
CPOM = coarse particulate organic matter; SAV = submerged aquatic vegetation

Storet 32010051 Field ID 21213016 status Project: USFWS Special Proj.
WBID 9500

SBIO ID:

Paste map here and show location of each dredge drop and where water chemistry parameters were collected.

(Z1-LL-13015)
Deer Point Lake
30.32098 x -85.58602



- * ① Winged Sumac → Pressed
- * ② Carex (not Glaucens) → lundia (?) → Pressed
- * ③ Polygonum hydropiperoides LAB ID
- * ④ Zizaniopsis ... PRESSED. Field ID Zizania
- * ⑤ Unknown monocot. Pressed.
Field ID Unknown Bushy Flower

- * ⑥ Unknown monocot. Pressed
Field ID Unknown Bushy Flower

- * ⑦ Unknown Serrated. Pressed.
Field ID serrated Alligator Weed