



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: COMMSTON LAKE

Date: 5-22-19
(mm/dd/yyyy)

WIN/ Field ID: G2SW0113

WBID: 1451I

Latitude: _____

(Decimal Degrees)

County: HILLS

ORG ID: 21FLTPA

Longitude: _____

(Decimal Degrees)

Receiving Body of Water: _____

RQ-2019- 05-20-06

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Judy ASHTON									
BEN PASWADEN									
SARAH MEYER									

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Depth Measured with: Secchi		
Equipment ID: Secchi #1		
Collection Method		
☐ Wading	☒ Canoe/Kayak	
☐ From Shore	☐ Electric Motor	
☐ Other	☐ Gasoline Motor	

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded

Meter ID# CHWY

Matrix: Fresh / Marine / DI

Photos: Yes/ No

Flow: No Flow / Interstitial / Flowing NA

Tide: Rising/ Falling/ Slack NA

Tide Times: High / Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1240	3.2	0.3	1.8	6.89	93.2	7.15	0.08	172.2	31.3
			2.7		0.97	12.1	5.80	0.08	162.6	26.5

Biological Samples Collected: None HA SCI RPS Algae ID 2 LVS LVI Other:

SBIO ID Numbers: SBIO-ID: 79699 HA-ID: 15959 RPS-ID: 11320 Macrophyte-ID: 11320 LIMS#: 2088546

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NR3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☐ Ice ☒ H ₂ SO ₄	<u>SA 8344070</u>	<u>12/10/19</u>	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO ₃			☐ <2
Filtered Nutrients	☒ W-PD4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci	☐ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ W-E8321-MS ☐ W-CARB-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Notes:

Field ID/WIN

G2SW0113



Site Name: Commston Lake @ Center

Signature: [Signature]

Date: 5-22-19

LIMS EVENT ID: 2019-05-23-01

WIN Import ID: 14323

Enter Field Parameters, Verify Station ID In LIMS DMT: SM 05/28/2019

QC Station ID, Field Parameters In LIMS DMT: SM 06/13/2019

Scan/Save Field Sheets: SM 01/15/2020

Migrate Data to WIN: SM 09/03/2019

Verify Data In WIN: SM 01/15/2020

(Initials/Date)

(Initials/Date)

(Initials/Date)



Site Name: Commston Lake @ Center

Waterbody:

County: Hills

Signature: *[Signature]*

Date: 5-22-19

required. *Genera that may require lab verification*

Lake units sampled (circle one group):

RD-2019-05-20-000

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		✓	✓			Gordonia lasianthus	✓	✓	✓	✓	
Alternanthera philoxeroides		✓	✓			Habenaria repens					
Andropogon sp.		✓				Hymenachne amplexicaulis					
Azolla filiculoides (A. caroliniana)						Hydrilla verticillata					
Baccharis sp.		✓		✓		Hydrocotyle sp.		✓	✓	✓	
Bacopa caroliniana						Hygrophila polysperma					
Bacopa monnieri						*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.					
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					
*Cyperus odoratus						*Ludwigia linearis					
*Cyperus surinamensis						*Ludwigia octovalvis					
Cyrilla racemiflora						*Ludwigia peruviana	✓	✓	✓	✓	
Decodon verticillatus						*Ludwigia repens					
Diodia virginiana						*Ludwigia					
*Echinochloa crus-galli						Luziola fluitans (Hydrochloa carolinensis)					
*Echinochloa muricatum						Lyonia lucida					
Echinochloa walteri											
Eclipta prostrata (E. alba)						CYPERUS PROLIFERA					
Egeria densa						CINNAMOMUM CAMPTOTRICHUM					
Eichhornia crassipes											
*Eleocharis baldwinii		✓	✓	✓		WDDOWANIA AEROLATA					
*Eleocharis						LYCOPHUS RUBELLUS					
Eleocharis cellulosa											
Eleocharis equisetoides						NEPHROLEPIS EXALTATA	✓	✓	✓	✓	
Eleocharis interstincta						QUERCUS NIGRA					
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium	✓	✓									
*Fuirena											
Fuirena scirpoidea											

Site:						Date: 05/22/2019					
SPECIES (M-P)	1	4	7	10	Collected? (✓)	SPECIES (R-Z)	1	4	7	10	Collected? (✓)
Magnolia virginiana						*Rhexia					
Mayaca fluviatilis						*Rhynchospora corniculata					
Melaleuca quinquenervia	✓	✓				*Rhynchospora inundata					
Micranthemum glomeratum						Rhynchospora tracyi					
Micranthemum umbrosum						Ricciocarpus natans					
Mikania scandens		✓	✓			Sabal palmetto					
Mimosa pigra	✓	✓	✓	✓		Sacciolepis striata					
Myrica cerifera	✓	✓	✓	✓		*Sagittaria filiformis					
Myriophyllum aquaticum						*Sagittaria graminea					
*Myriophyllum heterophyllum						*Sagittaria isoetiformis					
*Myriophyllum laxum						Sagittaria lancifolia					
*Myriophyllum pinnatum						Sagittaria latifolia					
Myriophyllum spicatum						Salix caroliniana	✓				
*Najas filifolia						Salvinia minima	✓	✓	✓	✓	
*Najas guadalupensis						Sambucus canadensis					
*Najas minor						Sapium sebiferum					
Nelumbo lutea						Saururus cernuus					
Nitella spp.						Schinus terebinthifolius	✓	✓			
Nuphar sp.	✓	✓	✓	✓		*Schoenoplectus californicus (Cali bulrush)					
Nymphaea odorata						*Schoenoplectus pungens (three square)					
Nymphoides aquatica						*Schoenoplectus tabernaemontani (softstem)					
Nyssa sylvatica var. biflora		✓				Scirpus cubensis (Oxycaryon cubense)		✓	✓	✓	
Orontium aquaticum						Scirpus cyperinus					
Osmunda cinnamomea						*Sesbania					
Osmunda regalis		✓	✓			Solidago sp.					
Panicum hemitomon		✓	✓			Sparganium americanum					
Panicum repens	✓		✓	✓		Spartina bakeri					
Paspalidium geminatum						Sphagneticola trilobata (Wedelia)					
*Paspalum repens						Spirodela polyrhiza					
Paspalum urvillei						Taxodium sp.	✓	ec			
Peltandra sp.						Thalia geniculata					
Persea sp.			✓			Thelypteris palustris					
Pennisetum purpureum						Triadenum virginicum					
Phragmites australis						Typha sp.		✓		✓	
Pinus elliotii						Urochloa mutica (Brachiaria mutica)					
Pistia stratioides						*Utricularia gibba (U. biflora)					✓
Pluchea sp.				✓		*Utricularia floridana					
*Polygonum glabrum (densiflorum)						*Utricularia foliosa					
*Polygonum hydropiperoides		✓				*Utricularia inflata					
*Polygonum punctatum						*Utricularia purpurea					
*Polygonum sp.						*Utricularia cornuta					
Pontederia cordata	✓	✓		✓		*Utricularia radiata					
*Potamogeton diversifolius						Vallisneria americana					
*Potamogeton illinoensis						*Websteria confervoides					
*Potamogeton pusillus						Wolffiella spp.					
*Potamogeton pectinatus						Woodwardia virginica					
Proserpinaca pectinata						Xyris sp.					
Neprolepis exalta	✓	✓	✓			Zizania aquatica					
						Zizaniopsis milacea					

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

Field ID/WIN

G2SW0113

SAMPLE ID: see sticker in upper right MACROPHYTE ID: _____
 COUNTY: HILLS WBID: 14511
 LAKE SIZE: L TIME: 12:40
 SAMPLING AGENCY: FLDEP SW ROC

Site Name: Commston Lake @ Center

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)														
<u>60</u>				<u>40</u>																	
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy										Artificially Impounded					LDI:						
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy										☐ Yes ☒ No					Land Use Source & Year:						
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				
<u>8</u>		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)				
<u>14</u>		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				
<u>15</u>		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 ☐ No 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: <u>0.3</u> <u>31.3</u> <u>7.15</u> <u>6.89</u> <u>93.2</u> <u>172.2</u> <u>0.08</u> Mid-Depth: _____ Bottom: <u>2.7</u> <u>26.5</u> <u>5.80</u> <u>0.97</u> <u>12.1</u> <u>162.6</u> <u>0.08</u> Meter ID: _____										Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Sediment Type: (may check more than one) ☒ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____										Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green									
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										SECCHI (M) <u>1.8</u> Total Station Depth (M) <u>3.2</u> VOB ☐									
Abundance: Absent Rare Common Abundant Periphyton ☐ ☐ ☒ ☐ Nuisance Plants ☐ ☐ ☐ ☒ Submersed Plants ☐ ☒ ☐ ☐ Exotic Apple Snails ☐ ☐ ☒ ☐										Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____									
Weather Conditions : <u>SUNNY, CLEAR</u>																			
SAMPLING TEAM: <u>J. ASHTON, B. PASWATER, S. MEYER</u>										SIGNATURE: <u>[Signature]</u>					DATE: <u>5-22-19</u>				

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

STORET STATION NUMBER: SEE STICKER UPPER RIGHT		LAKE SIZE:		LAKE NAME <u>Commston Lake</u>		FIELD ID / NAME: PUT STICKER ^	
ECO-REGION:		COUNTY: <u>Hillsborough</u>		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	
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	
Secchi		Secchi >3 m		Secchi(m)		1.0 0.9 0.8 0.7 0.6	
12		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Vegetation Quality		Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa		Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants		Large masses (21%- 40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats	
6		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
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	
8		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Bottom Substrate Quality		Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present		Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present		Moderate layer of CPOM/ mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom	
11		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Lakeside Adverse Human Alterations		Very few man-made structures, roads, or other disturbance adjacent to lake (<10%)		Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected		Many structures, roads or other human disturbance visible (50%-70%) lakeside affected	
14		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Upland 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	
15		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Adverse Watershed Land Use		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					
15		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
TOTAL SCORE		81		COMMENTS:			

ANALYSIS DATE:

5-22-19

ANALYST:

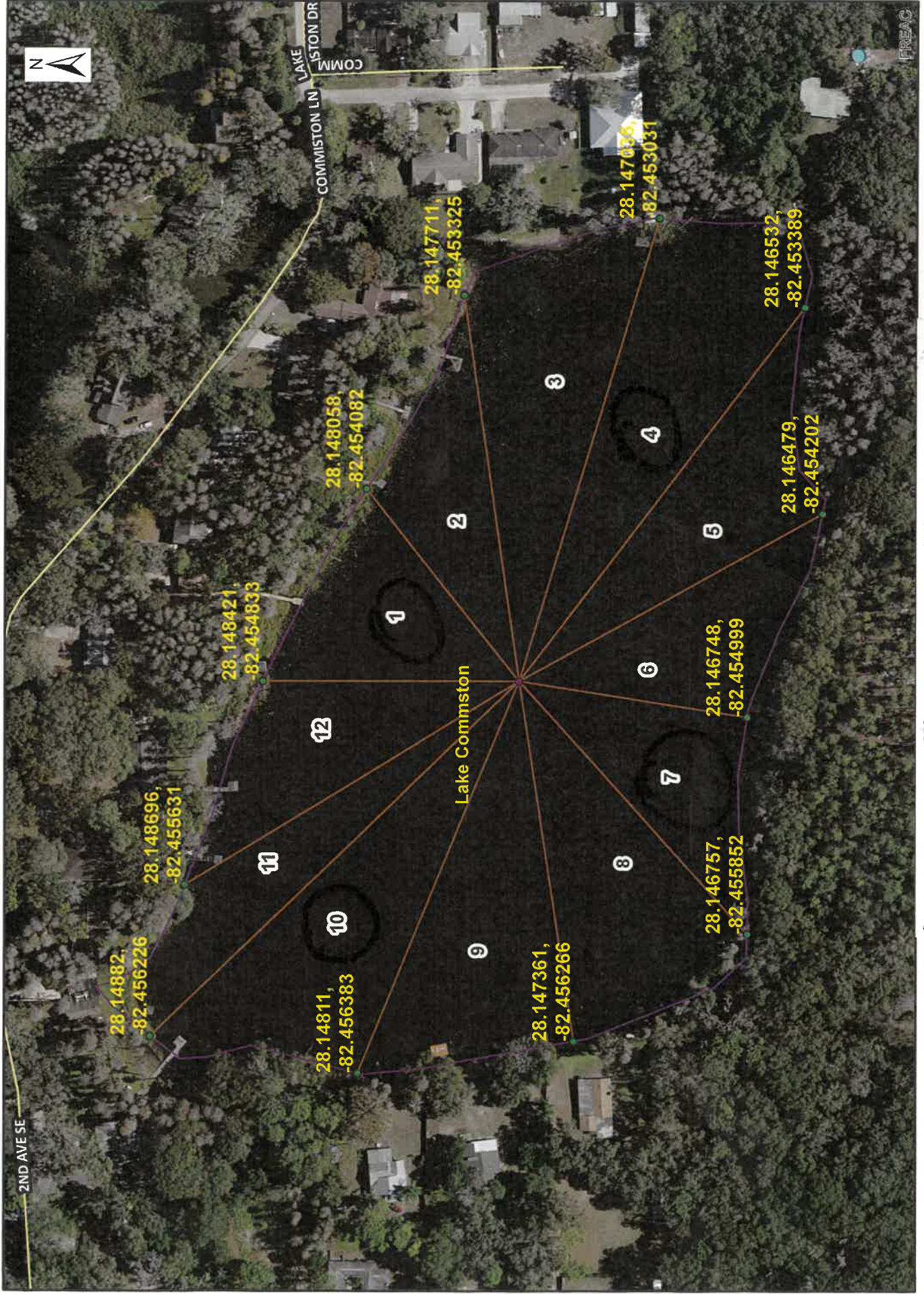
J. Ashton, B. PASWATER, S. MEYER

SIGNATURE:



Lake Commston

LVI Map for , WBID 14511



Florida Department of Environmental Protection

Central Laboratory Submittal Form

LVIs

Customer: SW-DIST

Requester: Judy Ashton

Field Report Prepared By:

Judy Ashton

Project ID: SMP

Collected By: J. Ashton, B. Paswater, S. Meyer

Sampling Agency:

FDLP

Location		☐ Comp	Collection (comp begin or grab)		Eastern	Composite end		Bottle Group(s) (See pg 2)
Field ID/WIN		☒ Grab	Date	Time	Central	Date	Time	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☒ mg/L	Total Res. Chlorine		
WIN		Temp (C)		pH	☐ ft	Sp. Conductance (umho/cm)		
Site Name: Commston Lake @ Center		Salinity (ppt)		Sample Depth		Total Res. Chlorine (mg/L)		A
Latitude		pH		Sample Depth		Sp. Conductance (umho/cm)		
☐ dd		Salinity (ppt)		Sample Depth		Sp. Conductance (umho/cm)		
☐ dms		pH		Sample Depth		Sp. Conductance (umho/cm)		
Location		☐ Comp	Collection (comp begin or grab)		Eastern	Composite end		Bottle Group(s)
Field ID/WIN		☒ Grab	Date	Time	Central	Date	Time	
Field ID		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☒ mg/L	Total Res. Chlorine		
WIN/S		Temp (C)		pH	☐ ft	Sp. Conductance (umho/cm)		
Site Name: Lake Hanna @ Center		Salinity (ppt)		Sample Depth		Total Res. Chlorine (mg/L)		A
Latitude		pH		Sample Depth		Sp. Conductance (umho/cm)		
☐ dd		Salinity (ppt)		Sample Depth		Sp. Conductance (umho/cm)		
☐ dms		pH		Sample Depth		Sp. Conductance (umho/cm)		
Location		☐ Comp	Collection (comp begin or grab)		Eastern	Composite end		Bottle Group(s)
Field ID		☐ Grab	Date	Time	Central	Date	Time	
WIN/STORET #		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L	Total Res. Chlorine		
Latitude		Temp (C)		pH	☐ ft	Sp. Conductance (umho/cm)		
Longitude		Salinity (ppt)		Sample Depth		Total Res. Chlorine (mg/L)		
☐ dd		pH		Sample Depth		Sp. Conductance (umho/cm)		
☐ dms		Salinity (ppt)		Sample Depth		Sp. Conductance (umho/cm)		
Longitude		pH		Sample Depth		Sp. Conductance (umho/cm)		
Location		☐ Comp	Collection (comp begin or grab)		Eastern	Composite end		Bottle Group(s)
Field ID		☐ Grab	Date	Time	Central	Date	Time	
WIN/STORET #		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	☐ mg/L	Total Res. Chlorine		
Latitude		Temp (C)		pH	☐ ft	Sp. Conductance (umho/cm)		
Longitude		Salinity (ppt)		Sample Depth		Total Res. Chlorine (mg/L)		
☐ dd		pH		Sample Depth		Sp. Conductance (umho/cm)		
☐ dms		Salinity (ppt)		Sample Depth		Sp. Conductance (umho/cm)		
Longitude		pH		Sample Depth		Sp. Conductance (umho/cm)		

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
<u>J. Ashton</u>	<u>5-22-19 1700</u>	<u>FDLP</u>	<u>1</u>		

Group: A	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab	2
	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
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	2
	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
	W-PO4-F						