



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF 1

Data Qualified?

Yes / No

Location/STORET Station Name: SUNSHINE LAKE

Date: 06/19 /2018
(mm/dd/yyyy)

STORET # G1SW0072

WBID: 1498C

Latitude: 28.11981111

(Decimal Degrees)

County: Hillsborough

RQ - 2018-06-18-03

ORG ID: 21FLTPA

Longitude: -82.52588056

(Decimal Degrees)

Receiving Body of Water:

Field ID: G1SW0072

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
Judy Ashton Sarah Meyer									☒ Sample Container	☐ Van Dorn	☐ Pole	
									☐ Carboy	☐ Syringe		
									☐ Dipper	☐ Other		
				Equipment ID								
									Collection Method			
									☐ Wading	☒ Via Boat		
									☐ From Shore	☒ Canoe/Kayak		
									☐ Other (note below)	☒ Electric Motor		
									☐ Gasoline Motor			

Water Level: Dry / Pooled / Low / Normal / High / Flooded						Matrix: Fresh / Marine / DI				
Meter ID# Chewy		Photos: Yes / No		Tide Falling: Yes / No / NA						
Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (umhos/cm)	Temp. (C°)
EST	12 04	0.3	3.5	8.41	116.0	7.57	0.05	1.3	109.1	32.4
CEN		3.0		0.15	1.9	6.19	0.05		106.2	28.2

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

SBIO ID Numbers: SBIO-ID: 78717 RPS-ID: Macrophyte-ID: 11015 LIMS#: 2002251

Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check
Preserved Nutrients	☐ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	SA808517Q	03/26/19	☒ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2
Filtered Nutrients	☐ W-PO4-F ☐ Field Filtered 0.45 um Filter	☐ Ice			
Chlorophyll	☐ CHLSUITE-W	☐ Ice			
Physical/Aggregate (Fresh)	☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-C / W-COLOR / W-SO4-IC / W-TDS	☐ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☐ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R	☐ Ice			
	☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Other			

Notes: SMP06182018 - FB
Access granted 2017 by Mr. Adams 813-963-2792. Drive to back yard toward metal shed. Call day ahead. Said you can get to Dosson Lake to the North?
Kit A, LVI
5341 MAYLOA RD.

Field ID/WIN

G1SW0072



Site Name: Sunshine Lake

Signature:

Sarah Meyer

Date:

06/19/2018

Field Parameters Entered into LIMS: SM 08/13/2018

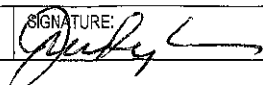
Field Parameters QC in LIMS: SM 09/05/2018

Date Migrated to STORET: SM 09/05/2018

Field Sheets Scanned/Saved: SM 09/13/2018

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

STORET STATION NUMBER: G15W0072	DATE (M/D/Y) 6-19-18	LAKE NAME SUNSHINE LAKE		FIELD ID / NAME: G15W0072																
ECO-REGION:	COUNTY: HILLS	SAMPLING LOCATION/DESCRIPTION:		LAKE SIZE: SMALL																
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 ☐	Secchi >3 m Or VOB	3	2.6	2.2	1.8	1.4	1.0	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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		Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed)														
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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														
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
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		Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom														
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Lakeside Adverse Human Alternations ☐	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		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
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		< 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
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																			
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
TOTAL SCORE	83	COMMENTS:																		

ANALYSIS DATE: 6-19-18	ANALYST: JUDY ASHTON, SARAH MEYER	SIGNATURE: 
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Form FD9000-27 Lake Vegetation Index Data Sheet (06-21-11)

Waterbody: Sunshine LakeCounty: HillsboroughDate: Oct 19, 2018Analyst: J Ashton & S MeyerSignature: [Signature]STORET: 615W0072

Except where noted as "sp." species level identification required. *Genera that may require lab verification*

Plants in bold = FLEPPC invasive exotic.

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	3	6	9	12	Collected? (v)	SPECIES	3	6	9	12	Collected? (v)
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						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 polystachyos						*Ludwigia octovalvis					
*Cyperus odoratus						*Ludwigia peruviana					
*Cyperus surinamensis						*Ludwigia repens					
Cyrtia 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						Myrica cerifera					
Eleocharis cellulosa											
Eleocharis equisetoides						Eleocharis vivipara					
Eleocharis interstincta						Mimosa look-alike					
*Eriocaulon compressum						Nymphoides cristata					
*Eriocaulon decangulare						Utricularia					
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

→ Aeschymene fluitans

Site:

Date: _____

[illegible]

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
COUNTY: HILLS STORET #: G15W0072 LONGITUDE: _____
DATE: 6-19-18 TIME: 12:04 SAMPLING AGENCY: FALP
SITE NAME: SUNSHINE LAKE WBID: 1-4986
FIELD ID/NAME: _____ LAKE SIZE: SMALL RQ: 2018-06-18-03

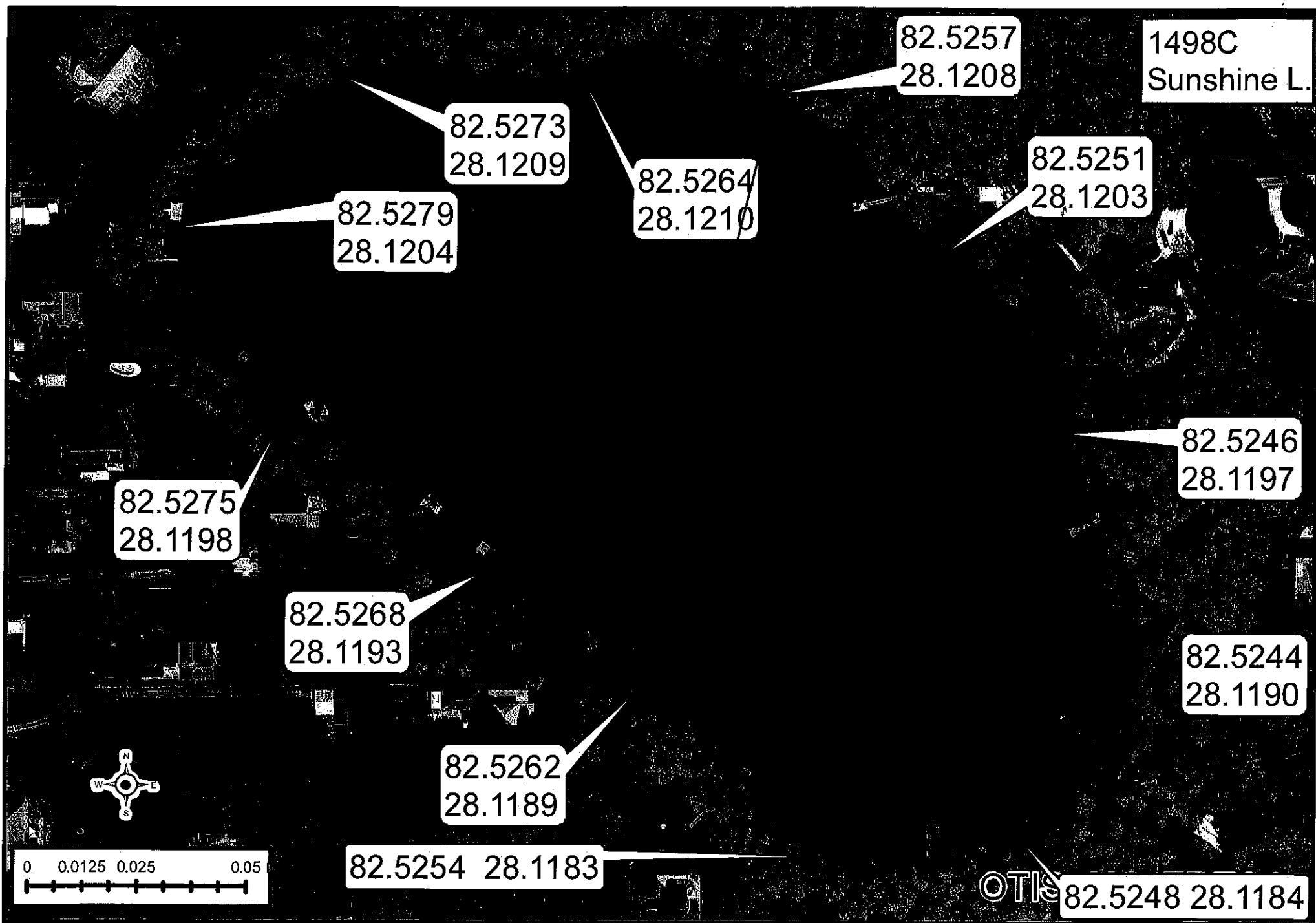
WATERSHED / LAKESIDE FEATURES

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>10</u>				<u>90</u>										
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy								Artificially Impounded ☐ Yes ☒ No						
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy								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>14</u>														
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>12</u>														
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>14</u>														

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 # _____ Exp. Date: _____										☐ Sewage ☐ Petroleum ☐ Other _____	
Alkalinity Sample Taken? ☒ Yes ☐ No										Water Surface Oils: ☒ 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:	<u>0.3</u>	<u>32.4</u>	<u>7.57</u>	<u>8.41</u>	<u>116.0</u>	<u>109.1</u>	<u>0.05</u>	☒ Clear	☐ Opaque	☒ Tannic	☐ Clear
Mid-Depth:								☐ Turbid	☐ Slightly Turbid	☐ Green	
Bottom:	<u>3.0</u>	<u>28.2</u>	<u>6.19</u>	<u>0.15</u>	<u>1.9</u>	<u>106.2</u>	<u>0.05</u>	SECCHI (M) <u>1.3</u>		Total Station Depth (M) <u>3.5</u>	
Meter ID: _____								VOB ☐			
Sediment Type: (may check more than one)										Sediment Odors:	
☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated										☒ Normal ☐ Other (Specify):	
☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify):										☐ Anaerobic	
Biological Communities:										Abundance:	
LVI Conducted? ☒ Yes ☐ No										Absent Rare Common Abundant	
Phytoplankton Sample Taken? ☐ Yes ☒ No										Periphyton ☐ ☐ ☐ ☒	
Sample Preserved? ☐ 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:											
SAMPLING TEAM: <u>Judy Ashwin, Sarah Meyer</u>											
SIGNATURE: <u>[Signature]</u>										DATE: <u>6-19-18</u>	

NOON ISH



Florida Department of Environmental Protection

Central Laboratory Submittal Form

LVI Lakes

Customer: SW-DIST

Requester: Benjamin Paswater

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 06/19/2018 Time 12:04		Eastern Central	Composite end Date	Time	Bottle Group(s) (See pg 2)
Field ID/WIN	G1SW0072	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 8.41	☒ mg/L ☐ % sat	Total Res Chlorine (mg/L)		A
WIN		Temp (C) 32.4	pH 7.57	Sample Depth 0.3	☐ ft ☒ m	Sp. Conductance (umho/cm)	109.1	
Latitude		Salinity (ppt) 0.05		Comments				
		☐ dd ☐ dms						
Location		☐ Comp ☒ Grab	Collection (comp begin or grab) Date 06/19/2018 Time 10:35		Eastern Central	Composite end Date	Time	Bottle Group(s)
Field ID/WIN	G1SW0105	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen 6.53	☒ mg/L ☐ % sat	Total Res Chlorine (mg/L)		A
WIN		Temp (C) 31.6	pH 6.85	Sample Depth 0.3	☐ ft ☒ m	Sp. Conductance (umho/cm)	231.5	
Latitude		Salinity (ppt) 0.11		Comments				
		☐ dd ☐ dms						
Location		☐ Comp ☐ Grab	Collection (comp begin or grab) Date		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		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: Sarah Meyer	Date/Time 06/19/2018	Shipping Method FedEx	Number of Coolers Shipped: 1	Received By:	Date/Time
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Ref:
Dep:
 Date: 07Jun18
 Wgt: 5.00 LBS
 DV:

 SHIPPING: 0.00
 SPECIAL: 0.00
 HANDLING: 0.00
 TOTAL: 0.00

 Svc: PRIORITY OVERNIGHT
 TRACK: 4386 5030 2953

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-250ML-WO-THI	# of Bottles: 2	Preservative: ICE	Enter Number of Bottles Sent to Lab	2
ENT-24-QT					
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					
H2SO4 LOT# 9A7275010 EXP: 10/02/2018					
Group: A	Bottle Type: P-125ML	# of Bottles: 2	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab	2
W-PO4-F					