



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes / No

WIN Station Name: G2SW0073

Date: 06/19/2019
(mm/dd/yyyy)

WIN/ Field ID: Long Pond @ Center

WBID: 15478

Latitude: 27.96515

County: Hillsborough

ORG ID: 21FLTPA

Longitude: -82.26539

Receiving Body of Water: N/A

RQ: 2019-06-17-08

Sampling Team Members

Bern Paswater
Kelby Callahan

WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
X	X	X	X	X

Sampling Equipment

☒ Sample Container ☐ Van Dorn ☐ Pole
☐ Carboy ☐ Syringe
☐ Dipper ☐ Other

Depth Measured with VSI
Equipment ID Chewy

Collection Method

☐ Wading ☒ Canoe/Kayak
☐ From Shore ☐ Electric Motor
☐ Other ☐ Gasoline Motor

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

Meter ID# Chewy

Matrix: Fresh Marine / DI

Photos: Yes / No

Flow: No Flow / Intestinal / 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 (PPTH)	Sp COND (umhos/cm)	Temp. (C°)
EST	1120	2.7	0.3	0.4	7.78	101.8	7.90	0.08	170.2	29.5
CEN			2.2		6.20	81.6	7.55	0.08	169.3	29.1

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

SBIO ID Numbers: SBIO-ID: 79945 HA-ID: 16130 RPS-ID: Macrophyte-ID: 11415 LIMS#: 2097199

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4	SA9010030	04/10/20	☒ <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-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ M-FW-QIDC	☐ 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-CTI-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Notes:

Field ID/WIN

G2SW0073

Site Name: Long Pond @ Center

Signature:

Date:

LIMS EVENT ID: 2019-06-20-01

WIN Import ID: 13954

Enter Field Parameters, Verify Station ID In LIMS DMT: SM 07/17/2019

QC Station ID, Field Parameters In LIMS DMT: SM 08/13/2019

Scan/Save Field Sheets SM 09/19/2019

Migrate Data to WIN: SM 08/13/2019

Verify Data In WIN: SM 09/19/2019

(Initials/Date)

(Initials/Date)

(Initials/Date)

G2SW0073

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Long Pond @ CenterCounty: HillsboroughSignature: [Signature]Date: 06/19/2019

required. *Genera that may require lab verification*

Lake units sampled (circle one group):

1, 4, 7, 10 2, 5, 8, 11

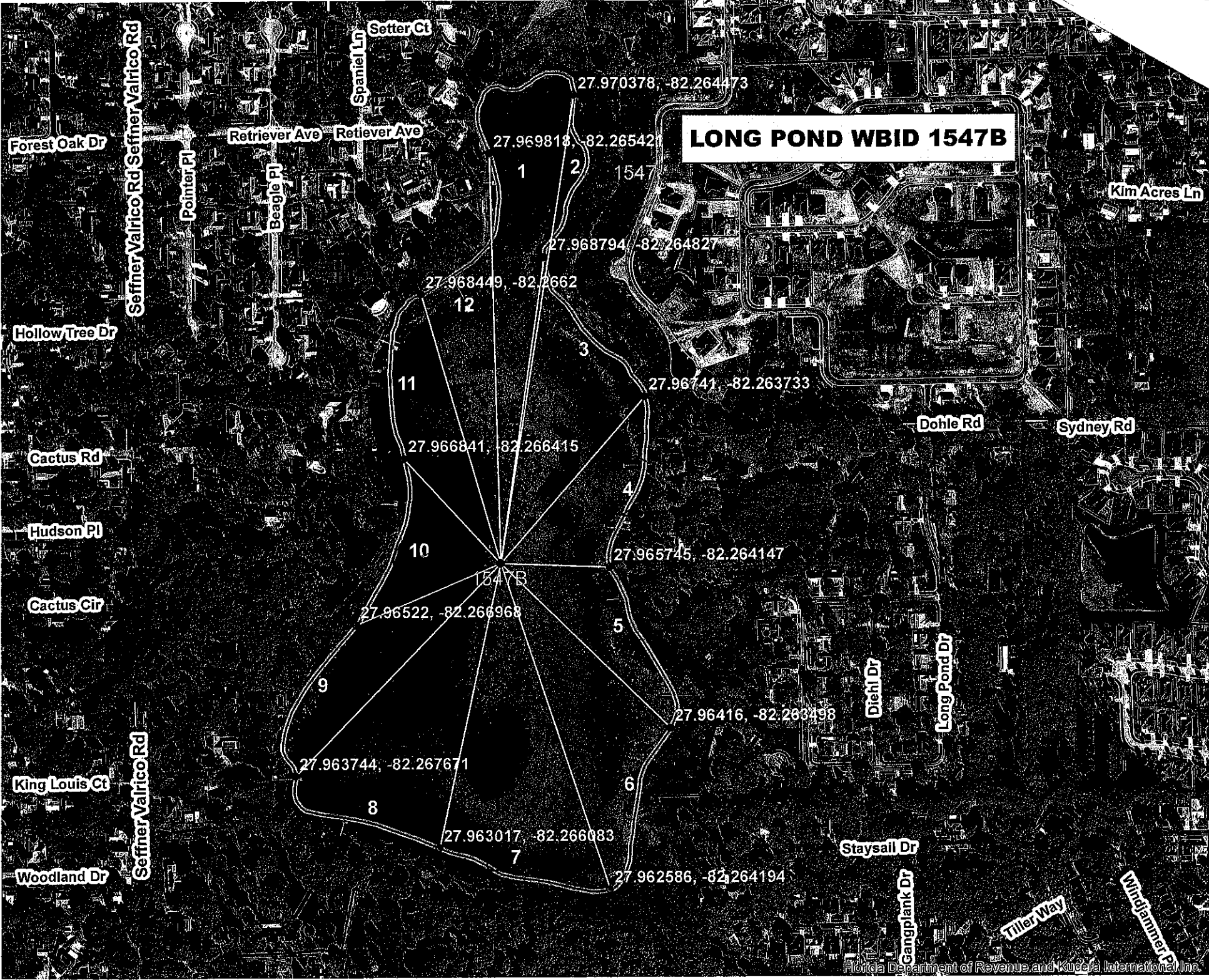
3, 6, 9, 12

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						Gordonia lasianthus					
Alternanthera philoxeroides	X	X	X	X		Habenaria repens					
Andropogon sp.						Hymenachne amplexicaulis	X			X	
Azolla filiculoides (A. caroliniana)						Hydrilla verticillata					
Baccharis sp.						Hydrocotyle sp.	X	X		X	
Bacopa caroliniana						Hygrophila polysperma					
Bacopa monnieri			X	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	X			X		*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		X				Lemna sp.			X		
Crinum americanum						Leucothoe racemosa (Eubotrys racemosa)					
*Cyperus alternifolius (C. involucratus)						Limnium spongia					
Cyperus articulatus						Limnophila sessiliflora					
Cyperus haspan	X		X			Liquidamber styraciflua			X		
*Cyperus lecontei						*Ludwigia arcuata					
*Cyperus polystachyos	X					*Ludwigia leptocarpa					
*Cyperus odoratus	X		X			*Ludwigia linearis					
*Cyperus surinamensis	X	X				*Ludwigia octovalvis	X				
Cyrtilla racemiflora						*Ludwigia peruviana	X	X	X		
Decodon verticillatus						*Ludwigia repens					
Diodia virginiana						*Ludwigia					
*Echinochloa crus-galli						Luziola fluitans (Hydrochloa carolinensis)					
*Echinochloa muricatum						Lyonia lucida					
Echinochloa walteri	X					Ludwigia cruegan				X	
Eclipta prostrata (E. alba)						Ludwigia peploides				X	
Egeria densa											
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											

Date: 06/19/2019

Revision Date: March 1, 2014





STATION NUMBER: CIRCUIT UPPER RIGHT	LAKE SIZE: <u>Mid</u>	LAKE NAME: <u>→</u>	Site Name: <u>Long Pond @ Center</u>																	
REGION:	COUNTY: <u>Hillsborough</u>	SAMPLING LOCATION/DE																		
PARAMETER																				
HYDROLOGY	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 ☐				
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 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 ☐					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

55

COMMENTS:

ANALYSIS DATE:

6/19/19

ANALYST:

Ben Paswater

SIGNATURE:

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: see sticker in upper right MACROPHYTE ID: 11415
COUNTY: Hillsborough WBID: 1547B
LAKE SIZE: _____ TIME: 1120
SAMPLING AGENCY: FLDEP SW ROC

LATITUDE: 27.96515
LONGITUDE: -82.26539

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>5</u> Silviculture _____ Field/Pasture _____ Agricultural _____ Residential <u>90</u> Commercial <u>5</u> Industrial _____ Other (Specify) _____					LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: _____ Land Use Source & Year: _____				
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy					Artificially Impounded ☐ Yes ☒ No				
Local Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy									
STORMWATER INPUTS <u>12</u>		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 <u>12</u> 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	
LAKESIDE ALTERATIONS <u>8</u>		Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected) 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 <u>8</u> 7 6		Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1	
BUFFER ZONE <u>4</u>		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 <u>4</u> 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: <u>0.3</u> <u>29.5</u> <u>7.90</u> <u>7.78</u> <u>101.8</u> <u>170</u> <u>1.08</u> Mid-Depth: _____ Bottom: <u>22</u> <u>29.1</u> <u>7.55</u> <u>6.26</u> <u>81.6</u> <u>169</u> <u>1.08</u>						Clarity: ☐ Clear ☒ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green					
Meter ID: <u>Cheney</u>						SECCHI (M) <u>0.4</u> Total Station Depth (M) <u>2.7</u> 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 :

Sunny about 90°

SAMPLING TEAM:

Ben Paswater and
Kelby Callahan

SIGNATURE:

Ben Paswater

DATE:

6/19/19

Florida Department of Environmental Protection

Central Laboratory Submittal Form

LVIs

Customer: SW-DIST

Project ID: SMP

Requester: Judy Ashton

Field Report Prepared By:

Collected By:

Sampling Agency:

Location		☐ Comp ☒ Grab		Collection (comp begin or grab) Date <u>6/19/19</u> Time <u>1120</u>		☒ Eastern ☐ Central		Composite end Date _____ Time _____		Bottle Group(s) (See pg 2)	
Field ID/WIN <u>G2SW0073</u>		Matrix (type, e.g., Salt, Fresh, etc) <u>○</u>		Diss. Oxygen <u>7.78</u>		☒ mg/L ☐ % sat		Total Res. Chlorine (mg/L)		<u>A</u>	
Win		Temp (C) <u>29.5</u>		pH <u>7.90</u>		Sample Depth <u>0.3</u>		Sp. Conductance (umho/cm) <u>170.2</u>			
Site Name: Long Pond @ Center		☐ dd ☐ dms		Salinity (ppt)		☐ ft ☒ m		Comments			
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 ☐ ft ☐ m		Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		☐ ft ☐ m		Comments			
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 ☐ ft ☐ m		Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		☐ ft ☐ m		Comments			
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 ☐ ft ☐ m		Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		☐ ft ☐ m		Comments			
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 ☐ ft ☐ m		Sp. Conductance (umho/cm)			
Latitude ☐ dd ☐ dms		Longitude ☐ dd ☐ dms		Salinity (ppt)		☐ ft ☐ m		Comments			

Relinquished By: <u>[Signature]</u>	Date/Time: <u>6/19/19 4pm</u>	Shipping Method: <u>Fed Ex</u>	Number of Coolers Shipped: <u>1</u>	Received By: _____	Date/Time: _____
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