



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Brant Lake @ Center

Date: 6/13/18
(mm/dd/yyyy)

WIN/ Field ID: G1SW0025

WBID: 1494B

Latitude: 28.126655
(Decimal Degrees)

County: Hillsborough

ORG ID: 21FLTPA

Longitude: -82.471463
(Decimal Degrees)

Receiving Body of Water: Tampa Bay

RQ-2018- 06-11-10

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Sara Myer						✓	✓	✓	✓
Ben Paswater					✓		✓		

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

Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded					Meter ID# <u>Cherry</u>		Matrix: <u>Fresh</u> Marine / DI			
Photos: Yes / No		Flow: No Flow / Interstitial / Flowing / <u>NA</u>		Tide: Rising/ Falling/ Slack / <u>NA</u>		Tide Times: High <u> </u> Low <u> </u>				
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	1115	4.0	0.3	1.2	8.6	115	7.8	180	179	30.8
			3.5		4.0	52	6.7		180	29.5
Biological Samples Collected: <u>784</u> None HA SCI RPS Algae ID LVS <u>LVI</u> Other:										
SBIO ID Numbers: SBIO-ID: <u>78482</u> HA-ID: <u>15307</u> RPS-ID: <u> </u> Macrophyte-ID: <u>10979</u> LIMS#: <u>2000980</u>										
Parameter Suite	Parameter Methods					Preservation	Lot#	Expiration	pH Check	
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-P					☒ Ice ☒ H2SO4	<u>SA7275010</u>	<u>10/18</u>	☒ <2	
Metals	☐ W-ICPMS ☐ W-ICP					☐ Ice ☐ HNO3			☒ <2	
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter					☒ Ice	9841668			
Chlorophyll	☒ W-LSUITE-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-F / W-TSS / TURBIDITY					☐ Ice				
Macroinvertebrates	☐ MI-FW-QLDC					☐ Formalin				
Periphyton	☐ ALGAE-ID					☐ Ice				
Microbiology	☒ CoI ☐ F CoI ☐ Enterococci					☒ Ice				
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD					☐ Ice				
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA					☐ Ice				
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA ☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R					☐ Ice ☐ Other				

Notes:	Field ID/WIN <u>G1SW0025</u>
	Site Name: <u>Brant Lake @ Center</u>
Signature: <u>Ben Paswater</u>	Date: <u>6/13/18</u>

Enter Field Parameters, Verify Station ID in LIMS DMT: 100 7/17/18

QC Station ID, Field Parameters in LIMS DMT: SM 07/31/2018

Scan/Save Field Sheets SM 08/30/2018

Migrate Data to WIN: MB 8/15/18

Verify Data in WIN: SM 08/30/2018

G1SW0025

AKE VEGETATION INDEX FIELD SHEET



Site Name: Brant Lake @ Center

County: Hillsborough

Date: 06/13/2013

Signature: Sarah Meyer

STORET: G1SW0025

red. *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	1	4	7	10	Collected? (✓)	SPECIES	1	4	7	10	Collected? (✓)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides	✓	✓	✓	✓		Hydrilla verticillata					
Andropogon sp.						Hydrocotyle sp.	✓	✓	✓	✓	
Azolla filiculoides (A. caroliniana)						Hidrolea quadrivalis					
Baccharis sp.						Hygrophila polysperma					
Bacopa caroliniana						*Hypericum fasciculatum					
Bacopa monnieri			✓			*Hypericum hypericoides					
Bidens laevis						*Hypericum myrtifolium					
Bidens mitis						Ilex cassine					
Blechnum serrulatum						Ipomoea aquatica					
Boehmeria cylindrica		✓				Ipomoea sagittata					
Brasenia schreberi						Iris pseudacorus					
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					
Cyrtilla racemiflora						*Ludwigia peruviana					
Decodon verticillatus						*Ludwigia repens					
Diodia virginiana	✓					*Ludwigia	✓			✓	✓
*Echinochloa crus-galli						Luziola fluitans (Hydrochloa carolinensis)					
*Echinochloa muricatum						Lycopus virginicus					
Echinochloa walteri						Lyonia lucida					
Eclipta prostrata (E. alba)						Magnolia virginiana					
Egeria densa						Mayaca fluviatilis		✓	✓	✓	
Eichhornia crassipes						Melaleuca quinquenervia		✓			
*Eleocharis baldwinii						Micranthemum glomeratum					
*Eleocharis		✓				Micranthemum umbrosum					
Eleocharis cellulosa						Mikania scandens	✓	✓			
Eleocharis equisetoides						Mimosa pigra					
Eleocharis interstincta						Myrica cerifera		✓			
*Eriocaulon compressum						Myrica cerifera					
*Eriocaulon decangulare						Umbellula cyperus					
Eupatorium capillifolium						Ludwigia grandiflora					
*Fuirena				✓							
Fuirena scirpoidea											
Gordonia lasianthus											

Blant Link FOR

62-160,800, F.A.C

① Nuphar ②
Nymphaea odorata ③

native snail eggs

Revision Date: March 1, 20

Nuphar dominate
in 4

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 78482 MACROPHYTE ID: 10979
 COUNTY: Hillsborough STORET #: _____
 DATE: _____ TIME: 11:15
 SITE NAME: _____
 FIELD ID/NAME: _____

Field ID/WIN

G1SW0025



Site Name: Brant Lake @ Center

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS): Forest/Natural <u>20</u> Silviculture _____ Field/Pasture <u>10</u> Agricultural <u>10</u> Residential <u>100</u> Commercial _____ Industrial _____ Other (Specify) _____						LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: _____ Land Use Source & Year: _____											
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy						Artificially Impounded: ☐ Yes ☐ No											
STORMWATER-INPUTS <u>8</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 12 11				Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 <u>8</u> 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>12</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 <u>12</u> 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			
BUFFER ZONE <u>6</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 <u>6</u>				< 29% of shoreline with >18m buffer 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: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>30.8</u> <u>7.4</u> <u>8.6</u> <u>115</u> <u>179</u> / Mid-Depth: _____ Bottom: <u>3.5</u> <u>29.5</u> <u>6.7</u> <u>4.0</u> <u>52</u> <u>180</u> / Meter ID: <u>Chewy</u>						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): _____						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: <u>Septic around Lake</u>					
Weather Conditions: <u>Sunny ~ 90</u>																	
SAMPLING TEAM: <u>Gara Myer + Ben Dinswater</u>						SIGNATURE: <u>Ben Dinswater</u>			DATE: <u>6/13/18</u>								



Site Name: **Brant Lake @ Center**

: Lake Habitat Assessment Field Sheet

STORE/STATION NUMBER:	LAKE NAME:		FIELD ID / NAME:	
ECO-REGION:	COUNTY:	SAMPLING LOCATION/DESCRIPTION:		LAKE SIZE:
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 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

79

COMMENTS:

ANALYSIS DATE:

ANALYSIS DATE: 6/13/18

ANALYST:

LYST
Sara Myer, Ben Laswate

SIGNATURE:

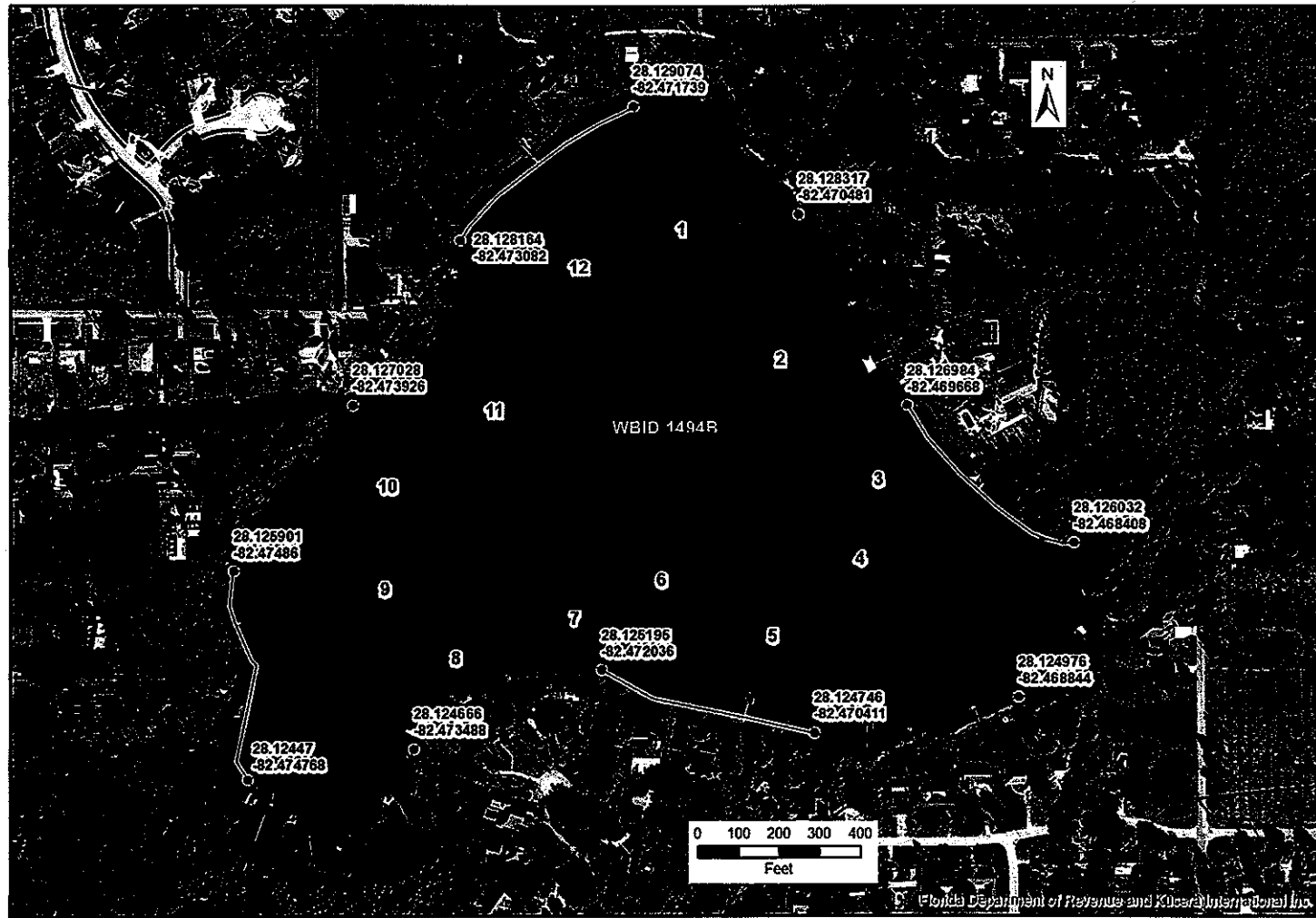
Ben P.

Contains: 1:1 Sulfuric Acid
Lot No.: SA7275010
Expires: 10/02/18
See Safety Data Sheet (SDS)


ACID 51%
SULFURIC
 100% H₂SO₄
 1800-450-2111
 HAZARD CASH KANSAS
 100% H₂SO₄

1. 2014

LVI Map for BRANT LAKE, WBID 1494B



Current Date: 1/8/2015

Date Saved: 1/7/2015

HOA Boat Ramp N 28.12926 W 82.47102

Request Number: RQ-2018-06-11-10

Florida Department of Environmental Protection

Central Laboratory Submittal Form

Page 1 of 2

LVI Lakes

last revised Jan 25, 2018

Customer: SW-DIST

Requester: Benjamin Paswater

Field Report Prepared By: *Ben Paswater*

Project ID: SMP

Collected By: *Ben Paswater, Sara Myer*Sampling Agency: *SW RCO*

Location		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <i>6/13/18</i> Time <i>1115</i>	Eastern Central	Composite end Date	Time	Bottle Group(s) (See pg 2)
Field ID/WIN G1SW0025		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen <i>8.6</i>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	<i>A</i>
Site Name: Brant Lake @ Center		Temp (C) <i>30.8</i>	pH <i>7.8</i>	Sample Depth <i>0.3</i>	☐ ft ☒ m	Sp. Conductance (umho/cm) <i>179</i>	
☐ dd ☐ dms		Salinity (ppt)	Comments				

Location		☐ Comp ☒ Grab	Collection (comp begin or grab) Date <i>6/13/18</i> Time <i>1310</i>	Eastern Central	Composite end Date	Time	Bottle Group(s)
Field ID/WIN G1SW0075		Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen <i>14.0</i>	☒ mg/L ☐ % sat	Total Res. Chlorine (mg/L)	<i>A</i>
Site Name: Wilson Lake		Temp (C) <i>30.8</i>	pH <i>8.9</i>	Sample Depth <i>0.3</i>	☐ ft ☒ m	Sp. Conductance (umho/cm) <i>201</i>	
☐ dd ☐ dms		Salinity (ppt)	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)	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)	Comments					

Relinquished By: <i>Ben Paswater</i>	Date/Time <i>6/13/18 4pm</i>	Shipping Method <i>Fed Ex</i>	Number of Coolers Shipped: <i>1</i>	Received By:	Date/Time
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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
ECOLI-18QT					
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					