



# FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes / No

WIN Station Name: See label on page 2

Date:

WIN/ Field ID: See label pg 2

WBID: 1539D

Latitude:

(Decimal Degrees)

County: POLK

ORG ID: 21FLTPA

Longitude:

(Decimal Degrees)

Receiving Body of Water:

RQ-2020-05-11-17

| Sampling Team Members | WQ Measurements                     | Sample Collection                   | Documentation                       | Preservation                        | Preservation Check                  |
|-----------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| JUDY ASHTON           | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| BEN MCKITTER          | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
|                       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
|                       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
|                       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |

| Sampling Equipment                                   |                                                    |
|------------------------------------------------------|----------------------------------------------------|
| <input checked="" type="checkbox"/> Sample Container | <input type="checkbox"/> Van Dorn                  |
| <input type="checkbox"/> Syringe                     | <input type="checkbox"/> Pole                      |
| <input type="checkbox"/> Dipper                      | <input type="checkbox"/> Other                     |
| Depth Measured with                                  |                                                    |
| Equipment ID                                         |                                                    |
| Collection Method                                    |                                                    |
| <input type="checkbox"/> Wading                      | <input type="checkbox"/> Canoe/Kayak               |
| <input type="checkbox"/> From Shore                  | <input type="checkbox"/> Electric Motor            |
| <input type="checkbox"/> Other                       | <input checked="" type="checkbox"/> Gasoline Motor |

|                                                                       |                              |                                  |                      |
|-----------------------------------------------------------------------|------------------------------|----------------------------------|----------------------|
| Water Level: Dry/ Pooled/ Low / Normal / High / Flooded               |                              | Meter ID# SWD                    |                      |
| Photos: Yes / No                                                      | Flow: No Flow / Flowing / NA | Tide: Rising/ Falling/ Slack/ NA | Tide Times: High Low |
| Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other: |                              |                                  |                      |
| SBIO ID Numbers:                                                      | SBIO-ID: 81063               | HA-ID: 16623                     | RPS-ID: ———          |
| Macrophyte-ID: 11673                                                  |                              | LIMS#: 2178559                   |                      |
| Notes:                                                                |                              |                                  |                      |

## Duplicate Sample

|                            |             |                 |              |
|----------------------------|-------------|-----------------|--------------|
| Time Zone: EST CEN         | Time: _____ | Field ID: _____ | (WIN ID_DUP) |
| WIN DMT Activity ID: _____ |             |                 |              |

## Blank

|                                      |                                          |                                                        |                       |
|--------------------------------------|------------------------------------------|--------------------------------------------------------|-----------------------|
| Time Zone: EST CEN                   | Time: _____                              | Field ID: _____                                        | (Blank Type_DDMMYYYY) |
| DI Source: _____                     |                                          | Location: _____                                        |                       |
| <input type="checkbox"/> Field Blank | <input type="checkbox"/> Equipment Blank | <input type="checkbox"/> Field Cleaned Equipment Blank | Equipment ID: _____   |

|            |              |
|------------|--------------|
| Signature: | Date: 6-9-20 |
|------------|--------------|

LIMS EVENT ID: 2020-06-10-02 WIN Import ID: 21208

Enter Field Parameters, Verify Station ID In LIMS DMT: SM 06/15/2020 QC Station ID, Field Parameters In LIMS DMT: SM 07/27/2020

Scan/Save Field Sheets Migrate Data to WIN: SM 07/27/2020 Verify Data In WIN: SM 09/09/2020



RQ-2020- See page 1

Collected By: SWROC

Customer: SWDIST

Field Report Prepared By:

ProjectID: SMP

Sampling Agency: FDEP

Field ID/WIN

G3SW0080



Site Name: Lake Otis @ Center

Comments:

\* CABLE TO YSI TOO SHORT

Matrix: Fresh / Marine

(Check one)

☒ GRAB☐ COMPOSITE

| Date       | Time | DO (mg/L) | DO (%SAT) | Temp. (C°) | pH   | Sample Depth (m) | Secchi Disk (m)                  | Total Depth (m) | Sp COND (µmhos/cm) | Salinity (PPTH) |
|------------|------|-----------|-----------|------------|------|------------------|----------------------------------|-----------------|--------------------|-----------------|
| 06/09/2020 | 1150 | 9.21      | 121.1     | 29.6       | 8.25 | 0.3              | 0.6                              | 5.6             | 191.6              | 0.09            |
| EST / CST  |      |           |           |            |      |                  | <input type="checkbox"/> VOB (S) |                 |                    |                 |

Cental Lab please use top row for login purposes

|           |  |      |      |      |      |      |  |  |       |      |
|-----------|--|------|------|------|------|------|--|--|-------|------|
|           |  | 2.52 | 31.9 | 27.5 | 7.32 | 4.0* |  |  | 193.2 | 0.09 |
| EST / CST |  |      |      |      |      |      |  |  |       |      |

| Parameter Suite                    | Parameter Methods                                                                                                                                                        | Preservation                                                                                       | pH Check                    | # Bottles sent to Lab | Bottle Group |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|--------------|
| Preserved Nutrients (P-500ML)      | <input type="checkbox"/> W-NH3 / <input type="checkbox"/> W-NO2NO3 / <input type="checkbox"/> W-TKN / <input type="checkbox"/> W-TOC / <input type="checkbox"/> W-S-A-TP | <input checked="" type="checkbox"/> Ice <input type="checkbox"/> H2SO4                             | <input type="checkbox"/> <2 | 1                     | A            |
|                                    | Lot # SA9354050 Exp: 12-22-20                                                                                                                                            |                                                                                                    |                             |                       |              |
| Metals (P-500ML)                   | <input type="checkbox"/> W-ICPMS <input checked="" type="checkbox"/> W-ICP <input type="checkbox"/> W-HARD                                                               | <input checked="" type="checkbox"/> Ice <input type="checkbox"/> HNO3* <input type="checkbox"/> <2 |                             | 1                     |              |
|                                    | Lot # NA9254150 Exp: 9-11-20                                                                                                                                             |                                                                                                    |                             |                       |              |
| Filtered Nutrients (P125ML)        | <input checked="" type="checkbox"/> W-PO4-F <input checked="" type="checkbox"/> Field Filtered 0.45 µm Filter                                                            | <input checked="" type="checkbox"/> Ice                                                            |                             | 1                     |              |
|                                    | Filter Lot # Exp:                                                                                                                                                        |                                                                                                    |                             |                       |              |
|                                    | Syringe Lot # Exp:                                                                                                                                                       |                                                                                                    |                             |                       |              |
| Chlorophyll (BP-1L)                | <input checked="" type="checkbox"/> CHLSUITE-W                                                                                                                           | <input checked="" type="checkbox"/> Ice                                                            |                             | 1                     |              |
| Physical/Aggregate (Fresh) (P-1L)  | <input checked="" type="checkbox"/> Alkalinity / W-F / W-TSS / TURBIDITY / W-CHC / W-COLOR / W-SO4-IC / W-TDS                                                            | <input checked="" type="checkbox"/> Ice                                                            |                             | 1                     |              |
| Physical/Aggregate (Marine) (P-1L) | <input type="checkbox"/> Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY                                                                                                  | <input type="checkbox"/> Ice                                                                       |                             |                       |              |
| Macroinvertebrates (PJ-2L)         | <input type="checkbox"/> MI-FW-QLDC                                                                                                                                      | <input type="checkbox"/> Formalin                                                                  |                             |                       |              |
| Periphyton (PT-50ML)               | <input type="checkbox"/> ALGAE-ID                                                                                                                                        | <input type="checkbox"/> Ice                                                                       |                             |                       |              |
| Microbiology (Contract Lab Bottle) | <input type="checkbox"/> E Coli <input type="checkbox"/> F Coli <input type="checkbox"/> Enterococci                                                                     | <input type="checkbox"/> Ice                                                                       |                             |                       |              |
|                                    | <input type="checkbox"/> Contract Lab                                                                                                                                    |                                                                                                    |                             |                       |              |
| Molecular (QPCR-P-500ML)           | <input type="checkbox"/> PCR-HF183 <input type="checkbox"/> PCR-BacR <input type="checkbox"/> PCR-DG3                                                                    | <input type="checkbox"/> Ice                                                                       |                             |                       |              |
|                                    | <input type="checkbox"/> PCR-GULL2 <input type="checkbox"/> PCR-GFD <input type="checkbox"/>                                                                             |                                                                                                    |                             |                       |              |
| Tracers (BG-500ML)                 | <input type="checkbox"/> W-E8321-DI <input type="checkbox"/> W-E8321-MS                                                                                                  | <input type="checkbox"/> Ice                                                                       |                             |                       |              |
| Pesticides (BG-500ML) (BG-1L)      | <input type="checkbox"/> W-E8321-DI <input type="checkbox"/> WE8321-MS <input type="checkbox"/> W-PSNP-TQ <input type="checkbox"/> W-CT-CL-R                             | <input type="checkbox"/> Ice                                                                       |                             |                       |              |
|                                    | <input type="checkbox"/> W-PCL-SQ-R <input type="checkbox"/> W-CARB-AA (5 ml of MCAA** Buffer Solution)                                                                  | <input type="checkbox"/> Ice                                                                       |                             |                       |              |
|                                    |                                                                                                                                                                          | <input type="checkbox"/> Ice                                                                       |                             |                       |              |

|                  |           |                 |                            |              |                     |
|------------------|-----------|-----------------|----------------------------|--------------|---------------------|
| Relinquished By: | Date/Time | Shipping Method | Number of Coolers Shipped: | Received By: | Date/Time: 6/9/2020 |
|------------------|-----------|-----------------|----------------------------|--------------|---------------------|

\*2.0 ml of Preservative used unless noted otherwise.

\*\*MCAA: Monochloroacetic acid buffer solution

Email Submittal form to : lab.receiving@floridadep.gov.



Waterbody:

County:

Signature:

Date:

Site Name: **Lake Otis @ Center**

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)                            | 7 | 10 | 4 | 1 | Collec<br>ted?<br>(✓) | SPECIES (G-L)                              | 7 | 10 | 4 | 1 | Collec<br>ted?<br>(✓) |
|------------------------------------------|---|----|---|---|-----------------------|--------------------------------------------|---|----|---|---|-----------------------|
| Acer rubrum                              |   |    | X | X |                       | Gordonia lasianthus                        |   |    |   |   |                       |
| Alternanthera philoxeroides              | X |    |   |   |                       | Habenaria repens                           |   |    |   |   |                       |
| Andropogon sp.                           |   |    |   |   |                       | Hymenachne amplexicaulis                   |   |    |   |   |                       |
| Azolla filiculoides (A. caroliniana)     |   |    |   |   |                       | Hydrilla verticillata                      | X |    |   |   |                       |
| Baccharis sp.                            |   |    |   |   |                       | Hydrocotyle sp.                            | X | X  | X |   |                       |
| 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                   | X | X  | X | X |                       | Juncus repens                              |   |    |   |   |                       |
| Chara sp.                                | X | X  | X | X |                       | *Juncus scirpoides                         |   |    |   |   |                       |
| Cladium jamaicense                       |   |    |   |   |                       | Lachnanthes caroliniana                    |   |    |   |   |                       |
| Cliftonia monophylla                     |   |    |   |   |                       | Leersia hexandra                           |   |    |   |   |                       |
| Colocasia esculenta                      |   |    |   | X |                       | 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                        |   |    | X |   |                       | *Ludwigia linearis                         |   |    |   |   |                       |
| *Cyperus surinamensis                    |   |    |   |   |                       | *Ludwigia octovalvis                       |   |    |   |   |                       |
| Cyrtilla racemiflora                     |   |    |   |   |                       | *Ludwigia peruviana                        | X |    |   |   |                       |
| Decodon verticillatus                    |   |    |   |   |                       | *Ludwigia repens                           |   |    |   |   |                       |
| Diodia virginiana                        |   |    |   |   |                       | *Ludwigia                                  |   |    |   |   |                       |
| *Echinochloa crus-galli                  |   |    |   |   |                       | Luziola fluitans (Hydrochloa carolinensis) |   |    |   |   |                       |
| *Echinochloa muricatum                   |   |    |   |   |                       | Lyonia lucida                              |   |    |   |   |                       |
| Echinochloa walteri                      |   |    |   |   |                       |                                            |   |    |   |   |                       |
| Eclipta prostrata (E. alba)              |   |    |   |   |                       |                                            |   |    |   |   |                       |
| Egeria densa                             |   |    |   |   |                       |                                            |   |    |   |   |                       |
| Eichhornia crassipes                     | X |    |   |   |                       |                                            |   |    |   |   |                       |
| *Eleocharis baldwinii                    |   |    |   |   |                       |                                            |   |    |   |   |                       |
| *Eleocharis viviparous                   | X |    |   |   |                       |                                            |   |    |   |   |                       |
| Eleocharis cellulosa                     |   |    |   |   |                       |                                            |   |    |   |   |                       |
| Eleocharis equisetoides                  |   |    |   |   |                       |                                            |   |    |   |   |                       |
| Eleocharis interstincta                  |   |    |   |   |                       |                                            |   |    |   |   |                       |
| *Eriocaulon compressum                   |   |    |   |   |                       |                                            |   |    |   |   |                       |
| *Eriocaulon decangulare                  |   |    |   |   |                       |                                            |   |    |   |   |                       |
| Eupatorium capillifolium                 |   |    |   |   |                       |                                            |   |    |   |   |                       |
| *Fuirena                                 |   |    |   |   |                       |                                            |   |    |   |   |                       |
| Fuirena scirpoidea                       |   |    |   |   |                       |                                            |   |    |   |   |                       |



Site Name: **Lake Otis @ Center**

LATITUDE: \_\_\_\_\_

LONGITUDE: \_\_\_\_\_

SAMPLING AGENCY: **FAEP**WBID: **1539D**LAKE SIZE: **L** RQ: **2022-05-11-17**

FIELD ID/NAME: \_\_\_\_\_

**WATERSHED / LAKESIDE FEATURES****PREDOMINANT LAND-USE IN WATERSHED** (specify relative percent in each category – from GIS) :

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 &lt; 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 &gt; 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

**LAKESIDE ALTERATIONS**

Very few man-made structures, roads, or other disturbance adjacent to lake (&lt;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 (&gt;70% of lakeside affected)

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 &gt;18 m buffer

89%-51% of shoreline with &gt;18m buffer or &gt;75% with 10m to 18m buffer

50%-30% of shoreline with &gt;18m buffer or 50%-74% with 10m to 18m buffer

&lt; 29% of shoreline with &gt;18m buffer

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 ☐ NoColor Sample Taken? ☒ Yes ☐ No Lot # \_\_\_\_\_ Exp. Date: \_\_\_\_\_Alkalinity Sample Taken? ☒ Yes ☐ NoWater Level ☐ Low ☒ Normal ☐ High**Water Odors:** ☒ Normal☐ Sewage ☐ Petroleum ☐ Other \_\_\_\_\_**Water Surface Oils:** ☒ None☐ 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:**☐ Clear☐ Opaque ☐ Turbid☒ Slightly Turbid**Color:**☐ Clear☐ Tannic ☒ GreenSECCHI (M) **0.6**

Total Station Depth (M)

VOB ☐**5.6**

Meter ID: \_\_\_\_\_

**Sediment Type:** (may check more than one)☐ Sandy ☐ Organic fibrous (peaty, CPOM)☐ Sand/Silt ☒ Organic smooth (muck)Sample Taken? ☐ Yes ☒ No☐ Vegetated☐ Other (Specify): \_\_\_\_\_**Sediment Odors:**☒ Normal ☐ Other (Specify): \_\_\_\_\_☐ Anaerobic**Biological Communities:**LVI Conducted? ☒ Yes ☐ NoPhytoplankton Sample Taken? ☐ Yes ☒ NoSample Preserved? ☐ Yes ☐ No

Lot #: \_\_\_\_\_ Exp Date: \_\_\_\_\_

Algal Bloom/Algal ID Sample Taken? ☐ Yes ☐ NoActive Vegetation Mgmt? ☐ Yes ☐ No ☐ Don't Know**Abundance:**

Absent Rare Common Abundant

Periphyton ☐ ☐ ☒ ☐Nuisance Plants ☐ ☐ ☒ ☐Submersed Plants ☐ ☐ ☒ ☐Exotic Apple Snails ☐ ☐ ☐ ☒**Additional Notes:****Weather Conditions :**SAMPLING TEAM: **ASHTON + PITSWATER**

SIGNATURE:

DATE: **6-9-20**

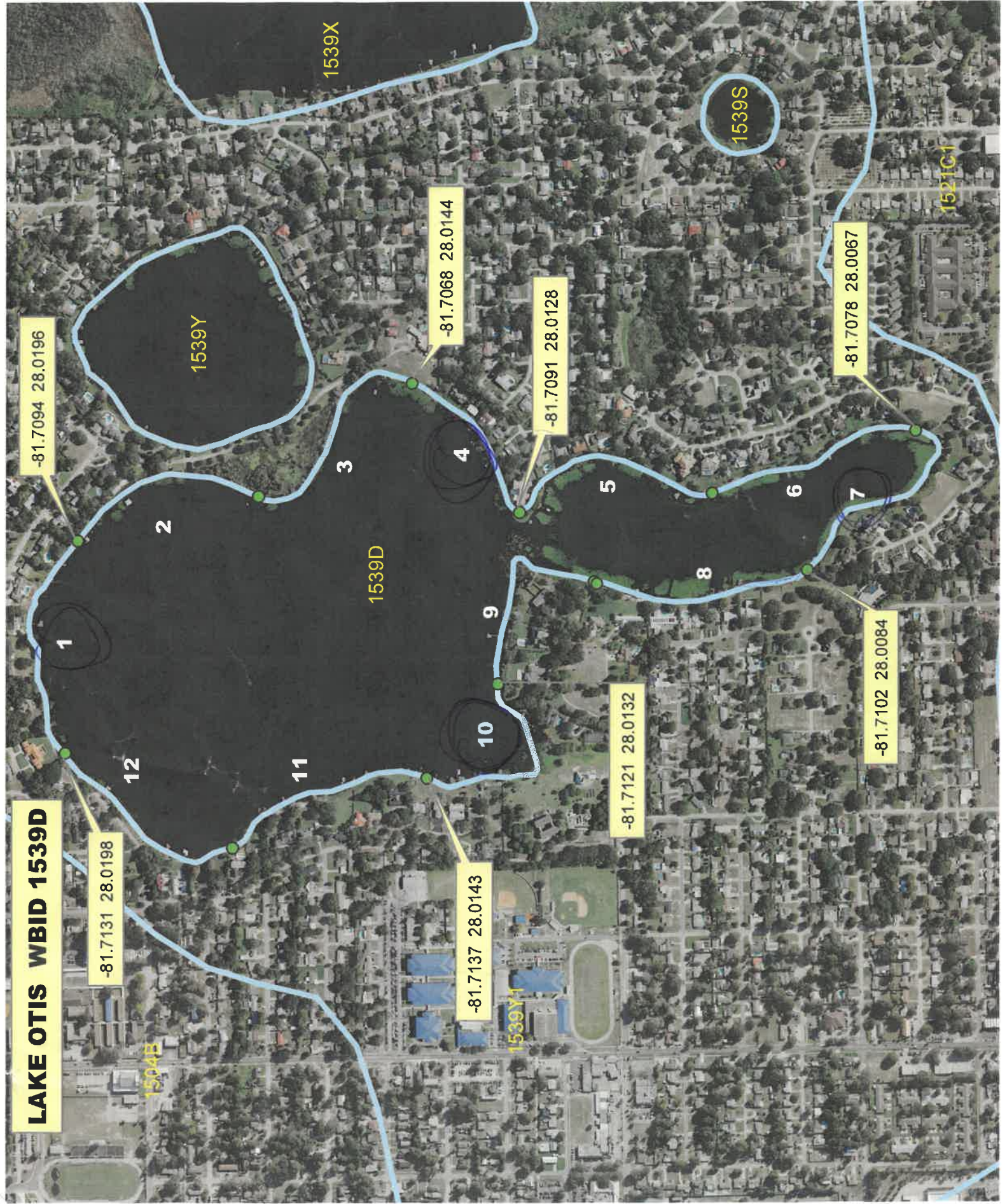


## 3: Lake Habitat Assessment Field Sheet

Site Name: **Lake Otis @ Center**

| ECO-REGION:                        |  | COUNTY:                                                                                                                                                                                                                                                                                                               | LAKE NAME                                                                                                                                                                         |    |    |    |            |                                                                                                                                                 |     |     |     |          | FIELD ID / NAME:                                                                                                                                                       |     |     |     |      |     |     |     |     |   |
|------------------------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|----|------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----|-----|------|-----|-----|-----|-----|---|
| PARAMETER                          |  | No surface inflow or outflow present, very long water residence time, groundwater seepage dominates<br><input type="checkbox"/>                                                                                                                                                                                       | Surface water inflow present, but flow is rare, moderate to long water residence time<br><input checked="" type="checkbox"/>                                                      |    |    |    |            | Surface water inflow and outflow present (or outflow only), sometimes with visible flow, short water residence time<br><input type="checkbox"/> |     |     |     |          | Impounded, hydrology of system artificially controlled<br><input type="checkbox"/>                                                                                     |     |     |     |      |     |     |     |     |   |
| HYDROLOGY                          |  |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                   |    |    |    |            |                                                                                                                                                 |     |     |     |          |                                                                                                                                                                        |     |     |     |      |     |     |     |     |   |
| Color                              |  | Very clear, uncolored water (benthic sampling appropriate)<br><input type="checkbox"/>                                                                                                                                                                                                                                | Water somewhat tannin stained (benthic sampling appropriate)<br><input checked="" type="checkbox"/>                                                                               |    |    |    |            | Dark, discolored water (water color 20 PCU or higher)<br><input type="checkbox"/>                                                               |     |     |     |          | Visibility extremely reduced due to high color<br><input type="checkbox"/>                                                                                             |     |     |     |      |     |     |     |     |   |
|                                    |  | Optimal                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                   |    |    |    | Suboptimal |                                                                                                                                                 |     |     |     | Marginal |                                                                                                                                                                        |     |     |     | Poor |     |     |     |     |   |
| Secchi                             |  | Secchi > 3 m      Secchi(m)                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                   |    |    |    | 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 |   |
|                                    |  | Or VOB                                                                                                                                                                                                                                                                                                                | 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<br><input type="checkbox"/>                                                                                                                                                                                                   | Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants<br><input checked="" type="checkbox"/> |    |    |    |            | Large masses (21%- 40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats<br><input type="checkbox"/>             |     |     |     |          | Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed)<br><input type="checkbox"/> |     |     |     |      |     |     |     |     |   |
|                                    |  | 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<br><input type="checkbox"/>                                                                                                                                                                                                     | Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place<br><input checked="" type="checkbox"/>                                         |    |    |    |            | Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place<br><input type="checkbox"/>          |     |     |     |          | Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place<br><input type="checkbox"/>                          |     |     |     |      |     |     |     |     |   |
|                                    |  | 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<br><input type="checkbox"/>                                                                                                                                                                                                | Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present<br><input checked="" type="checkbox"/>                                               |    |    |    |            | Moderate layer of CPOM/ mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom<br><input type="checkbox"/>       |     |     |     |          | Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom<br><input type="checkbox"/>           |     |     |     |      |     |     |     |     |   |
|                                    |  | 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%)<br><input type="checkbox"/>                                                                                                                                                                                                         | Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected<br><input checked="" type="checkbox"/>                                                       |    |    |    |            | Many structures, roads or other human disturbance visible (50%-70%) lakeside affected<br><input type="checkbox"/>                               |     |     |     |          | Highly developed or disturbed (>70% of lakeside affected)<br><input type="checkbox"/>                                                                                  |     |     |     |      |     |     |     |     |   |
|                                    |  | 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<br><input type="checkbox"/>                                                                                                                                                                                 | 89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer<br><input checked="" type="checkbox"/>                                                                       |    |    |    |            | 50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer<br><input type="checkbox"/>                                             |     |     |     |          | < 29% of shoreline with >18m buffer<br><input type="checkbox"/>                                                                                                        |     |     |     |      |     |     |     |     |   |
|                                    |  | 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<br><input type="checkbox"/> |                                                                                                                                                                                   |    |    |    |            |                                                                                                                                                 |     |     |     |          |                                                                                                                                                                        |     |     |     |      |     |     |     |     |   |
|                                    |  | 20                                                                                                                                                                                                                                                                                                                    | 19                                                                                                                                                                                | 18 | 17 | 16 | 15         | 14                                                                                                                                              | 13  | 12  | 11  | 10       | 9                                                                                                                                                                      | 8   | 7   | 6   | 5    | 4   | 3   | 2   | 1   |   |
| TOTAL SCORE                        |  | 82                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                   |    |    |    |            |                                                                                                                                                 |     |     |     |          |                                                                                                                                                                        |     |     |     |      |     |     |     |     |   |
| COMMENTS:                          |  |                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                   |    |    |    |            |                                                                                                                                                 |     |     |     |          |                                                                                                                                                                        |     |     |     |      |     |     |     |     |   |
| ANALYSIS DATE:                     |  | 6-9-20                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                   |    |    |    |            |                                                                                                                                                 |     |     |     |          |                                                                                                                                                                        |     |     |     |      |     |     |     |     |   |
| ANALYST:                           |  | Judy Ashton                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                   |    |    |    |            |                                                                                                                                                 |     |     |     |          |                                                                                                                                                                        |     |     |     |      |     |     |     |     |   |
| SIGNATURE:                         |  | Judy Ashton                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                   |    |    |    |            |                                                                                                                                                 |     |     |     |          |                                                                                                                                                                        |     |     |     |      |     |     |     |     |   |

**LAKE OTIS WBID 1539D**



**Florida Department of Environmental Protection  
Central Laboratory Submittal Form**

LVI C Kit Lakes

last revised Jan 25, 2018

Customer: SW-DIST

Requester: Benjamin Paswater

Field Report Prepared By:

J. Ashton

Project ID: SMP

Collected By:

J. Ashton, B. Paswater

Sampling Agency:

FL DEP

|              |  |                                                             |  |                                                                           |  |                                                                                 |  |                                                                                                  |  |                                        |  |
|--------------|--|-------------------------------------------------------------|--|---------------------------------------------------------------------------|--|---------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------|--|----------------------------------------|--|
| Location     |  | Field ID/WIN<br><b>G3SW0079</b>                             |  | <input type="checkbox"/> Comp<br><input checked="" type="checkbox"/> Grab |  | Collection (comp begin or grab)<br>Date <u>6-9-20</u> Time <u>1010</u>          |  | Eastern<br><input checked="" type="checkbox"/> Central<br>Composite end<br>Date _____ Time _____ |  | Bottle Group(s)<br>(See pg 2)          |  |
| Field ID     |  |                                                             |  | Matrix (type, e.g., Salt, Fresh, etc)                                     |  | Diss. Oxygen<br><u>11.60</u>                                                    |  | <input checked="" type="checkbox"/> mg/L<br><input type="checkbox"/> % sat                       |  | Total Res. Chlorine<br>(mg/L)          |  |
| WIN/STOR     |  | Site Name: <b>Lake Blue @ Center</b>                        |  | Temp (C) <u>29.2</u>                                                      |  | pH <u>8.62</u>                                                                  |  | Sample Depth <u>0.3</u>                                                                          |  | Sp. Conductance (umho/cm) <u>128.5</u> |  |
| Latitude     |  | <input type="checkbox"/> dd<br><input type="checkbox"/> dms |  | Salinity (ppt) <u>0.06</u>                                                |  | Comments                                                                        |  |                                                                                                  |  |                                        |  |
| Location     |  | Field ID/WIN<br><b>G3SW0080</b>                             |  | <input type="checkbox"/> Comp<br><input checked="" type="checkbox"/> Grab |  | Collection (comp begin or grab)<br>Date <u>6-9-20</u> Time <u>1150</u>          |  | Eastern<br><input checked="" type="checkbox"/> Central<br>Composite end<br>Date _____ Time _____ |  | Bottle Group(s)                        |  |
| Field ID     |  |                                                             |  | Matrix (type, e.g., Salt, Fresh, etc)                                     |  | Diss. Oxygen<br><u>9.21</u>                                                     |  | <input checked="" type="checkbox"/> mg/L<br><input type="checkbox"/> % sat                       |  | Total Res. Chlorine<br>(mg/L)          |  |
| WIN/STOR     |  | Site Name: <b>Lake Otis @ Center</b>                        |  | Temp (C) <u>29.6</u>                                                      |  | pH <u>8.25</u>                                                                  |  | Sample Depth <u>0.5</u>                                                                          |  | Sp. Conductance (umho/cm) <u>191.6</u> |  |
| Latitude     |  | <input type="checkbox"/> dd<br><input type="checkbox"/> dms |  | Salinity (ppt) <u>0.09</u>                                                |  | Comments                                                                        |  |                                                                                                  |  |                                        |  |
| Location     |  | Field ID                                                    |  | <input type="checkbox"/> Comp<br><input type="checkbox"/> Grab            |  | Collection (comp begin or grab)<br>Date _____ Time _____                        |  | Eastern<br><input type="checkbox"/> Central<br>Composite end<br>Date _____ Time _____            |  | Bottle Group(s)                        |  |
| WIN/STORET # |  |                                                             |  | Matrix (type, e.g., Salt, Fresh, etc)                                     |  | Diss. Oxygen<br><input type="checkbox"/> mg/L<br><input type="checkbox"/> % sat |  | Total Res. Chlorine<br>(mg/L)                                                                    |  |                                        |  |
| Latitude     |  | <input type="checkbox"/> dd<br><input type="checkbox"/> dms |  | Longitude                                                                 |  | <input type="checkbox"/> dd<br><input type="checkbox"/> dms                     |  | Salinity (ppt)                                                                                   |  | Comments                               |  |
| Location     |  | Field ID                                                    |  | <input type="checkbox"/> Comp<br><input type="checkbox"/> Grab            |  | Collection (comp begin or grab)<br>Date _____ Time _____                        |  | Eastern<br><input type="checkbox"/> Central<br>Composite end<br>Date _____ Time _____            |  | Bottle Group(s)                        |  |
| WIN/STORET # |  |                                                             |  | Matrix (type, e.g., Salt, Fresh, etc)                                     |  | Diss. Oxygen<br><input type="checkbox"/> mg/L<br><input type="checkbox"/> % sat |  | Total Res. Chlorine<br>(mg/L)                                                                    |  |                                        |  |
| Latitude     |  | <input type="checkbox"/> dd<br><input type="checkbox"/> dms |  | Longitude                                                                 |  | <input type="checkbox"/> dd<br><input type="checkbox"/> dms                     |  | Salinity (ppt)                                                                                   |  | Comments                               |  |

|                                      |                                 |                                   |                                        |              |           |
|--------------------------------------|---------------------------------|-----------------------------------|----------------------------------------|--------------|-----------|
| Relinquished By:<br><u>J. Ashton</u> | Date/Time<br><u>6-9-20 1200</u> | Shipping Method<br><u>FLA Exp</u> | Number of Coolers Shipped:<br><u>1</u> | Received By: | Date/Time |
|--------------------------------------|---------------------------------|-----------------------------------|----------------------------------------|--------------|-----------|

|          |              |         |                 |               |               |                                     |   |
|----------|--------------|---------|-----------------|---------------|---------------|-------------------------------------|---|
| 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-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: | HNO3          | Enter Number of Bottles Sent to Lab | 2 |
|          | W-HARD       |         |                 |               |               |                                     |   |
|          | W-ICP        |         |                 |               |               |                                     |   |
|          | W-ICPMS      |         |                 |               |               |                                     |   |
| 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      |         |                 |               |               |                                     |   |
|          | W-SO4-IC-F   |         |                 |               |               |                                     |   |