



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

page 1
of 2

WIN Station Name: See label on page 2

Date: 6/08/2020
(mm/dd/yyyy)

WIN/ Field ID: See label on page 2

WBID: 1497D

Latitude:

(Decimal Degrees)

County: POLK

ORG ID: 21FLTPA

Longitude:

(Decimal Degrees)

Receiving Body of Water:

RQ-2020-0511-14

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Judy Ashton					
Ben Ashton					

Sampling Equipment	
☒ Sample Container	☐ Van Dorn
Syringe	Pole
Dipper	Other
Depth Measured with	
Equipment ID Secchi #3	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
Other	☒ Gasoline Motor

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded		Meter ID# Chewy 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: 81060	HA-ID: 16620	RPS-ID: Macrophyte-ID: 11670 LIMS#: 2175259

Notes:

Duplicate Sample

Time Zone: EST	Time:	Field ID:	(WIN ID_DUP)
WIN DMT Activity ID:			

Blank

Time Zone: EST	Time:	Field ID:	(Blank Type_DDMMYYYY)
DI Source: SWDIST DI Machine	Location:		
☐ Field Blank	☐ Equipment Blank	☐ Field Cleaned Equipment Blank	Equipment ID:

LIMS EVENT ID: 2020-06-09-01

WIN Import ID: 21203

Enter Field Parameters, Verify Station ID In LIMS DMT: SM 06/15/2020
(Initials/Date)

QC Station ID, Field Parameters In LIMS DMT: SM 07/27/2020
(Initials/Date)

Scan/Save Field Sheets
(Initials/Date)

Migrate Data to WIN: SM 07/27/2020
(Initials/Date)

Verify Data In WIN: SM 09/23/2020
(Initials/Date)



RQ-2020- see page 1

Customer: SWROC

Project ID: SMP

Collected By: SWROC

Field Report Prepared By: J Ashton

Sampling Agency: DEP SWROC

Field ID/WIN G3SW0046 Site Name: Lake Gibson @ Center						Comments: METALS/NUTRIENTS				
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)
6-8-20	1115	7.86	99.8	27.6	8.23	0.3	0.4	2.6	220.6	0.10
		Cental Lab please use top row for login purposes								
		6.73 84.9 27.2 7.61 2.1 221.9 0.10								
Parameter Suite		Parameter Methods				Preservation	pH Check	# Bottles sent to Lab	Bottle Group	
Preserved Nutrients (P-500ML)		☒ W-NH3 / ☐ W-NO2NO3 / ☐ W-TKN / ☐ W-TOC / ☐ W-S-A-TP				☒ Ice ☐ H2SO4*	☒	1	A	
		Lot # <u>SA9301030</u>		Exp: <u>10/28/2020</u>						
Metals (P-500ML)		☐ W-ICPMS ☐ W-ICP ☒ W-HARD				☒ Ice ☐ HNO3*	☒	1		
		Lot # <u>NA9254150</u>		Exp: <u>7/8/2020</u>						
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☐ Ice	☐	1		
		Filter Lot # <u>16968882</u>								
		Syringe Lot # <u>9056849</u>								
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☐ Ice	☐	1		
Physical/Aggregate (Fresh)(P-1L)		☒ Alkalinity / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY / ☐ W-CHC / ☐ W-COLOR / ☐ W-S04-IC / ☐ TDS				☒ Ice	☐	1		
Physical/Aggregate (Marine P-1L)		☐ Alkalinity / ☐ W-BR-IC / ☐ W-F / ☐ W-TSS / ☐ TURBIDITY				☐ Ice	☐			
Macroinvertebrates (PJ-2L)		☐ MI-FW-QLDC				☐ Formalin	☐			
Periphyton (PT-50ML)		☐ ALGAE-ID				☐ Ice	☐			
Microbiology (Contract Lab Bottle)		☐ E Coli ☐ F Coli ☐ Enterococci				☐ Ice	☐			
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3				☐ Ice	☐			
		☐ PCR-GULL2 ☐ PCR-GFD ☐ See Notes								
Tracers (BG-500ML)		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice	☐			
Pesticides (BG-500ML) (BG-1L)		☐ W-E8321-DI ☐ WE8321-MS ☐ W-PSNP-TQ ☐ W-CT-CL-R				☐ Ice	☐			
		☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)								
Name: <u>Judy Ashton</u>						Signature: <u>[Signature]</u>			Date: <u>6/8/2020</u>	

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Site Name: **Lake Gibson @ Center**

LATITUDE: _____

LONGITUDE: _____

SAMPLING AGENCY: **FWP**WBID: **14970**LAKE SIZE: **L** RQ: **2020-05-11-16**

FIELD ID/NAME: _____

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

Forest/Natural ☒ 5 Silviculture ☐ Field/Pasture ☒ 10 Agricultural ☐ Residential ☒ 75 Commercial ☒ 5 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 < 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

LAKESIDE ALTERATIONS

Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected)

Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected)

Many structures, roads or other human disturbance visible (50%-70% lakeside affected)

Highly developed or disturbed (>70% of lakeside affected)

20 19 18 17 16

15 14 13 12 11

10 9 8 7 6

5 4 3 2 1

BUFFER ZONE

Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer

89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer

50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer

< 29% of shoreline with >18m buffer

20 19 18 17 16

15 14 13 12 11

10 9 8 7 6

5 4 3 2 1

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS**Water:**Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ 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 ☒ Green

Top:

0.3

27.6

8.23

7.86

99.8

220.6

0.10

Mid-Depth:

Bottom:

2.1

27.2

7.61

6.73

84.9

221.9

0.10

Meter ID: _____

SECCHI (M)

0.4

Total Station Depth (M)

VOB

☐

2.6

Sediment Type: (may check more than one)

☐ Sandy ☒ Organic fibrous (peaty, CPOM) ☐ Vegetated

☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____

Sample Taken? ☐ Yes ☒ No**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 ☒ 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 :****Cloudy, Hot**SAMPLING TEAM: **ASHTON, ASHWATER**

SIGNATURE:

DATE: **6-8-20**



Waterbody:

County: PolkSignature: [Signature]Date: 6-28-20Site Name: **Lake Gibson @ Center**

equired. *Genera that may require lab verification*

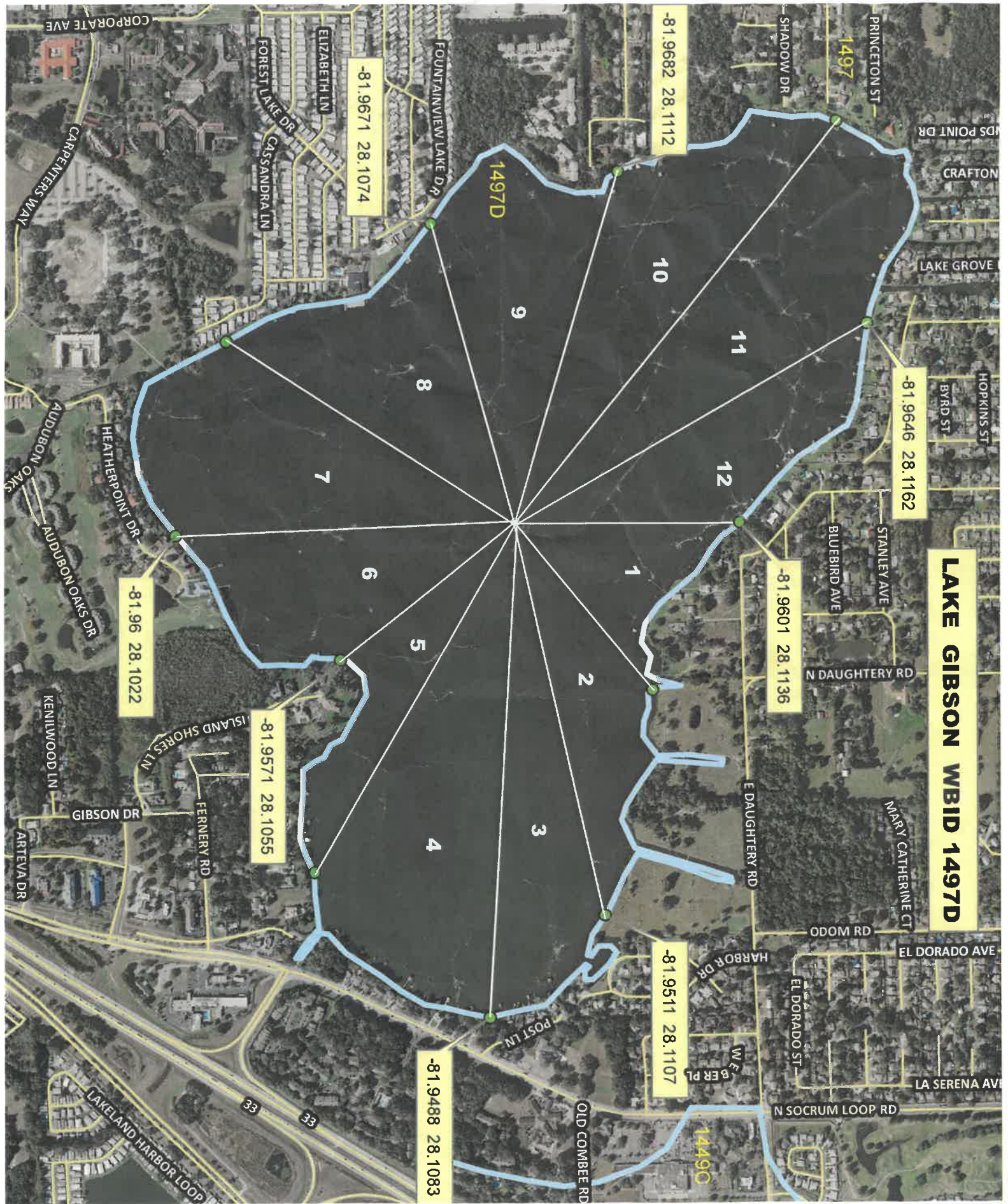
Lake units sampled (circle one group):

1, 4, 7, 10, 2, 5, 8, 11
3, 6, 9, 12

Identify the 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)	6	9	12	3	Collected? (✓)	SPECIES (G-L)	6	9	12	3	Collected? (✓)
Acer rubrum	X	X		X		Gordonia lasianthus					
Alternanthera philoxeroides						Habenaria repens					
Andropogon sp.						Hymenachne amplexicaulis					
Azolla filiculoides (A. caroliniana)						Hydrilla verticillata					
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			X			*Juncus megacephalus					
Ceratophyllum demersum						Juncus repens					
Chara sp.						*Juncus scirpoides					
Cladium jamaicense						Lachnanthes caroliniana					
Cliftonia monophylla						Leersia hexandra					
Colocasia esculenta	X	X		X		Landoltia punctata (Spirodela punctata)					
*Commelina						Lemna sp.	X				
Crinum americanum						Leucothoe racemosa (Eubotrys racemosa)					
*Cyperus alternifolius (C. involucratus)						Limnium spongia					
Cyperus articulatus						Limnophila sessiliflora					
Cyperus haspan						Liquidambar styraciflua		X			
*Cyperus lecontei						*Ludwigia arcuata					
*Cyperus polystachyos						*Ludwigia leptocarpa					
*Cyperus odoratus						*Ludwigia linearis					
*Cyperus surinamensis						*Ludwigia octovalvis	X				
Cyrilla racemiflora						*Ludwigia peruviana		X		X	
Decodon verticillatus						*Ludwigia repens					
Diodia virginiana						*Ludwigia					
*Echinochloa crus-galli						Luziola fluitans (Hydrochloa carolinensis)					
*Echinochloa muricatum						Lyonia lucida					
Echinochloa walteri	X										
Eclipta prostrata (E. alba)											
Egeria densa											
Eichhornia crassipes											
*Eleocharis baldwinii											
*Eleocharis											
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare	X	X		X							
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea											

LAKE GIBSON WBID 1497D





3: Lake Habitat Assessment Field Sheet

Site Name: Lake Gibson @ Center

ECO-REGION:		COUNTY: <i>POLK</i>	LAKE NAME										FIELD ID / NAME:									
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		55 57																				
COMMENTS:																						
ANALYSIS DATE: 6-8-20		ANALYST: JIMMY ARTHUR										SIGNATURE: <i>[Signature]</i>										



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes ☒ No ☐

page 1
of 2

WIN Station Name: See label on page 2

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(mm/dd/yyyy)

WIN/ Field ID: See label on page 2

WBID: 1497E

Latitude:

(Decimal Degrees)

County: POLK

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Longitude:

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Receiving Body of Water:

RQ-2020-0511-14

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Juan ASHTON	☒	☒	☒	☒	☒
BEN PASQUALE	☒	☒	☒	☒	☒
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

Sampling Equipment	
☒ Sample Container	☐ Van Dorn
Syringe	Pole
Dipper	Other
Depth Measured with	
Equipment ID Secchi #3	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
Other	☒ Gasoline Motor

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded		Meter ID# Chewy SWA	
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: 81061	HA-ID: 16621	RPS-ID: Macrophyte-ID: 11671 LIMS#: 2175260
Notes:			

Duplicate Sample

Time Zone: EST	Time:	Field ID: (WIN ID_DUP)
WIN DMT Activity ID:		

Blank

Time Zone: EST	Time:	Field ID: (Blank Type_DDMMYYYY)
DI Source: SWDIST DI Machine	Location:	
☐ Field Blank ☒ Equipment Blank ☐ Field Cleaned Equipment Blank	Equipment ID:	

LIMS EVENT ID: 2020-06-09-01 WIN Import ID: 21203

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 09/23/2020



RQ-2020- see page 1

Customer: SWROC

Project ID: SMP

Collected By: SWROC

Field Report Prepared By:

Sampling Agency: DEP SWROC

Field ID/WIN

G3SW0077



Site Name: Lake Bonny @ Center

Comments:

NUTRIENTS

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 (PPT)
6/8/20	1450	9.05	114.5	27.6	7.79	0.3	0.5	2.5	130	0.06
	EST						☐ VOB (S)			
Cental Lab please use top row for login purposes										
	EST	6.50	81.9	27.2	7.06	2.0			130	0.06

Parameter Suite	Parameter Methods	Preservation	pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP Lot # SA9301030 Exp: 10/28/2020 12/20/20	☒ Ice ☒ H2SO4* ☐ <2		1	B
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # NA9189080 Exp: 7/8/2020 9/11/20	☐ Ice ☐ HNO3* ☐ <2			
Filtered Nutrients (P125ML)	☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter Filter Lot # 16968882 Syringe Lot # 9056849	☒ Ice		1	
Chlorophyll (BP-1L)	☒ CHL SUITE-W	☒ Ice		1	
Physical/Aggregate (Fresh)(P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CHC / W-COLOR / W-SO4-IC / W-IDS	☒ Ice		1	
Physical/Aggregate (Marine P-1L)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates (PJ-2L)	☐ MI-FW-QLDC	☐ Formalin			
Periphyton (PT-50ML)	☐ ALGAE-ID	☐ Ice			
Microbiology (Contract Lab Bottle)	☐ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab	☐ Ice			
Molecular (QPCR-P-500ML)	☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐ See Notes	☐ Ice			
Tracers (BG-500ML)	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ W-E8321-MS ☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			

Name:

Judy Ashton

Signature:

Date:

6/8 /2020

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Site Name: **Lake Bonny @ Center**

LATITUDE: _____

LONGITUDE: _____

SAMPLING AGENCY: **FDEP**WBID: **14976**LAKE SIZE: **L** RQ: **2010-05-11-16**

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 ☐ HeavyArtificially Impounded ☐ Yes ☒ NoLocal Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy

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Highly developed or disturbed (>70% of lakeside affected)

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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

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)

LDI: _____

Land Use Source & Year: _____

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water:

Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No 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:

Top: Depth (M) **0.3** Temp. (°C) **27.6** pH (SU) **7.79** D.O. (MG/L) **9.05** D.O. Sat. (%) **114.5** Cond. (UMHO/CM) **130** Salinity (PPT) **0.6**

Mid-Depth: _____

Bottom: **2.0** **27.2** **7.06** **6.5** **81.9** **130** **0.6**

Meter ID: _____

Clarity:

☐ Clear ☒ Turbid☐ Opaque ☐ Slightly Turbid

Color:

☐ Clear ☒ Green☐ TannicSECCHI (M) **0.5**

Total Station Depth (M)

VOB ☐**2.5**

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☒ Anaerobic☐ Other (Specify): _____

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, ALBERTA**SIGNATURE: **Gulz**DATE: **6-8-20**



-6: Lake Habitat Assessment Field Sheet

6-8-20

Site Name: Lake Bonny @ Center

ECO-REGION:		COUNTY:	LAKE NAME		FIELD ID / NAME:		
PARAMETER		HYDROLOGY	SAMPLING LOCATION/DESCRIPTION:		LAKE SIZE:		
		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		
		☐	☒		☐		
Color		Very clear, uncolored water (benthic sampling appropriate)	Water somewhat tannin stained (benthic sampling appropriate)		Dark, discolored water (water color 20 PCU or higher)		
		☐	☐		☒		
		Optimal	Suboptimal		Marginal		
Secchi		Secchi >3 m	3 2.6 2.2 1.8 1.4		1.0 0.9 0.8 0.7 0.6		
Or VOB		20 19 18 17 16	15 14 13 12 11		10 9 8 7 6		
		5	14		5		
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		
		14	14		7		
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		
		7	14		7		
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		
		9	13		9		
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		
		13	13		9		
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		
		13	13		9		
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					
		14	14		9		

TOTAL SCORE

65

COMMENTS:

ANALYSIS DATE:

6-8-20

ANALYST:

J. Ashton, B. Asmayer

SIGNATURE:

G3SW0077



Site Name: Lake Bonny @ Center

Waterbody:

County: POLK

Signature: *[Signature]*

Date: 6-8-20

required. *Genera that may require lab verification*

Lake units sampled (circle one group)

1, 4, 7, 10

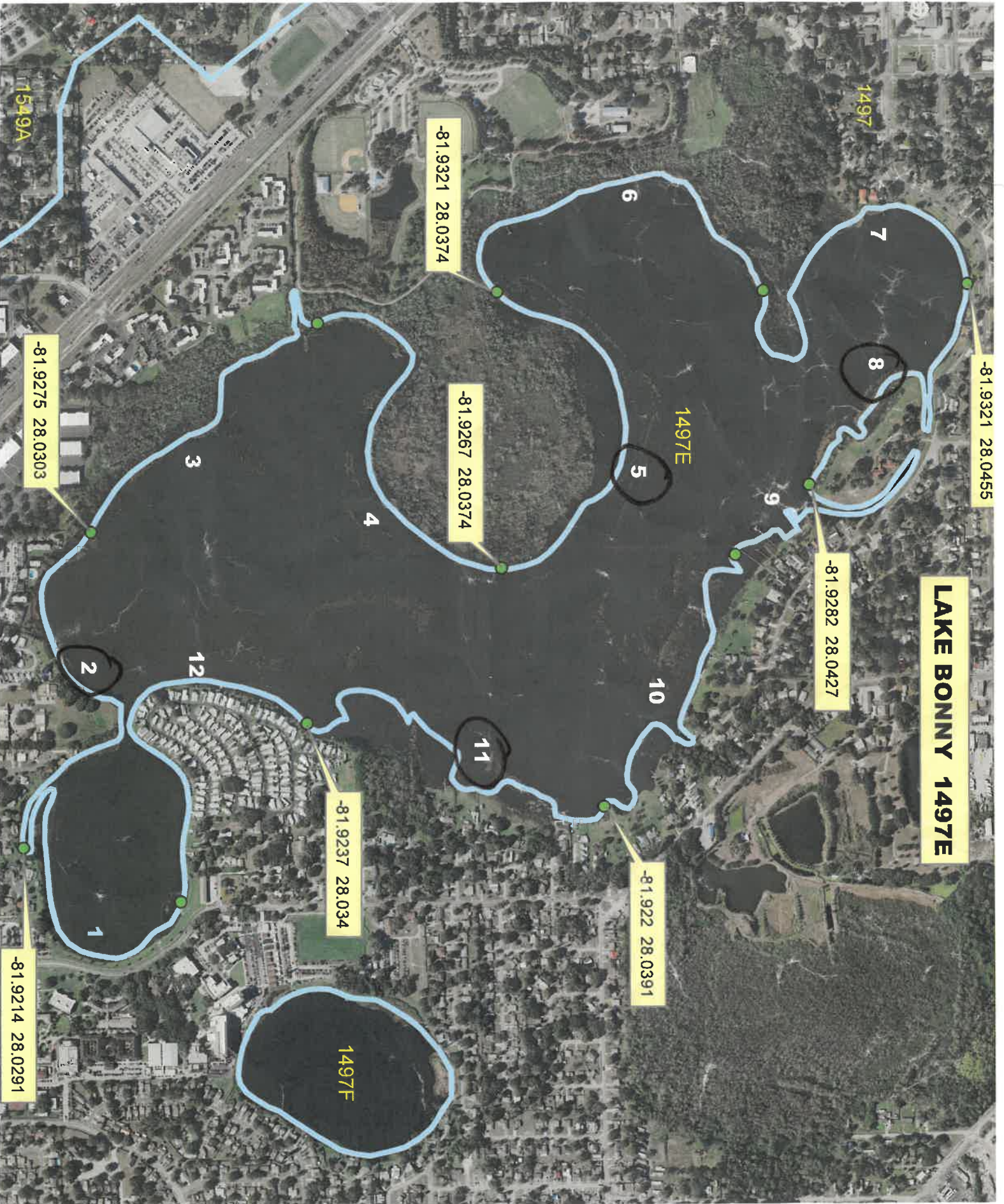
2, 5, 8, 11

3, 6, 9, 12

areal extent) for each unit. Use "D" to denote dominant

taxon, or "C" for the 2 co-dominant taxa.

SPECIES (A-F)	8	5	11	2	Collec ted? (✓)	SPECIES (G-L)	8	5	11	2	Collec ted? (✓)
Acer rubrum	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			
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	X	X		X		*Juncus megacephalus					
Ceratophyllum demersum	X					Juncus repens					
Chara sp.	X					*Juncus scirpoides					
Cladium jamaicense						Lachnanthes caroliniana					
Cliftonia monophylla						Leersia hexandra					
Colocasia esculenta				X		Landoltia punctata (Spirodela punctata)					
*Commelina	X					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	X	X	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											
*Eleocharis baldwinii											
*Eleocharis											
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea											



LVI Lakes: Akit Ckit

Customer: SW-DIST

Project ID: SMP

Requester: Benjamin Paswater

Field Report Prepared By:

Collected By:

Sampling Agency:

Location	Field ID/WIN		G3SW0046		Barcode		Site Name: Lake Gibson @ Center		Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center	
Field I	Matrix (type, e.g., Salt, Fresh, etc)		Date		Time		Composite end		Date		Time		Total Res. Chlorine		Bottle Group(s)	
WIN/STORE	Temp (C)		pH		Sample Depth		Diss. Oxygen		mg/L		% sat		Sp. Conductance (umho/cm)		A	
Latitude	Salinity (ppt)		Comments		dd		dms		dd		dms		dd		dms	
Location	Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center		Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center	
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Date		Time		Composite end		Date		Time		Total Res. Chlorine		Bottle Group(s)	
WIN/STORE	Temp (C)		pH		Sample Depth		Diss. Oxygen		mg/L		% sat		Sp. Conductance (umho/cm)		B	
Latitude	Salinity (ppt)		Comments		dd		dms		dd		dms		dd		dms	
Location	Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center		Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center	
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Date		Time		Composite end		Date		Time		Total Res. Chlorine		Bottle Group(s)	
WIN/STORE	Temp (C)		pH		Sample Depth		Diss. Oxygen		mg/L		% sat		Sp. Conductance (umho/cm)		B	
Latitude	Salinity (ppt)		Comments		dd		dms		dd		dms		dd		dms	
Location	Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center		Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center	
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Date		Time		Composite end		Date		Time		Total Res. Chlorine		Bottle Group(s)	
WIN/STORE	Temp (C)		pH		Sample Depth		Diss. Oxygen		mg/L		% sat		Sp. Conductance (umho/cm)		B	
Latitude	Salinity (ppt)		Comments		dd		dms		dd		dms		dd		dms	
Location	Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center		Field ID/WIN		G3SW0077		Barcode		Site Name: Lake Bonny @ Center	
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Date		Time		Composite end		Date		Time		Total Res. Chlorine		Bottle Group(s)	
WIN/STORE	Temp (C)		pH		Sample Depth		Diss. Oxygen		mg/L		% sat		Sp. Conductance (umho/cm)		B	
Latitude	Salinity (ppt)		Comments		dd		dms		dd		dms		dd		dms	

Relinquished By: <i>J. Ashtman</i>	Date/Time <i>6-19-20 1700</i>	Shipping Method <i>FLS BC</i>	Number of Coolers Shipped: <i>1</i>	Received By:	Date/Time
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Group: A	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	HNO3	Enter Number of Bottles Sent to Lab	1
	W-HARD						
	W-ICP						
	W-ICPMS						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	1
	W-PO4-F						
	W-SO4-IC-F						
Group: B	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-TDS						
	W-TSS						
Group: B	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						

Group: B	Bottle Type:	P-500ML	# of Bottles: 1	Preservative: ICE And H2SO4	Enter Number of Bottles Sent to Lab
	W-NH3				
	W-NO2NO3				
	W-S-A-TP				
	W-TKN				
	W-TOC				

Group: B	Bottle Type:	P-125ML	# of Bottles: 1	Preservative: FILTER-ICE	Enter Number of Bottles Sent to Lab
	W-PO4-F				
	W-SO4-IC-F				