FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN FIELD SHEET

January 2022

Meter Passed End of Day CCV Yes / No

WIN Station Name: Lake Bryan, center of lake **Date:** 6/20/2022

WIN/Field ID: G4CE0190 **WBID:** 3169N **ENR:** - **Latitude:** 28.36875

County: ORANGE **Org ID:** 21FLCEN **Longitude:** -81.49694

Receiving Body of Water: - **RQ-** 2022-06-20-15

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
[x] Elizabeth Bates		x		x	x
[x] Katie March	x		x		
[ ]					
[ ]					

Sampling Equipment

- [x] Sample Container
- [ ] Dipper
- [x] Syringe
- [ ] Carboy
- [ ] Van Dorn
- [ ] Pole

Depth measured with: Secchi

Secchi Equipment ID: Knothead

Collection Method

- [ ] Wading
- [ ] From Shore
- [ ] Other _____
- [ ] Canoe/Kayak
- [ ] Electric Motor
- [x] Gasoline Motor

Water Level: [x] Normal [ ] Low [ ] High [ ] Dry [ ] Pooled [ ] Flooded

Meter ID# CRAW DADDY

Photos: YES **Flow:** **Tide:** **Tide Times:** High: Low:

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

SBIO ID Numbers: SBIO: 84493 MACRO ID: 12191 LIMS:2335688

Notes:

Duplicate Sample

Time Zone: EST **Time:** _____ **Field ID:** N/A (WIN ID_DUP)

WIN DMT Activity ID: _____

Blank

Time Zone: _____ **Time:** _____ **Field ID:** _____ (Blank Type_DDMMYYYY)

DI Source: _____ **Location:** _____

DI Type: _____ **Equipment ID:** _____

DI Container (Name/ID): **DI Container Type:**

LIMS EVENT ID: CEN-DIST-2022-06-21-02 **WIN Import ID:** 35061

Enter Field Parameters, Verify Station ID In LIMS DMT: EB 6/29/22 (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** KWM 7/8/22 (Initials/Date)

Scan/Save Field Sheets KWM 8/29/22 (Initials/Date) **Migrate Data to WIN:** KWM 8/29/22 (Initials/Date) **Verify Data In WIN:** _____ (Initials/Date)

RQ-2022-06-20-15
Customer: CEN-DIST
Project ID: STRATEGIC MONITORING PLAN

Collected By: Elizabeth Bates, Katie March
Field Report Prepared By: Elizabeth Bates
Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID: G4CE0190

Location: Lake Bryan, center of lake

Comments:

Matrix: Fresh

(Check one) ☒ GRAB ☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C⁰)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
6/20/2022	1115 EST	7.5	100.1	30.5	7.15	0.3	3 ☐ VOB (S)	8.5	183.2	0.08
	1117	7.38	97.9	30.1	7.25	2.0	Central Lab please use top row for login purposes		183.2	0.08
	1120 EST	0.34	4.1	23.9	6.17	8			188.3	0.09

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	x☐ Ice x☐ H_2SO_4*	☐<2	1	A
	Lot # 130873 **Exp:** 11/17/22				
Metals (P-500ML)	☒ W-ICPMS ☒ W-ICP ☒ W-HARD	x☐ Ice ☐ HNO_3*	☐<2	1	A
	Lot # NA1105100 **Exp:** 6/7/23				
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	x☐ Ice		1	A
	Filter Lot # 17413308	**Syringe Lot #** 1335260			
BOD (BP-1L)	☐ OV-BODUNIN	☐ Ice			
Chlorophyll (BP-1L)	☒ CHLSUITE-W	x☐ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	x☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / TDS / W-SO4-IC / W-	x☐ Ice		1	A
Physical/Aggregate (Marine) (P-1L)	☐ Alkalinity / 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 ☐	☐ Ice			
Tracers (BG-500ML)	☒ W-E8321-DI ☒ W-E8321-MS	☒ Ice	MCAA Exp.	1	A
Pesticides (BG-500ML) (BG-1L)	☐ W-E8321-DI ☐ WE8321-MS x W-PSNP-TQ ☐ W-CT-CI-R ☐ W-PCL-TQ-R W-CARB-AA (5 ml of MCAA** Buffer Solution) ☐ W-TR-SQ-R ☐ W-PCB-TQ-R	☒ Ice	MCAA Lot#	4	A
Phytoplankton/Periphyton	☐ DTY-QN-C ☐ PKD-QN-C	☐ Ice			

Name: Elizabeth Bates, Katie March

Signature: K March

Date: 06/20/2022

*2.0 ml of Preservative used unless noted otherwise.
**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Lake Bryan	County: Orange	Date: 6/20/22
Analyst: LR Bates Lake Ranch	Signature: LRB	STORET:

Except where noted as "sp." species level identification required. *Genera that may require lab verification*
Plants in bold= FLEPPC invasive exotic.

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.

Lake units sampled (circle one group):
1, 4, 7, 10 2, 5, 8, 11
3, 6, 9, 12

SPECIES	3	6	9	12	Collected? (√)
Acer rubrum		C			
Alternanthera philoxeroides					
Amaranthus australis					
Andropogon sp.					
Azolla filiculoides (A. caroliniana)					
Baccharis sp.					
Bacopa caroliniana					
Bacopa monnieri					
Bidens alba					
Bidens laevis					
Bidens mitis					
Blechnum serrulatum					
Boehmeria cylindrica					
Brasenia schreberi					
Cabomba caroliniana					
Canna					
Centella asiatica					
Cephalanthus occidentalis					
Ceratophyllum demersum					
Chara sp.					
Cladium jamaicense					
Colocasia esculenta					
*Commelina					
Crinum americanum					
***Cyperus alternifolius (C. involucratus)**					
Cyperus articulatus					
Cyperus haspan					
*Cyperus lecontei					
*Cyperus polystachyos					
*Cyperus odoratus					
*Cyperus surinamensis					
Cyrilla racemiflora					
Decodon verticillatus					
Diodia virginiana					
*Echinochloa crus-galli					
*Echinochloa muricatum					
Echinochloa walteri					
Eclipta prostrata (E. alba)					
Eichhornia crassipes					
*Eleocharis					
Eleocharis cellulosa					
*Eleocharis elongata					
Eleocharis equisetoides					
Eleocharis interstincta					
Eleocharis submersed viviparous					
*Eriocaulon compressum					
*Eriocaulon decangulare					
Eupatorium capillifolium					
Fraxinus					

SPECIES	3	6	9	12	Collected? (√)
Fuirena scirpoides					
Gordonia lasianthus					
Habenaria repens					
Hibiscus coccineus					
Hibiscus grandiflora					
Hydrilla verticillata					
Hydrocotyle sp.					
Hygrophila polysperma					
Hymenocallis sp.					
*Hypericum fasciculatum					
*Hypericum hypericoides					
*Hypericum myrtifolium					
Ilex cassine					
Ipomoea aquatica					
Ipomoea sagittata					
Itea virginica					
Juncus effusus					
*Juncus marginatus					
*Juncus megacephalus					
Juncus repens					
*Juncus scirpoides					
Lachnanthes caroliniana					
Leersia hexandra					
Landoltia punctata (Spirodela punctata)					
Lemna sp.					
Leucothoe racemosa (Eubotrys racemosa)					
Limnobium spongia					
Limnophila sessiliflora				C	
Liquidamber styraciflua					
*Ludwigia arcuata					
*Ludwigia grandiflora					
*Ludwigia hexapetala					
*Ludwigia leptocarpa					
Ludwigia (native)					
*Ludwigia octovalvis					
***Ludwigia peruviana**					
*Ludwigia repens					
Ludwigia suffruticosa					
Luziola fluitans (Hydrochloa carolinensis)					
Magnolia virginiana					
Mayaca fluviatilis					
Melaleuca quinquenervia					
Micranthemum glomeratum					
Micranthemum umbrosum					
Mikania scandens					
Mimosa pigra					
Myrica cerifera					
Phyla nodiflora					
Imperata cylindrica					

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: Lake Conway | Date: 6/20/22

SPECIES	3	6	9	12	Collected? (√)
Myriophyllum aquaticum					
*Myriophyllum heterophyllum					
*Myriophyllum laxum					
*Myriophyllum pinnatum					
Myriophyllum spicatum					
*Najas filifolia					
*Najas guadalupensis					
*Najas minor					
Nelumbo lutea					
Nitella spp.					
Nuphar sp.	/	/	/	/	
Nymphaea mexicana					
Nymphaea odorata					
Nymphoides aquatica					
Nyssa sylvatica var. biflora	/	/	/	/	
Orontium aquaticum					
Osmunda cinnamomea					
Osmunda regalis					
Panicum hemitomon					
Panicum repens	/	/	/	/	
Paspalidium geminatum					
*Paspalum repens					
Paspalum urvillei					
Peltandra sp.	/			/	
Persea sp.					
Pennisetum purpureum					
Phragmites australis					
Pinus elliottii	/	/	/	/	
Pistia stratioides					
Pluchea sp.					
*Polygonum glabrum (densiflorum)					
Polygonum hirsutum					
*Polygonum hydropiperoides					
*Polygonum punctatum					
*Polygonum					
Pontederia cordata	/	/			
*Potamogeton diversifolius		/			
*Potamogeton illinoensis	/				
*Potamogeton pusillus					
*Potamogeton pectinatus (Stuckenia pectinatus)					
Proserpinaca pectinata					
*Rhexia					
*Rhynchospora corniculata					
*Rhynchospora inundata					
Rhynochospora nitens					
Ricciocarpus natans					
Sabal palmetto					
Sacciolepis striata			/		
*Sagittaria filiformis					
*Sagittaria graminea					
*Sagittaria isoetiformis					
Sagittaria lancifolia	/	/	/	/	
Sagittaria latifolia					

SPECIES	3	6	9	12	Collected? (√)
Salix caroliniana	/	/	/		
Salvinia minima					
Sambucus canadensis		/	/		
Sapium sebiferum	/				
Saururus cernuus					
Schinus terebinthifolius		/	/		
*Schoenoplectus californicus					
*Schoenoplectus pungens					
*Schoenoplectus tabernaemontani (Scirpus validus)					
Scirpus cubensis (Oxycaryon cubense)					
Scirpus cyperinus					
*Sesbania					
Solidago sp.					
Sparganium americanum					
Spartina bakeri					
Spirodela polyrhiza					
Taxodium sp.	/	C	C		
Thalia geniculata					
Thelypteris interrupta					
Thelypteris palustris					
Triadenum virginicum					
Typha sp.		/	/	/	
Urochloa mutica (Brachiaria mutica)					
*Utricularia foliosa					
*Utricularia gibba (U. biflora)					
*Utricularia inflata					
*Utricularia purpurea					
*Utricularia radiata					
*Utricularia resupinata					
Vallisneria americana					
Vigna luteola					
Vitis sp.					
*Websteria confervoides					
Wedelia trilobata (Sphagneticola trilobata)					
Wolffiella spp.					
Woodwardia virginica					
Xyris sp.					
Zizania aquatica					
Zizaniopsis milacea					
Thelypteris interrupta	/				√
Iris sp.		/		X	
Enterolobium			/		

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 28.368715

COUNTY: Orange STORET #: _____ LONGITUDE: -81.491694

DATE: 6/20/2022 TIME: _____ SAMPLING AGENCY: 21FLCEN

SITE NAME: Lake Bonn, center of Lake WBID: 3169N

FIELD ID/NAME: GUCE0190 LAKE SIZE: 214 Acres RQ: 2022-0620-15

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)
40				30 high dens. 30 low dens.	30 hotel/resort		

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)

LDI: _____

Land Use Source & Year:

Local Watershed Erosion (select one) : ☐ None ☑ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☑ Moderate ☐ Heavy

Artificially Impounded ☐ Yes ☑ No

STORMWATER INPUTS: 8	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: 7	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: 7	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 ☑ pH<2 ☐ No

Color Sample Taken? ☑ Yes ☐ No Lot # 130873 Exp. Date: 11/17/22

Alkalinity Sample Taken? ☑ Yes ☐ No

Water Level ☐ Low ☑ Normal ☐ High

Water Odors: ☑ Normal ☐ Sewage ☐ Petroleum ☐ Other _____

Water Surface Oils: ☑ None ☐ Sheen/Slick ☐ Glob ☐ Other _____

Meter Readings:	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top:	0.3	30.5	7.15	7.5	100.1	183.2	0.08
Mid-Depth:	2.0	30.1	7.25	7.38	97.9	183.2	0.08
Bottom :	8.0	23.9	6.17	0.34	4.1	188.3	0.09

Meter ID: GadwDaddy

Clarity: ☑ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid

Color: ☐ Clear ☑ Tannic ☐ Green

SECCHI (M): 3.0

VOB ☐

Total Station Depth (M): 8.5

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: N/A

☐ Normal ☐ Other (Specify): _____

☐ Anaerobic

Biological Communities:

LVI Conducted? ☑ Yes ☐ No

Phytoplankton Sample Taken? ☐ Yes ☑ No

Sample Preserved? ☐ Yes ☑ No

Lot #: _____ Exp Date: _____

Algal Bloom/Algal ID Sample Taken? Yes (No)

Active Vegetation Mgmt? ☐ Yes ☐ No ☑ Don't Know

Abundance:

	Absent	Rare	Common	Abundant
Periphyton	☐	☑	☐	☐
Nuisance Plants	☐	☐	☑	☐
Submersed Plants	☐	☑	☐	☐
Exotic Apple Snails	☑	☐	☐	☐

Additional Notes: Limnophila abundant in section 12 (boat ramp). Submersed plants almost absent in rest of lake.

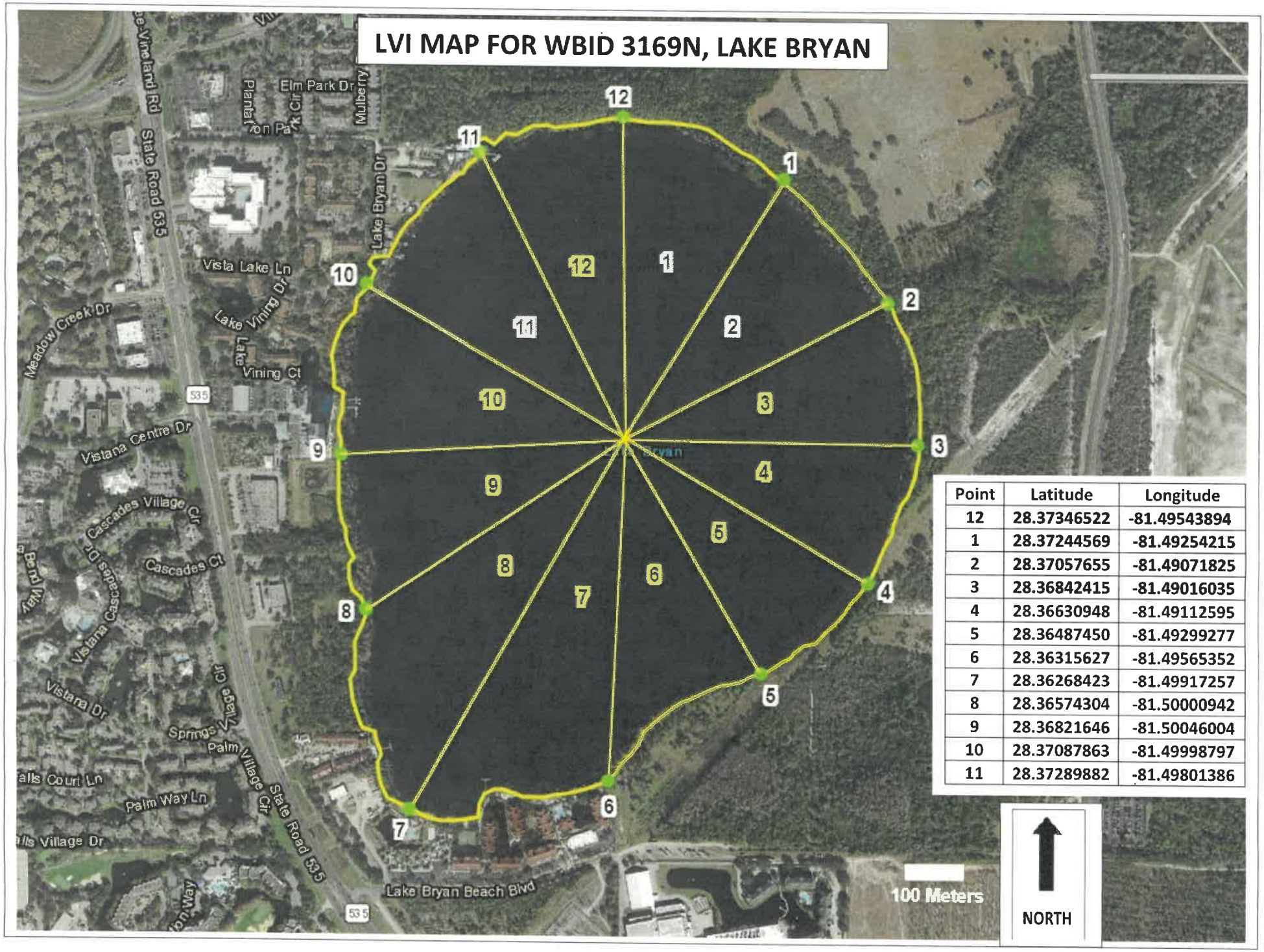
Weather Conditions : 100° + sunny

G TEAM: Katie March, LizBates SIGNATURE: KMarch, EBB DATE: 6/20/22

, F.A.C.

Revision Date: January 2017

LVI MAP FOR WBID 3169N, LAKE BRYAN



Point	Latitude	Longitude
12	28.37346522	-81.49543894
1	28.37244569	-81.49254215
2	28.37057655	-81.49071825
3	28.36842415	-81.49016035
4	28.36630948	-81.49112595
5	28.36487450	-81.49299277
6	28.36315627	-81.49565352
7	28.36268423	-81.49917257
8	28.36574304	-81.50000942
9	28.36821646	-81.50046004
10	28.37087863	-81.49998797
11	28.37289882	-81.49801386