DEP TIER 1
STATUS NETWORK SITE CHARACTERIZATION

Stream/Water Body Name: **Mildred Lake**

Site ID	Latitude	Longitude	Type of Recon	Date of Recon
Z3-SL-15021			**Site Visit**	**5/16/2021**

Return Recon #1 _____

Return Recon #2 _____

Return Recon #3 _____

Resource Type	Secondary Resource Type
Small Lake	**No 2nd Type**
Desk Recon: 12/15/2020 By: Nate Gargasz	Letter Sent:
Recon Team:	

Site Location Address & Contact Information	Property Owner's Address
Data Requested:	*County:* Putnam

Tidal Info:

Access and Permission
PUBLIC ACCESS

Reason for Exclusion

Recon Result For Site:
Z3-SL-15021
INCLUDE

ADDITIONAL NOTES

Additional Items: Jon Boat w/Trolling Motor 4x4 truck

DIRECTIONS:

From the district take FL-100 W go ~1.4 miles, turn left onto CR 309C go ~2.4 miles, turn right onto Motes Rd go ~1 mile, Continue straight for ~0.4 miles, turn right onto FL-20 W go ~15.4 miles, turn left onto CR 21 go ~0.1 miles, turn left onto Morris Lake Dr go ~0.3 miles, Slight right onto Frances St. Go ~200ft, continue straight onto Lake Mildred Rd go ~0.3 miles, when you come to the intersection for Millie St turn left down a trail next to a house (See pics/maps) follow trail to left drive down to lake

FILES GENERATED: (i.e. digital photos, GPS, etc.)	PHOTOS

GWIS Generalized Water Information System Database Utilities

Recon Tracking | Existing Station | New SW Station | New GW Station

PK RANDOM SAMPLE LOCATION = Z3-SL-15021

County	PUTNAM	Quarter Quad	
WMD	ST. JOHNS RIVER WMD	HUC	OKLAWAHA
Random Latitude	29° 36m 30.3729s	Random Longitude	81° 58m 24.351s

29.6084 81.9762

Is Z3-SL-15021 sampleable? ○ Yes ○ No ◉ N/A

Exclusion Category:

Exclusion Criteria:(definitions):

Was Z3-SL-15021 sampled? ○ Yes *Month* 5 *Day* 24 *Year* 2021

Add to LF

Comments:

Save Reset

◉ Aerial Photo ○ Quad Map ○ No Image

Show Map

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Meter ID: Pro DSS Stitch RQ- ~~2021-10-18.15~~ N/A Project: ~~Snap Mossy North~~ Status LUI

Boldly "X" this box if there are qualified data on this page.

Notes: (1) Always wait for meter to stabilize before recording any readings.
(2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).
(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Temperature (Quarterly) FT 1400 Date of Last Temperature Verification 8/16/21

DO DEP SOP FT 1500	Name	Date 10/19/21	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	Kim Appleby	~~8/19/21~~ 10/19	738	21.2	765.7	9.0	—	100.8	-	1.02646	(P)/ F	(L)/ F
ICV			739	21.2	765.8	9.0	8.96	100.9	-	1.02646	(P)/ F	(L)/ F
CCV	JTramsh	10/19/21	1612	21.3	765.6	8.9	8.98	100.9	—	—	(P)/ F	(L) F
CCV											P / F	L / F

DO Acceptance criteria from Table ± 0.3 mg/L. **Rapid-Pulse Sensors:** DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.
Optical: DO gain range 0.85 to 1.15 (Pro DSS 0.75 to 1.50); DO charge N/A. **Steady-state & Galvanic Sensors:** DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date 10/19/21	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	Kim Appleby	~~8/19/21~~ 10/19	742	210426B	5/22	1000	1000	(P)/ F	(L)/ F
ICV			744	210426A	5/22	100	101.6	(P) F	(L) F
CCV	JTramsh	10/19/21	1613	210426C	5/22	1413	1400	(P) F	(L) F
CCV								P / F	L / F

Conductivity Acceptance criteria ± 5%

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	Kim Appleby	10/19/21	748	2107F56	7/23	7.02	21.7	7.02	-29.7	(P)/ F	(L)/ F
Calibr.			752	2107640	7/23	4.00	21.8	4.00	178.2	(P)/ F	(L)/ F
Calibr.			754	2107F56	7/23	10.04	21.6	10.04	-200.1	(P)/ F	(L)/ F
ICV			758	2107F56	7/23	7.02	21.8	7.07	-29.9	(P)/ F	(L)/ F
CCV	JTramsh	10/19/21	1015	2107F56	7/23	10.00	21.4	10.17	207.6	(P)/ F	(L)/ F
CCV										P / F	L / F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50; mV pH 4 Range +180 ± 50; mV pH 10 Range -180 ± 50;
If mV are recorded: slope from 7 to 10 170.4, slope from 4 to 7 177.9 (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? (YES) / NO / NA (not surf. water project)
If **YES**, complete daily Calibr. & ICV below and list date of last quarterly depth verification: 8/18/21
If **NO**, what will be used? (circle one) **Secchi Disk Line / Sonar** Unique ID: _____; Date of last verification: _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	Kim Appleby	10/19/21	800	0.00	0.00	(P)/ F	(L)/ F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria ± 5 % or ± 0.05m, whichever is greater.

COMMENTS:

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: Date:

SPECIES					Collected? (√)	SPECIES					Collected? (√)
Myriophyllum aquaticum						Salix caroliniana					
*Myriophyllum heterophyllum						**Salvinia minima**					
*Myriophyllum laxum						Sambucus canadensis					
*Myriophyllum pinnatum						**Sapium sebiferum**					
Myriophyllum spicatum						Saururus cernuus					
*Najas filifolia						**Schinus terebinthifolius**					
*Najas guadalupensis						*Schoenoplectus californicus					
*Najas minor						*Schoenoplectus pungens					
Nelumbo lutea						*Schoenoplectus tabernaemontani (Scirpus validus)					
Nitella spp.						Scirpus cubensis (Oxycaryon cubense)					
Nuphar sp.						Scirpus cyperinus					
Nymphaea odorata	D	D	D	D		*Sesbania					
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora						Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrhiza					
Osmunda regalis						Taxodium sp.					
Panicum hemitomon	✓					Thalia geniculata					
Panicum repens						Thelypteris palustris					
Paspalidium geminatum						Triadenum virginicum			✓		
*Paspalum repens						Typha sp.					
Paspalum urvillei						**Urochloa mutica (Brachiaria mutica)**					
Peltandra sp.						*Utricularia gibba (U. biflora)	✓	✓	✓	✓	
Persea sp.						*Utricularia floridana	✓	✓	✓	✓	
Pennisetum purpureum						*Utricularia foliosa					
Phragmites australis						*Utricularia inflata					
Pinus elliottii						*Utricularia purpurea					
Pistia stratioides						*Utricularia cornuta					
Pluchea sp.			✓			*Utricularia radiata					
*Polygonum glabrum (densiflorum)						Vallisneria americana					
*Polygonum hydropiperoides						*Websteria confervoides					
*Polygonum punctatum						**Wedelia trilobata (Sphagneticola trilobata)**					
*Polygonum Hirsutum	✓					Wolffiella spp.					
Pontederia cordata	✓	✓		✓		Woodwardia virginica					
*Potamogeton diversifolius						Xyris sp.					
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuckenia pectinatus)											
Proserpinaca pectinata					✓	Panicum ~~dichotomiflorum~~ Rigidulum	✓		✓		
*Rhexia				✓		Rhynchospora Miliac.	✓	✓	✓	✓	
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynochospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata	✓	✓	✓	✓							
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

DEP Form FD 9000-6: Lake Habitat Assessment Field Sheet

STORET STATION NUMBER:	DATE (M/D/Y): 10/19/21	LAKE NAME: 73-51-1502/ Mildred Lake	FIELD ID / NAME:
ECO-REGION:	COUNTY: Putnam	SAMPLING LOCATION/DESCRIPTION:	LAKE SIZE:

PARAMETER				
HYDROLOGY	No surface inflow or outflow present, very long water residence time, groundwater seepage dominates [X]	Surface water inflow present, but flow is rare, moderate to long water residence time [ ]	Surface water inflow and outflow present (or outflow only), sometimes with visible flow, short water residence time [ ]	Impounded, hydrology of system artificially controlled [ ]
Color	Very clear, uncolored water (benthic sampling appropriate) [ ]	Water somewhat tannin stained (benthic sampling appropriate) [X]	Dark, discolored water (water color 20 PCU or higher) [ ]	Visibility extremely reduced due to high color [ ]
	Optimal	**Suboptimal**	**Marginal**	**Poor**
Secchi 11	Secchi >3 m / Secchi(m) / Or VOB: 20 19 18 17 16	3 2.6 2.2 1.8 1.4 / 15 14 13 12 (11)	1.0 0.9 0.8 0.7 0.6 / 10 9 8 7 6	0.5 0.4 0.3 0.2 0.1 / 5 4 3 2 1
Vegetation Quality 14	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 13	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 19	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 Alternations 13	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 13	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 14	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: 97	COMMENTS:

ANALYSIS DATE: 10/19/21	ANALYST:	SIGNATURE:

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____

COUNTY: _____ STORET #: _____ LONGITUDE: _____

DATE: 10/19/21 TIME: 1145 SAMPLING AGENCY: _____

SITE NAME: Mildred Lake WBID: _____

FIELD ID/NAME: 23-5L-15021 LAKE SIZE: _____ RQ: _____

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)

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 13	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 13	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 13	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 # _____ Exp. Date: _____

Alkalinity Sample Taken? ☐ Yes ☒ No

Water Level ☐ Low ☐ Normal ☐ High

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

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

Meter Readings:	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top:	0.3	25.9	6.4	5.07	62.0	36	0.02
Mid-Depth:	2.0	25.3	6.27	4.68	56.8	35.8	0.02
Bottom : 6.0	~~6.5~~	21.4	5.9	0.7	8.4	106	0.05
Meter ID:							

Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid

Color: ☒ Clear ☐ Tannic ☐ Green

SECCHI (M) 1.5 VOB ☐

Total Station Depth (M) 6.5

Sediment Type: (may check more than one) Sample Taken? ☐ Yes ☒ No

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

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

Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic

Biological Communities:

LVI Conducted? ☑ Yes ☐ No

Phytoplankton Sample Taken? ☐ Yes ☑ No

Sample Preserved? ☐ Yes ☑ No

Lot #: _____ Exp Date: _____

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

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

Abundance:

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

Additional Notes: Powerline easement access

Weather Conditions :

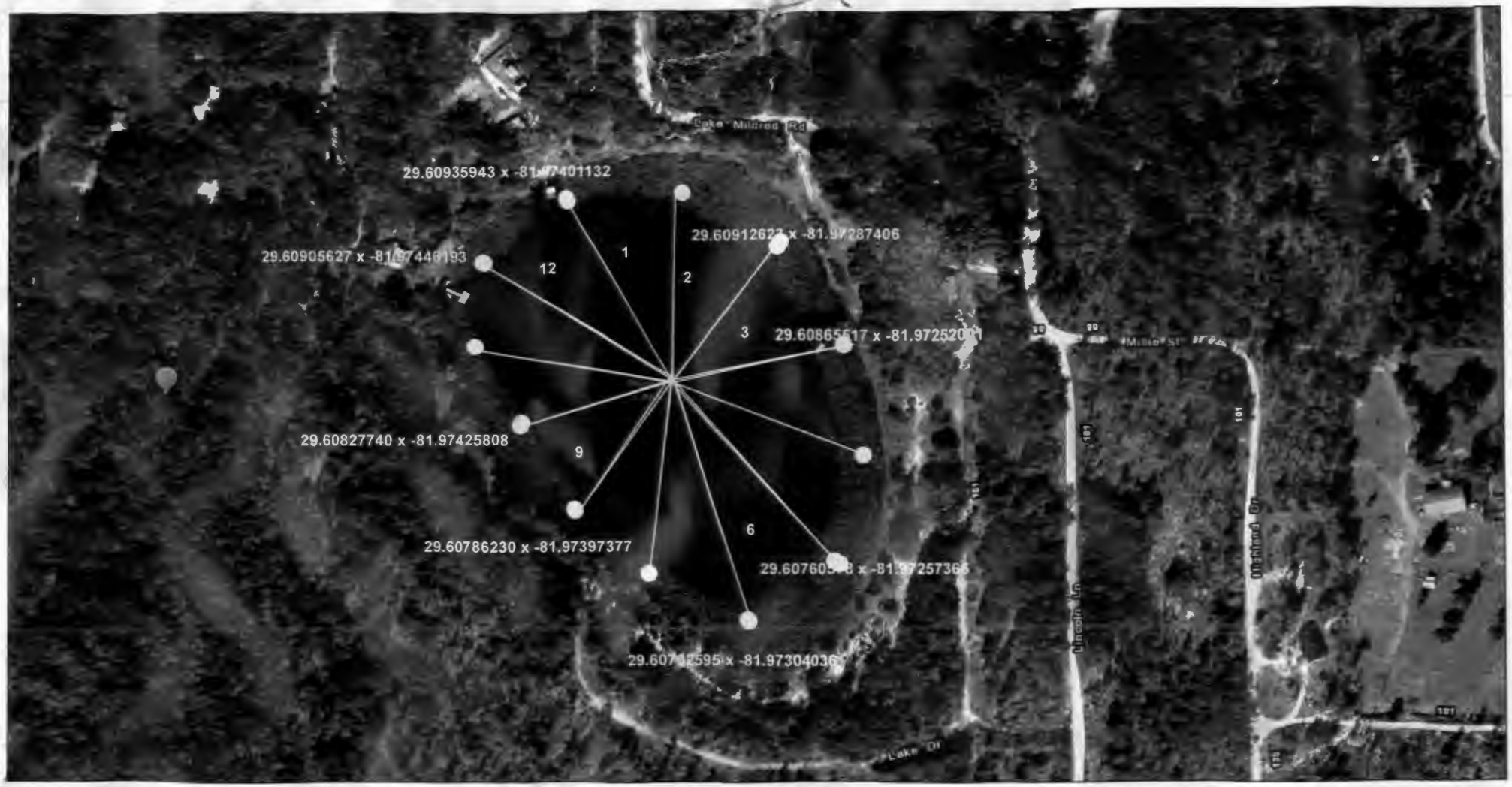
SAMPLING TEAM: Gary Pann / B Davis **SIGNATURE:** Gary Pann **DATE** 10/19/21

62-160.800, F.A.C.

Revision Date: January 2017

23-SL-15021

Marker shows Map Coordinate



October 7, 2021

1:2,257

0 0.02 0.04 0.09 mi

0 0.04 0.07 0.15 km

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