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

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

Meter ID: 154177 **RQ-** 2019-06-24-34 **Project:** SMP2019

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 4/1/19

DO DEP SOP FT 1500	Name	Date	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.	J. Burtchett	7/1/19	753	22.4	758.0	8.7	8.66	99.9	–	1.04	P / F	L / F
ICV	"	↓	803	19.5	757.9	9.2	9.17	99.8	–	–	P / F	L / F
CCV		↓	1545	26.8	757.0	8.0	8.00	100.0			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	Time CT-ET	Lot #	Expir. Date	Standard µmhos/cm	Meter Reading µmhos/cm	Pass / Fail	Lab / Field
Calibr.	J. Burtchett	7/1/19	755	1906185	06/20	1000	1000	P / F	P / F
ICV	"	↓	805	2808884	07/20	100	101	P / F	L / F
CCV		↓	1547	2808884	07/20	100	101	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.	J. Burtchett	7/1/19	757	180621E	01/20	7.01	19.6	7.02	-12.0	P / F	P / F
Calibr.	"	↓	759	F10405B	10/20	4.00	19.4	4.00	165.6	P / F	P / F
Calibr.	"	↓	801	180621F	01/20	10.08	19.4	10.07	-176.8	P / F	P / F
ICV	"	↓	807	180621F	01/20	10.05	20.6	10.06	-181.1	P / F	P / F
CCV		↓	1550	F10405B	10/20	4.01	21.0	4.03	162.7	P / F	P / 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 10 166.8, slope from 4 to 7 177.6 (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: 4/1/19
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	J. Burtchett	7/1/19	750	0.000	0.000	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 effective August 1, 2018

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified? (Yes) No

WIN Station Name: Crystal lake Center **Date:** 07/01/2019 (mm/dd/yyyy)

WIN/ Field ID: G3TLHR0012 **WBID:** 795A **Latitude:** 30.4531 (Decimal Degrees)

County: Washington **ORG ID:** 21FLTLHR **Longitude:** 85.7027 (Decimal Degrees)

Receiving Body of Water: NA **RQ-** 2019-06-24-34

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Burtchett	✓		✓		✓
J. Woods		✓		✓	

Sampling Equipment
- [x] Sample Container
- [ ] Van Dorn
- [ ] Pole
- [ ] Carboy
- [x] Syringe
- [ ] Dipper
- [ ] Other
- Depth Measured with: Sonar
- Equipment ID: #1

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

Water Level: Dry/ Pooled/ Low / Normal / (High) / Flooded **Meter ID#** 154177 **Matrix:** (Fresh) / Marine / DI

Photos: Yes / (No) **Flow:** No Flow / Intestital / Flowing / NA **Tide:** Rising/ Falling/ Slack/ (NA) **Tide Times:** High Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTh)	Sp COND (µmhos/cm)	Temp. (C°)
(EST)	1230	21.9	0.3	7.5	8.05	107.9	7.10	0.01	29.7	30.8
CEN	1233		9.8 (J)		10.54	118.8	7.59	0.01	28.5	21.8

Biological Samples Collected: (None) HA SCI RPS Algae ID LVS (LVI) Other:

SBIO ID Numbers: SBIO-ID: 79902 HA-ID: 16125 RPS-ID: Macrophyte-ID: 11402 LIMS#: 2099705

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[x] Ice [x] H_2SO_4	7163030	10/30/19	[x] <2
Metals	[ ] W-ICPMS [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
Physical/Aggregate (Fresh)	[x] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[x] Ice			
Physical/Aggregate (Marine)	[ ] Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	[ ] Ice			
Macroinvertebrates	[ ] MI-FW-QLDC	[ ] Formalin			
Periphyton	[ ] ALGAE-ID	[ ] Ice			
Microbiology	[ ] E Coli [ ] F Coli [ ] Enterococci	[ ] Ice			
Molecular	[ ] PCR-FILTER [ ] PCR-BacR [ ] PCR-GULL2 [ ] PCR-HF183 [ ] PCR-DG3 [ ] PCR-GFD	[ ] Ice			
Tracers	[ ] W-E8321-DI [ ] W-E8321-MS	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-CT-CL-R [ ] W-E8321-DI [ ] W-PCL-SQ-R [ ] WE8321-MS [ ] W-CARB-AA	[ ] Ice			
Phytoplankton	[ ] DTY-QN-C [ ] PKD-QN-C	[ ] Ice			

Place Preservative Sticker(s) Here (If Available)

Notes: Sonde cord unable to reach bottom depth ~~btm~~

Place Label Here

Signature: Gade **Date:** 07/01/19

LIMS EVENT ID: **WIN Import ID:**

Enter Field Parameters, Verify Station ID In LIMS DMT: (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** (Initials/Date)

Scan/Save Field Sheets CL 7-3-19 (Initials/Date) **Migrate Data to WIN:** (Initials/Date) **Verify Data In WIN:** (Initials/Date)

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

STORET STATION NUMBER: G 35LHR0012	DATE (M/D/Y) 07/01/2019	LAKE NAME Crystal Lake	FIELD ID / NAME:
ECO-REGION:	COUNTY: Washington	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) [X]	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 [20]	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 [16]	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 (duck-weed, 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 [3]	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 [2]	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 [3]	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 [7]	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 70	COMMENTS:

ANALYSIS DATE: 07/01/19	ANALYST: J. Burtchett	SIGNATURE: [signature]

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
COUNTY: _____ STORET #: G3TLHR0012 LONGITUDE: _____
DATE: _____ TIME: 1230 SAMPLING AGENCY: _____
SITE NAME: Crystal Lake Center WBID: 7954
FIELD ID/NAME: G3TLHR0012 LAKE SIZE: _____ RQ: 2019-06-24-34

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)
				~~95~~ 100			

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 4	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 1	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 1	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 # 7163030 Exp. Date: 10/30/19
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	30.8	7.10	8.05	107.9	29.7	0.01
Mid-Depth:							
Bottom :	9.8 (J)	21.8	7.59	10.54	118.8	28.5	0.01

Meter ID: 154177

Clarity: ☑ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid

Color: ☑ Clear ☐ Tannic ☐ Green

SECCHI (M) 7.5 VOB ☐

Total Station Depth (M) 21.9

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 ☐ 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: unable to collect bottom depth readings sonde cord too short.

Weather Conditions : Clear

SAMPLING TEAM: Burtchett, Woods **SIGNATURE:** [signature] **DATE:** 07/01/19

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Crystal Lake	County: Washington	Date: 07/01/19
Analyst: J. Burtchett	Signature: [illegible]	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	7 ~~8~~	10 ~~11~~	1 ~~2~~	4 ~~5~~	Collected? (√)	SPECIES	7 ~~8~~	10 ~~11~~	1 ~~2~~	4 ~~5~~	Collected? (√)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides						**Hydrilla verticillata**					
Andropogon sp.						Hydrocotyle sp.		✓			
Azolla filiculoides (A. caroliniana)						**Hygrophila polysperma**					
Baccharis sp.						*Hypericum fasciculatum	✓	✓	✓	✓	
Bacopa caroliniana						*Hypericum hypericoides					
Bacopa monnieri						*Hypericum myrtifolium					
Bidens laevis						Ilex cassine					
Bidens mitis						**Ipomoea aquatica**					
Blechnum serrulatum						Ipomoea sagittata					
Boehmeria cylindrica						Itea virginica					
Brasenia schreberi						Juncus effusus					
Cabomba caroliniana						*Juncus marginatus					
Casuarina equisitifolia						*Juncus megacephalus					
Centella asiatica						Juncus repens					
Cephalanthus occidentalis	✓					*Juncus scirpoides					
Ceratophyllum demersum						Lachnanthes caroliniana					
Chara sp.						Leersia hexandra					
Cladium jamaicense						**Landoltia punctata (Spirodela punctata)**					
Cliftonia monophylla						Lemna sp.					
Colocasia esculenta						Leucothoe racemosa (Eubotrys racemosa)					
Commelina						Limnobium spongia					
Crinum americanum						**Limnophila sessiliflora**					
***Cyperus alternifolius** (C. involucratus)						Liquidamber styraciflua					
Cyperus articulatus						*Ludwigia arcuata					
Cyperus haspan						*Ludwigia leptocarpa					
*Cyperus lecontei						*Ludwigia linearis					
*Cyperus polystachyos						*Ludwigia octovalvis					
*Cyperus odoratus						***Ludwigia peruviana**					
*Cyperus surinamensis						*Ludwigia repens					
Cyrilla racemiflora			✓			*Ludwigia					
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					
Diodia virginiana						Lyonia lucida					
*Echinochloa crus-galli						Magnolia virginiana					
*Echinochloa muricatum						Mayaca fluviatilis					
Echinochloa walteri						**Melaleuca quinquenervia**					
Eclipta prostrata (E. alba)						Micranthemum glomeratum					
Egeria densa						Micranthemum umbrosum					
Eichhornia crassipes						Mikania scandens					
*Eleocharis baldwinii						**Mimosa pigra**			✓		
*Eleocharis						Myrica cerifera					
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta											
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium											
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site:

Date:

SPECIES	7 8	10 11	1 2	4 5	Collected? (√)
Myriophyllum aquaticum					
*Myriophyllum heterophyllum					
*Myriophyllum laxum					
*Myriophyllum pinnatum					
Myriophyllum spicatum					
*Najas filifolia					
*Najas guadalupensis					
*Najas minor					
Nelumbo lutea					
Nitella spp.					
Nuphar sp.					
Nymphaea odorata					
Nymphoides aquatica					
Nyssa sylvatica var. biflora					
Orontium aquaticum					
Osmunda cinnamomea					
Osmunda regalis					
Panicum hemitomon	√	√	√	√ D	
Panicum repens	D √	D √	D √	√	
Paspalidium geminatum					
*Paspalum repens					
Paspalum urvillei					
Peltandra sp.					
Persea sp.					
Pennisetum purpureum					
Phragmites australis					
Pinus elliottii					
Pistia stratioides					
Pluchea sp.					
*Polygonum glabrum (densiflorum)					
*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 tracyi					
Ricciocarpus natans					
Sabal palmetto					
Sacciolepis striata					
*Sagittaria filiformis					
*Sagittaria graminea					
*Sagittaria isoetiformis					
Sagittaria lancifolia					
Sagittaria latifolia					

SPECIES	7	10	1	4	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.					
Thalia geniculata					
Thelypteris palustris					
Triadenum virginicum	√				
Typha sp.					
Urochloa mutica (Brachiaria mutica)					
*Utricularia gibba (U. biflora)	√	√			
*Utricularia floridana	√	√	√	√	
*Utricularia foliosa					
*Utricularia inflata					
*Utricularia purpurea					
*Utricularia cornuta					
*Utricularia radiata					
Vallisneria americana					
*Websteria confervoides					
Wedelia trilobata (Sphagneticola trilobata)					
Wolffiella spp.					
Woodwardia virginica					
Xyris sp.					
Zizania aquatica					
Zizaniopsis milacea					

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified? Yes / No (No)

WIN Station Name: Major Lake Center **Date:** 07/01/2019 (mm/dd/yyyy)

WIN/ Field ID: G3TLHR0011 **WBID:** 526B **Latitude:** 30.4982 (Decimal Degrees)

County: Washington **ORG ID:** 21FLTLHR **Longitude:** 85.7144 (Decimal Degrees)

Receiving Body of Water: NA **RQ-** 2019-06-24-30

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Burtchett	✓		✓		
J. Woods		✓		✓	✓

Sampling Equipment
- [x] Sample Container
- [ ] Van Dorn
- [ ] Pole
- [ ] Carboy
- [x] Syringe
- [ ] Dipper
- [ ] Other
- Depth Measured with: sonar
- Equipment ID: #1

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

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded **Meter ID#** 154 177 **Matrix:** Fresh / Marine / DI

Photos: Yes / No (No) **Flow:** No Flow / Intestital / Flowing / NA (NA) **Tide:** Rising/ Falling/ Slack/ NA (NA) **Tide Times:** High Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTh)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1115	9.2	0.3	4.8	7.42	99.9	5.48	0.01	15.0	31.0
CEN	1118		8.7		0.24	2.5	5.16	0.01	17.2	17.2

Biological Samples Collected: None (None) HA SCI RPS Algae ID LVS LVI Other:

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	[x] W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	[ ] Ice [x] H_2SO_4	7163030	10/30/19	[ ] <2
Metals	[ ] W-ICPMS [ ] W-ICP	[ ] Ice [ ] HNO_3			[ ] <2
Filtered Nutrients	[x] W-PO4-F [x] Field Filtered 0.45 µm Filter	[x] Ice			
Chlorophyll	[x] CHLSUITE-W	[x] Ice			
Physical/Aggregate (Fresh)	[x] Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	[x] Ice			
Physical/Aggregate (Marine)	[ ] Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	[ ] Ice			
Macroinvertebrates	[ ] MI-FW-QLDC	[ ] Formalin			
Periphyton	[ ] ALGAE-ID	[ ] Ice			
Microbiology	[ ] E Coli [ ] F Coli [ ] Enterococci	[ ] Ice			
Molecular	[ ] PCR-FILTER [ ] PCR-BacR [ ] PCR-GULL2 [ ] PCR-HF183 [ ] PCR-DG3 [ ] PCR-GFD	[ ] Ice			
Tracers	[ ] W-E8321-DI [ ] W-E8321-MS	[ ] Ice			
Pesticides	[ ] W-PSNP-TQ [ ] W-CT-CL-R [ ] W-E8321-DI [ ] W-PCL-SQ-R [ ] WE8321-MS [ ] W-CARB-AA	[ ] Ice			
Phytoplankton	[ ] DTY-QN-C [ ] PKD-QN-C				

Place Preservative Sticker(s) Here (If Available)

Notes:

Field/WIN ID → G3TLHR0011

Location ↓ MAJOR LAKE CENTER

Signature: [signature] **Date:** 07/01/19

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: (Initials/Date) QC Station ID, Field Parameters In LIMS DMT: (Initials/Date)

Scan/Save Field Sheets CL 7-3-19 (Initials/Date) Migrate Data to WIN: (Initials/Date) Verify Data In WIN: (Initials/Date)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified? Yes / No

WIN Station Name: Dunford Lake **Date:** 07/01/2019 (mm/dd/yyyy)

WIN/ Field ID: G3TLHR0010 **WBID:** 526A **Latitude:** 30.55016 (Decimal Degrees)

County: Washington **ORG ID:** 21FLTLHR **Longitude:** 85.6795 (Decimal Degrees)

Receiving Body of Water: Lucas Lake? **RQ-** 2019-06-24-34

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
J. Burtchett	✓		✓		
J. Woods		✓		✓	✓

Sampling Equipment
- ☑ Sample Container ☐ Van Dorn ☐ Pole
- ☐ Carboy ☑ Syringe
- ☐ Dipper ☐ Other
- Depth Measured with Sonar
- Equipment ID #1

Collection Method
- ☐ Wading ☐ Canoe/Kayak
- ☐ From Shore ☐ Electric Motor
- ☐ Other ☑ Gasoline Motor

Water Level: Dry/ Pooled/ Low / Normal / High / Flooded **Meter ID#** 154177 **Matrix:** Fresh / Marine / DI

Photos: Yes / No **Flow:** No Flow / Intestital / Flowing / NA **Tide:** Rising/ Falling/ Slack/ NA **Tide Times:** High Low

Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPTh)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1045	6.6	0.3	1.9	6.29	83.8	5.56	0.00	13.7	30.4
CEN	1048		6.1		0.38	4.0	5.57	0.01	26.3	17.6

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

SBIO ID Numbers: SBIO-ID: HA-ID: RPS-ID: Macrophyte-ID: LIMS#:

Parameter Suite	Parameter Methods	Preservation	Lot#	Expiration	pH Check
Preserved Nutrients	☑ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H_2SO_4	163030	10/30/19	☐ <2
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO_3			☐ <2
Filtered Nutrients	☑ W-PO4-F ☑ Field Filtered 0.45 µm Filter	☒ Ice			
Chlorophyll	☑ CHLSUITE-W	☒ Ice			
Physical/Aggregate (Fresh)	☑ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-FW-QLDC	☐ Formalin			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci	☐ Ice			
Molecular	☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD	☐ Ice			
Tracers	☐ W-E8321-DI ☐ W-E8321-MS	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-E8321-DI ☐ W-PCL-SQ-R ☐ WE8321-MS ☐ W-CARB-AA	☐ Ice			
Phytoplankton	☐ DTY-QN-C ☐ PKD-QN-C				

Place Preservative Sticker(s) Here (If Available)

Notes:

Field/WIN ID → G3TLHR0010

Location ↓ DUNFORD LAKE

Signature: [signature] **Date:** 07/01/19

LIMS EVENT ID: **WIN Import ID:**

Enter Field Parameters, Verify Station ID In LIMS DMT: (Initials/Date) **QC Station ID, Field Parameters In LIMS DMT:** (Initials/Date)

Scan/Save Field Sheets CL 7-3-19 (Initials/Date) **Migrate Data to WIN:** (Initials/Date) **Verify Data In WIN:** (Initials/Date)

Request Number: RQ-2019-06-24-34

Run 6

Florida Department of Environmental Protection
Central Laboratory Submittal Form

last revised Jan 25, 2018

Customer: TLH-ROC

Project ID: SMP

Requester: Michael Eckles

Collected By: J. Woods, J. Burtchett

Field Report Prepared By: J. Burtchett

Sampling Agency: 8034

Location	Field/WIN ID	Comp / Grab	Collection (comp begin or grab) Date	Time	Eastern / Central	Composite end Date	Time	Bottle Group(s) (See pg 2)
Field ID: G3TLHR0010		☐ Comp ☑ Grab	07/01/19	1045	Eastern	—	—	A
WIN/STORET #: DUNFORD LAKE	Matrix (type, e.g., Salt, Fresh, etc): Fresh	Diss. Oxygen: 6.29 ☑ mg/L ☐ % sat	Total Res. Chlorine (mg/L): —					
Latitude: ☐ dd ☐ dms	Temp (C): 30.4	pH: 5.56	Sample Depth: 0.3 ☐ ft ☑ m	Sp. Conductance (umho/cm): 13.7				
	Salinity (ppt): 0.00	Comments:						
Location	Field/WIN ID: G3TLHR0011	☐ Comp ☑ Grab	07/01/19	1115	Eastern	—	—	A
Field ID	Matrix (type, e.g., Salt, Fresh, etc): Fresh	Diss. Oxygen: 7.42 ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L): —					
WIN/STORET #: MAJOR LAKE CENTER	Temp (C): 31.0	pH: 5.48	Sample Depth: 0.3 ☐ ft ☑ m	Sp. Conductance (umho/cm): 15.0				
Latitude: ☐ dd ☐ dms	Salinity (ppt): 0.01	Comments:						
Location	Field/WIN ID: G3TLHR0012	☐ Comp ☑ Grab	07/01/19	1230	Eastern	—	—	A
Field ID	Matrix (type, e.g., Salt, Fresh, etc): Fresh	Diss. Oxygen: 8.05 ☑ mg/L ☐ % sat	Total Res. Chlorine (mg/L): —					
WIN/STORET #: CRYSTAL LAKE CENTER	Temp (C): 30.8	pH: 7.10	Sample Depth: 0.3 ☐ ft ☑ m	Sp. Conductance (umho/cm): 29.7				
Latitude: ☐ dd ☐ dms	Salinity (ppt): 0.01	Comments:						
Location		☐ Comp ☐ Grab	Date	Time	Eastern / Central	Date	Time	
Field ID	Matrix (type, e.g., Salt, Fresh, etc):	Diss. Oxygen: ☐ mg/L ☐ % sat	Total Res. Chlorine (mg/L):					
WIN/STORET #	Temp (C):	pH:	Sample Depth: ☐ ft ☐ m	Sp. Conductance (umho/cm):				
Latitude: ☐ dd ☐ dms	Longitude: ☐ dd ☐ dms	Salinity (ppt):	Comments:					

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
JB, JW	7/1/19 1528	HD	1	KK	7.1.19 / 15:30

Group:	Bottle Type:	# of Bottles:	Preservative:	Enter Number of Bottles Sent to Lab
A	P-1L	5	ICE	3
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS			
A	BP-1L	5	ICE	3
	CHLSUITE-W			
A	P-500ML	5	ICE And H2SO4	3
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC		7163030 KY 30/19	
A	P-125ML	5	FILTER-ICE	3
	W-PO4-F			
B	P-1L	2	ICE	
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS			
B	BP-1L	2	ICE	
	CHLSUITE-W			
B	P-250ML-WO-THI	2	ICE	
	ECOLI-18QT			
B	P-500ML	2	ICE And H2SO4	

Group:	Bottle Type:	# of Bottles:	Preservative:	Enter Number of Bottles Sent to Lab
B	P-500ML	2	ICE And H2SO4	
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC			
B	P-125ML	2	FILTER-ICE	
	W-PO4-F			
C	P-1L	1	ICE	
	ALKALINITY TURBIDITY W-CL-IC W-COLOR W-F W-SO4-IC W-TDS W-TSS			
C	P-250ML-WO-THI	1	ICE	
	ECOLI-18QT			
C	P-500ML	1	ICE And H2SO4	
	W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC			
C	P-125ML	1	FILTER-ICE	
	W-PO4-F			