



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
☒ Yes ☐ No

WIN Station Name: Lake Ingram East **Date:** 8/16/2021
WIN/Field ID: G4CE0155 **WBID:** 3170L **ENR:** - **Latitude:** 28.4612
County: ORANGE **Org ID:** 21FLCEN **Longitude:** -81.64
Receiving Body of Water: Kissimmee River **RQ:** 2021-08-02-67

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Katie March	x		x		
☒	Elizabeth Bates		x		x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Secchi	
Secchi Equipment ID: Knothead	
Collection Method	
☐ Wading	☒ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID# CRAW DADDY							
Photos: YES		Flow: NA		Tide:		Tide Times: High: Low:							
Biological Samples Collected: EB ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☒ LVI Other:													
SBIO ID Numbers: LIMS ID: 2269888 SBIO ID: 82979 Macrophyte ID: 11932													
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-2021-08-18-01 WIN Import ID: 28682
Enter Field Parameters, Verify Station ID In LIMS DMT: EB 9/1/21 QC Station ID, Field Parameters In LIMS DMT: KWM 9/21/21
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets KWM 9/21/21 Migrate Data to WIN: KWM 9/21/21 Verify Data In WIN: _____
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-08-02-67

Customer: WQAP

Project ID: SMP

Collected By: Katie March, Elizabeth Bates

Field Report Prepared By: Katie March

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4CE0155

Location: Lake Ingram East

Comments:

Matrix: Fresh

(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)		
	1124 EST	6.04	79	29.3	6.53	0.3	1.7 ☐ VOB (S)	2.3	60.7	0.03		
8/16/2021												
	1129 EST	5.46	71	29	6.06	1.8			60.7	0.03		
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*		☒ <2	1	A		
		Lot #	SA1105060		Exp:	4/30/2022						
Metals (P-500ML)		☐ W-ICPMS ☐ W-ICP ☐ W-HARD				☐ Ice ☐ HNO3*		☐ <2				
		Lot #			Exp:							
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A		
		Filter Lot #	17135566									
		Syringe Lot #	1091364									
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	A		
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice			1	A		
Physical/Aggregate (Marine) (P-1L)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice						
Macroinvertebrates (PJ-2L)		☐ MI-FW-QLDC	Formalin Lot #			☐ 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 ☐				☐ 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	☐ Ice						
Phytoplankton/Periphyton		W-PCL-TQ-R	W-CAR8-AA (5 ml of MCAA** Buffer Solution)			☐ Ice						
				DTY-QN-C	PKD-QN-BV	☐ Ice						
Name: Katie March Elizabeth Bates					Signature:				Date: 8/16/21			

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
COUNTY: Orange STORET #: G4CEDISS LONGITUDE: _____
DATE: 8/16/21 TIME: _____ SAMPLING AGENCY: _____
SITE NAME: Lake Ingram WBID: _____
FIELD ID/NAME: _____ LAKE SIZE: _____ RQ: _____

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : <i>drastically changing currently</i>				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)			
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Other (Specify)
☐	☐	☐	☐	☐	☐	☐	☐
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☒ Moderate ☐ Heavy						Artificially Impounded ☐ Yes ☒ No	
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy						LDI: ☐	
STORMWATER INPUTS <u>8</u>				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) <u>10</u>			
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			
20 19 18 17 16				15 14 13 12 11			
LAKESIDE ALTERATIONS <u>10</u>				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) <u>10</u>			
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)			
20 19 18 17 16				15 14 13 12 11			
BUFFER ZONE <u>9</u>				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) <u>10</u>			
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			
20 19 18 17 16				15 14 13 12 11			
STORMWATER INPUTS <u>8</u>				LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) <u>10</u>			
Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation				Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place			
20 19 18 17 16				15 14 13 12 11			
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20 19 18 17 16				15 14 13 12 11			

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 _____			
Meter Readings: Top: <u>0.3</u> <u>29.3</u> <u>6.53</u> <u>6.04</u> <u>79</u> <u>60.7</u> <u>0.03</u> Mid-Depth: _____ Bottom: <u>1.8</u> <u>29</u> <u>6.06</u> <u>5.46</u> <u>71</u> <u>60.7</u> <u>0.03</u>				Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____			
Meter ID: <u>Craw Daddy</u>				Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid			
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____				Color: ☒ Clear ☐ Tannic ☐ Green			
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				SECCHI (M) <u>1.7</u> Total Station Depth (M) <u>2.3</u> VOB ☐			
Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☐ ☐ ☒ ☐ Submersed Plants ☐ ☐ ☐ ☒ Exotic Apple Snails ☒ ☐ ☐ ☐				Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic			
Weather Conditions:				Additional Notes: <u>Lots of nearby development, home owner said developer has been pumping lake levels up and down.</u>			
SAMPLING TEAM: <u>E. Bates, K. March</u>				SIGNATURE: <u>K March</u> DATE: <u>8/16/21</u>			

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Ingram</u>	County: <u>Orange</u>	Date: <u>8/16/21</u>
Analyst: <u>E. Bates, K. March</u>	Signature: <u>K. March</u>	STORET:
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold = FLEPPC invasive exotic.		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	1 4 7 10	Collected? (✓)
Acer rubrum		
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		
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		
Liquidambar 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		
<u>Amorpha fruticosa</u>		
<u>Hypericum sp</u>		

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Ingram</u>				Date: <u>8/16/21</u>			
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 mexicana				*Sesbania			
Nymphaea odorata				Solidago sp.			
Nymphoides aquatica				Sparganium americanum			
Nyssa sylvatica var. biflora				Spartina bakeri			
Orontium aquaticum				Spirodela polyrhiza			
Osmunda cinnamomea				Taxodium sp.			
Osmunda regalis				Thalia geniculata			
Panicum hemitomon				Thelypteris interrupta			
Panicum repens				Thelypteris palustris			
Paspalidium geminatum				Triadenum virginicum			
*Paspalum repens				Typha sp.			
Paspalum urvillei				Urochloa mutica (Brachiaria mutica)			
Peltandra sp.				*Utricularia foliosa			
Persea sp.				*Utricularia gibba (U. biflora)			
Pennisetum purpureum				*Utricularia inflata			
Phragmites australis				*Utricularia purpurea			
Pinus elliotii				*Utricularia radiata			
Pistia stratioides				*Utricularia resupinata			
Pluchea sp.				Vallisneria americana			
*Polygonum glabrum (densiflorum)				Vigna luteola			
Polygonum hirsutum				Vitis sp.			
*Polygonum hydropiperoides				*Websteria confervoides			
*Polygonum punctatum				Wedelia trilobata (Sphagneticola trilobata)			
*Polygonum				Wolffiella spp.			
Pontederia cordata				Woodwardia virginica			
*Potamogeton diversifolius				Xyris sp.			
*Potamogeton illinoensis				Zizania aquatica			
*Potamogeton pusillus				Zizaniopsis milacea			
*Potamogeton pectinatus (Stuckenia pectinatus)				<u>Scleria reticularis</u>			X
Proserpinaca pectinata							
*Rhexia							
*Rhynchospora corniculata							
*Rhynchospora inundata <u>scirpoides</u>							
Rhynchospora nitens							
Ricciocarpus natans							
Sabal palmetto							
Sacciolepis striata							
*Sagittaria filiformis							
*Sagittaria graminea							
*Sagittaria isoetiformis							
Sagittaria lancifolia							
Sagittaria latifolia							

LVI Map for Lake Ingram, WBID 3170L

