



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
☒ Yes / ☐ No

WIN Station Name: Clear Lake @ Center

Date: 06/22/2020
(mm/dd/yyyy)

WIN/ Field ID: G4CE0188

WBID: 3169G

Latitude: 28.521652

(Decimal Degrees)

County: Orange

ORG ID: 21FLCEN

Longitude: -81.409623

(Decimal Degrees)

Receiving Body of Water:

RQ-2020- 06-22-54

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment	
						Sample Container	Van Dorn
Natalie Ayala						☒ Syringe	☐ Pole
Elizabeth Bates						☐ Dipper	☐ Other
						Depth Measured with Equipment ID	
						Collection Method	
						☐ Wading	☐ Canoe/Kayak
						☐ From Shore	☒ Electric Motor
						☐ Other	☐ Gasoline Motor
						Boston Whaler	

Water Level: Dry/ Pooled/ Low / ☒ Normal / High / Flooded		Meter ID#	
Photos: ☒ Yes / ☐ No		Craw Daddy	
Flow: No Flow / Flowing / ☒ NA		Tide: Rising/ Falling/ Slack/ NA	
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☒ LVI ☐ Other:		Tide Times: High ☒ N/A Low ☒ N/A	
SBIO ID Numbers: SBIO-ID: 81498 HA-ID: N/A RPS-ID: N/A		Macrophyte-ID: 11717 LIMS#: 2178391	
Notes: LVI 3,6,9,12			

Duplicate Sample	
Time Zone: EST CEN Time: N/A	Field ID: N/A (WIN ID_DUP)
WIN DMT Activity ID: N/A	

Blank	
Time Zone: EST CEN Time: N/A	Field ID: N/A (Blank Type_DDDMMYYYY)
DI Source: N/A	Location: N/A
☐ Field Blank ☐ Equipment Blank ☐ Field Cleaned Equipment Blank	Equipment ID: N/A

LIMS EVENT ID: CEN-DIST-2020- 06-24-03 WIN Import ID: 22625

Enter Field Parameters, Verify Station ID In LIMS DMT: KMW 7/1/20 QC Station ID, Field Parameters In LIMS DMT: NA 10/1/2020

(Initials/Date) (Initials/Date)

Scan/Save Field Sheets KWM 10/30/20 Migrate Data to WIN: KWM 10/30/20 Verify Data In WIN:

(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2020- 06-22-54
Customer: CEN-DIST
Project ID: SMP

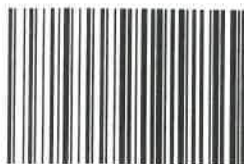
Collected By: Natalie Ayala

Field Report Prepared By: Elizabeth Bates

Sampling Agency: FDEP CEN-ROC

WIN ID / Field ID →

Clear Lake @ Center



G4CE0188

Comments:

Bloom present

LVI 36,9,12

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)
06/22/20	1003 EST / CST	9.34	125.1	30.7	9.06	0.3	1.0 ☐ VOB (S)	6.8	194.0	0.09

Central Lab please use top row for login purposes

	1010 EST / CST	0.10	1.1	26.9	7.33	6.3			222.2	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 Lot # SA 9354050 Exp: 12/20/20	☒ Ice ☒ H2SO4* ☐ <2	☐ <2	1	A
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3* ☐ <2	☐ <2		
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 16930280 Syringe Lot # 9149785	☒ Ice		1	A
Chlorophyll (BP-1L)	☒ CHLSUITE-W	☒ Ice		1	A
Physical/Aggregate (Fresh) (P-1L)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CHC / 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			
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 ☐ WE8321-MS ☐ W-PSNP-TQ ☐ W-CT-CL-R ☐ W-PCL-SQ-R ☐ W-CARB-AA (5 ml of MCAA** Buffer Solution)	☐ Ice			

Name: Elizabeth BatesSignature: [Signature]Date: 06/22/2020

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

SAMPLE ID: 81498 MACROPHYTE ID: 11717 LATITUDE: 28.521652
COUNTY: Orange STORET #: G4CE0188 LONGITUDE: -81.409623
DATE: 06/22/2020 TIME: SAMPLING AGENCY: 21FLCEN FDGP
SITE NAME: Clear Lake WBID: 3169G
FIELD ID/NAME: G4CE0188 LAKE SIZE: RQ: 2020-06-22-54

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS)													LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)								
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industrial	Parks Other (Specify)							LDI:							
				95%			5%														
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				
3		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)				
3		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				
3		20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1

Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No pH < 2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # <u>9A9354050</u> Exp. Date: <u>12/20/20</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High				Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____																																			
Meter Readings: <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat. (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> </tr> </thead> <tbody> <tr> <td>Top:</td> <td><u>0.3</u></td> <td><u>30.7</u></td> <td><u>9.06</u></td> <td><u>9.34</u></td> <td><u>125.1</u></td> <td><u>194.0</u></td> <td><u>0.09</u></td> </tr> <tr> <td>Mid-Depth:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bottom:</td> <td><u>6.3</u></td> <td><u>26.9</u></td> <td><u>7.33</u></td> <td><u>0.10</u></td> <td><u>1.1</u></td> <td><u>222.0</u></td> <td><u>0.10</u></td> </tr> </tbody> </table> Meter ID: _____					Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)	Top:	<u>0.3</u>	<u>30.7</u>	<u>9.06</u>	<u>9.34</u>	<u>125.1</u>	<u>194.0</u>	<u>0.09</u>	Mid-Depth:								Bottom:	<u>6.3</u>	<u>26.9</u>	<u>7.33</u>	<u>0.10</u>	<u>1.1</u>	<u>222.0</u>	<u>0.10</u>	Water Surface Oils: ☒ None ☐ Sheen/Slack ☐ Glob ☐ Other _____			
					Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)																												
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Clarity: <u>N/A</u> ☐ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid				Color: <u>N/A</u> ☐ Clear ☐ Tannic ☐ Green																																			
SECCHI (M) <u>1.0</u>				Total Station Depth (M) <u>6.8</u>																																			
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____				Sediment Odors: <u>N/A</u> ☐ 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: <table style="width: 100%;"> <thead> <tr> <th></th> <th>Absent</th> <th>Rare</th> <th>Common</th> <th>Abundant</th> </tr> </thead> <tbody> <tr> <td>Periphyton</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Nuisance Plants</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Submersed Plants</td> <td>☐</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Exotic Apple Snails</td> <td>☒</td> <td>☐</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>					Absent	Rare	Common	Abundant	Periphyton	☒	☐	☐	☐	Nuisance Plants	☐	☐	☒	☐	Submersed Plants	☐	☐	☒	☐	Exotic Apple Snails	☒	☐	☐	☐							
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Weather Conditions : 				Additional Notes: 																																			
SAMPLING TEAM: <u>Natalie Ayala / Elizabeth Bates</u>				SIGNATURE: <u>[Signature]</u>		DATE: <u>06/22/2020</u>																																	

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Clear Lake</u>				County: <u>Orange</u>				Date: <u>6/22/2020</u>			
Analyst: <u>Natalie Ayala / Liz Bates</u>				Signature: <u>[Signature]</u>				STORET: <u>64CE0188</u>			
Except where noted as "sp." species level identification required. *Genera that may require lab verification*								Lake units sampled (circle one group):			
Plants in bold = FLEPPC invasive exotic.								1, 4, 7, 10 2, 5, 8, 11			
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.								3, 6, 9, 12			
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Acer rubrum	/		/			Fuirena scirpoides					
Alternanthera philoxeroides						Gordonia lasianthus					
Amaranthus australis						Habenaria repens					
Andropogon sp.						Hibiscus coccineus					
Azolla filiculoides (A. caroliniana)						Hibiscus grandiflora					
Baccharis sp.						Hydrilla verticillata	/	/	/	/	BNA
Bacopa caroliniana						Hydrocotyle sp.		/		/	
Bacopa monnieri						Hygrophila polysperma					
Bidens alba						Hymenocallis sp.					
Bidens laevis						*Hypericum fasciculatum					
Bidens mitis						*Hypericum hypericoides					
Blechnum serrulatum						*Hypericum myrtifolium					
Boehmeria cylindrica						Ilex cassine					
Brasenia schreberi						Ipomoea aquatica					
Cabomba caroliniana						Ipomoea sagittata					
Canna						Itea virginica					
Centella asiatica						Juncus effusus					
Cephalanthus occidentalis						*Juncus marginatus					
Ceratophyllum demersum	/	/	/			*Juncus megacephalus					
Chara sp.						Juncus repens					
Cinnamomum camphora						*Juncus scirpoides					
Cladium jamaicense						Lachnanthes caroliniana					
Colocasia esculenta	/	/	/	/		Leersia hexandra					
*Commelina						Landoltia punctata (Spirodela punctata)					
Crinum americanum						Lemna sp.	/	/	/		
*Cyperus alternifolius (C. involucratus)						Leucothoe racemosa (Eubotrys racemosa)					
Cyperus articulatus						Limnobia spongia					
Cyperus haspan						Limnophila sessiliflora					
*Cyperus lecontei						Liquidambar styraciflua					
*Cyperus polystachyos						*Ludwigia arcuata					
*Cyperus odoratus	/	/	/			Ludwigia hex-grand-uruguayensis complex**					
*Cyperus surinamensis						*Ludwigia leptocarpa	/				
Cyrilla racemiflora						Ludwigia (native)					
Decodon verticillatus						*Ludwigia octovalvis					
Diodia virginiana						*Ludwigia peruviana	/	/	/	/	
*Echinochloa crus-galli						*Ludwigia repens					
*Echinochloa muricatum						Ludwigia suffruticosa					
Echinochloa walteri						Luziola fluitans (Hydrochloa carolinensis)					
Eclipta prostrata (E. alba)						Magnolia virginiana					
Eichhornia crassipes						Mayaca fluviatilis					
*Eleocharis						Melaleuca quinquenervia					
Eleocharis cellulosa						Micranthemum glomeratum					
*Eleocharis elongata						Micranthemum umbrosum					
Eleocharis equisetoides						Mikania scandens					
Eleocharis interstincta						Mimosa pigra					
Eleocharis submersa viviparous						Myrica cerifera					
*Eriocaulon compressum						Ludwigia 5 petals					3 petals
*Eriocaulon decanulare											
Eupatorium capillifolium											
Fraxinus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Clear Lake</u>					Date: <u>06/22/2020</u>						
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Myriophyllum aquaticum						<i>Salix caroliniana</i>					
* <i>Myriophyllum heterophyllum</i>						<i>Salvinia minima</i>					
* <i>Myriophyllum laxum</i>						<i>Sambucus canadensis</i>					
* <i>Myriophyllum pinnatum</i>						<i>Sapium sebiferum</i>					
<i>Myriophyllum spicatum</i>						<i>Saururus cernuus</i>					
* <i>Najas filifolia</i>						<i>Schinus terebinthifolius</i>					
* <i>Najas guadalupensis</i>						* <i>Schoenoplectus californicus</i>					NA
* <i>Najas minor</i>						* <i>Schoenoplectus pungens</i>					
<i>Nelumbo lutea</i>						* <i>Schoenoplectus tabernaemontani</i> (<i>Scirpus validus</i>)					NA
<i>Nitella</i> spp.						<i>Scirpus cubensis</i> (<i>Oxycaryon cubense</i>)					
<i>Nuphar</i> sp.						<i>Scirpus cyperinus</i>					
<i>Nymphaea mexicana</i>						* <i>Sesbania</i>					
<i>Nymphaea odorata</i>						<i>Solidago</i> sp.					
<i>Nymphoides aquatica</i>						<i>Sparganium americanum</i>					
<i>Nyssa sylvatica</i> var. <i>biflora</i>						<i>Spartina bakeri</i>					
<i>Orontium aquaticum</i>						<i>Spirodela polyrhiza</i>					
<i>Osmunda cinnamomea</i>						<i>Taxodium</i> sp.					
<i>Osmunda regalis</i>						<i>Thalia geniculata</i>					
<i>Panicum hemitomon</i>						<i>Thelypteris interrupta</i>					
<i>Panicum repens</i>						<i>Thelypteris palustris</i>					
<i>Paspalidium geminatum</i>						<i>Triadenum virginicum</i>					
* <i>Paspalum repens</i>						<i>Typha</i> sp.					
<i>Paspalum urvillei</i>						<i>Urochloa mutica</i> (<i>Brachiaria mutica</i>)					
<i>Peltandra</i> sp.						* <i>Utricularia gibba</i> (<i>U. biflora</i>)					
<i>Persea</i> sp.						* <i>Utricularia foliosa</i>					
<i>Pennisetum purpureum</i>						* <i>Utricularia inflata</i>					
<i>Phragmites australis</i>						* <i>Utricularia purpurea</i>					NA
<i>Pinus elliotii</i>						* <i>Utricularia radiata</i>					
<i>Pistia stratioides</i>						* <i>Utricularia resupinata</i>					
<i>Pluchea</i> sp.						<i>Vallisneria americana</i>					
* <i>Polygonum glabrum</i> (<i>densiflorum</i>)						<i>Vitis</i> sp.					
<i>Polygonum hirsutum</i>						* <i>Websteria confervoides</i>					
* <i>Polygonum hydropiperoides</i>						<i>Wedelia trilobata</i> (<i>Sphagneticola trilobata</i>)					
* <i>Polygonum punctatum</i>						<i>Wolffiella</i> spp.					
* <i>Polygonum</i>						<i>Woodwardia virginica</i>					
<i>Pontederia cordata</i>						<i>Xyris</i> sp.					
* <i>Potamogeton diversifolius</i>						<i>Zizania aquatica</i>					
* <i>Potamogeton illinoensis</i>						<i>Zizaniopsis milacea</i>					
* <i>Potamogeton pusillus</i>						<i>Xanthosoma</i>					NA
* <i>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)						<i>Cyperus papyrus</i>					NA
<i>Proserpinaca pectinata</i>						<i>Utricularia</i> sp.					NA
* <i>Rhexia</i>						<i>Utricularia</i> sp.					NA
* <i>Rhynchospora corniculata</i>						<i>Utricularia</i> sp.					NA
* <i>Rhynchospora inundata</i>						<i>Utricularia</i> sp.					NA
<i>Rhynchospora nitens</i>						<i>Utricularia</i> sp.					NA
<i>Ricciocarpus natans</i>						<i>Utricularia</i> sp.					NA
<i>Sabal palmetto</i>						<i>Utricularia</i> sp.					NA
<i>Sacciolepis striata</i>						<i>Utricularia</i> sp.					NA
* <i>Sagittaria filiformis</i>						<i>Utricularia</i> sp.					NA
* <i>Sagittaria graminea</i>						<i>Utricularia</i> sp.					NA
* <i>Sagittaria isoetiformis</i>						<i>Utricularia</i> sp.					NA
<i>Sagittaria lancifolia</i>						<i>Utricularia</i> sp.					NA
<i>Sagittaria latifolia</i>						<i>Utricularia</i> sp.					NA

LVI Map for Clear Lake, WBID 3169G

