FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter Passed End of Day CCV: (Yes) / No

WIN Station Name:	CLEAR LAKE NEAR CENTER					**Sample Date:**	6/26/2023
WIN / Field ID:	G1CE0129	**ORG ID:**	21FLCEN	**ENR:**	-	**Latitude:**	28.604041
County:	LAKE	**WBID:**	2864A	LAKE		**Longitude:**	-81.787241
Receiving Body of Water:	-					**RQ-**	2023-05-15-20

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Denver Bourassa		x		x	x
Terry Riordan	x		x		

Sampling Equipment					
x	Sample Container			Carboy	
	Dipper			Van Dorn	
x	Syringe			Pole	
Syringe Lot#	*2327923*		**Filter Lot#**	*17769663*	
Secchi Equipment ID:	*Light*				

Collection Method			
	Wading	x	Canoe/Kayak
	From Shore		Electric Motor
			Gasoline Motor
Depth Measured With	*Secchi*		

Water Level:	*Normal*
Flow:	*NA*
Matrix:	*Fresh*
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	*Yes*
Meter ID:	*Shrimp Trap*
Depth Gauge ID:	**depth_gauge**

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (°C)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
EST	1230	2.7	0.3	6.86	91.8	30.5	6.71	2	89.9	0.04
	1236		2	5.8	74.5	28.2	6.67		89.3	0.04
	1238		2.2	5.57	71	28	6.58		89.1	0.04

Biological Samples Collected: None

SBIO Visit ID: 87428 **HA ID:** **RPS ID:** **Macrophyte ID:** 12509 **LIMS Sample ID In The Macrophyte Module:** 2419812

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation Type		Lot#	Expiration Date	pH Check
Microbiology								
Chlorophyll	**CHLSUITE-W**			**ICE**				
Physical/Aggregate Nutrients	**ALKALINITY, TURBIDITY, W-F, W-TSS**			**ICE**				
	W-CL-IC, W-COLOR, W-SO4-IC, W-TDS			**ICE**				
Filtered Nutrients	**W-PO4-F**	**Field Filtered 0.45 µm Filter**		**ICE**		Syring Lot#:2327923; Filter Lot#:17769663		
Acid Preserved Nutrients	**W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP**			**ICE**	**H2SO4***	*SA3013020*	*01/25/2024*	*H2SO4 pH<2*
Metals	**W-ICPMS**	**W-ICP**	**W-HARD**	**ICE**	**HNO3****	NA2230040	09/01/2023	HNO3 pH<2
Organics (LC)	**W-E8321-DI**	**W-E8321-MS**		**Ice**	**MCAA*****			
Macroinvertebrates								
Organics (GC)				**Ice**				
	W-PSNP-TQ	**W-TR-SQ-R**						
Molecular								
Periphyton								
Phytoplankton								
BOD								
DOC								
Other(s)								

*2.0 ml of H2SO4 Used Unless Noted Otherwise
**2.0 ml of HNO3 Used Unless Noted Otherwise

SyringLot# **FilterLot#**

Field Comments:	90 partly cloudy
Comments on COC:	
Relinquish Date:	06/26/2023
Signature:	

LIMS EVENT ID: CEN-DIST-2023-06-23-01 **WIN Import ID:** 41943

Enter Field Parameters, Verify Station ID In LIMS DMT: KWM 7/27/23 (Initials/Date)

QC Station ID, Field Parameters In LIMS DMT: VLS 8/2/23 (Initials/Date)

Save Field Sheets on Network: KWM 8/3/23 (Initials/Date)

Migrate Data to WIN: KWM 8/3/23 (Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 28.604041

COUNTY: Lake STORET #: _____ LONGITUDE: -81.787241

DATE: 6/26/23 TIME: 12:30 SAMPLING AGENCY: CEROC

SITE NAME: Clear Lake near Center WBID: 2864A

FIELD ID/NAME: ~~CE01~~ 7K GICE0129 LAKE SIZE: 23 Ac RQ: 2023-05-15-20

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)
	15	70	10	5			

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 19	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 17	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 14	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 # SA3013020 Exp. Date: 1/25/24

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	6.71	6.86	91.8	89.9	0.04
Mid-Depth:	2.0	28.2	6.67	5.8	74.5	89.3	0.04
Bottom :	2.2	28.0	6.58	5.57	71.0	89.1	0.04

Meter ID: _____

Clarity: ☑ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid

Color: ☐ Clear ☑ Tannic ☐ Green

SECCHI (M) 2.0 VOB ☐

Total Station Depth (M) 2.7

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:

☐ Normal ☐ Other (Specify): NA

☐ 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:

Weather Conditions : 90's ptly cloudy

SAMPLING TEAM: Terry Riordan, Denver Bowrassa **SIGNATURE:** _____ **DATE:** 6/26/23

6/26/23

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Clear Lake	County: Lake	Date: 06/26/23
Analyst: D.Baxassa T. Riordan	Signature: [signature]	WIN ~~STORET~~: G1CE0129

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) circled; 2, 5, 8, 11; 3, 6, 9, 12

SPECIES	1	4	7	10	Collected? (√)
Acer rubrum					
Alternanthera philoxeroides					
Andropogon sp.					
Azolla filiculoides (A. caroliniana)					
Baccharis sp.				✓	
Bacopa caroliniana					
Bacopa monnieri					
Bidens laevis					
Bidens mitis					
Blechnum serrulatum					
Boehmeria cylindrica					
Brasenia schreberi					
Cabomba caroliniana					
Casuarina equisitifolia					
Centella asiatica					
Cephalanthus occidentalis					
Ceratophyllum demersum					
Chara sp.					
Cladium jamaicense			✓		
Cliftonia monophylla					
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)					
Egeria densa					
Eichhornia crassipes					
*Eleocharis baldwinii	✓	[scribbled out]		✓	
*Eleocharis vivipara	✓	[scribbled out]			
Eleocharis cellulosa					
Eleocharis equisetoides					
Eleocharis interstincta					
*Eriocaulon compressum					
*Eriocaulon decangulare					
Eupatorium capillifolium	✓			✓	
*Fuirena					
Fuirena scirpoidea	✓				
Gordonia lasianthus					

SPECIES	1	4	7	10	Collected? (√)
Habenaria repens					
Hydrilla verticillata					
Hydrocotyle sp.	✓		✓	✓	
Hygrophila polysperma					
*Hypericum fasciculatum					
*Hypericum hypericoides					
*Hypericum myrtifolium					
Ilex cassine					
Ipomoea aquatica					
Ipomoea sagittata					
Itea virginica					
Juncus effusus			✓		
*Juncus marginatus					
*Juncus megacephalus	✓		X	✓	√ ml
Juncus repens					
*Juncus scirpoides					
Lachnanthes caroliniana				✓	
Leersia hexandra					
Landoltia punctata (Spirodela punctata)					
Lemna sp.					
Leucothoe racemosa (Eubotrys racemosa)					
Limnobium spongia					
Limnophila sessiliflora					
Liquidamber styraciflua					
*Ludwigia arcuata	X				
*Ludwigia leptocarpa					
*Ludwigia linearis					
*Ludwigia octovalvis					
***Ludwigia peruviana**	✓		✓	✓	
*Ludwigia repens		✓			
*Ludwigia suffruticosa	✓			✓	√ ml
Luziola fluitans (Hydrochloa carolinensis)					
Lyonia lucida					
Magnolia virginiana					
Mayaca fluviatilis					
Melaleuca quinquenervia					
Micranthemum glomeratum					
Micranthemum umbrosum					
Mikania scandens	✓		✓		
Mimosa pigra					
Myrica cerifera		✓	✓	✓	
~~Fireweed~~ ~~Erechtites sp.~~			X		
Eleocharis elongata	✓	✓	✓	✓	
Erechtites hieraciifolius			✓		

Clear Lake

6/26/23

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

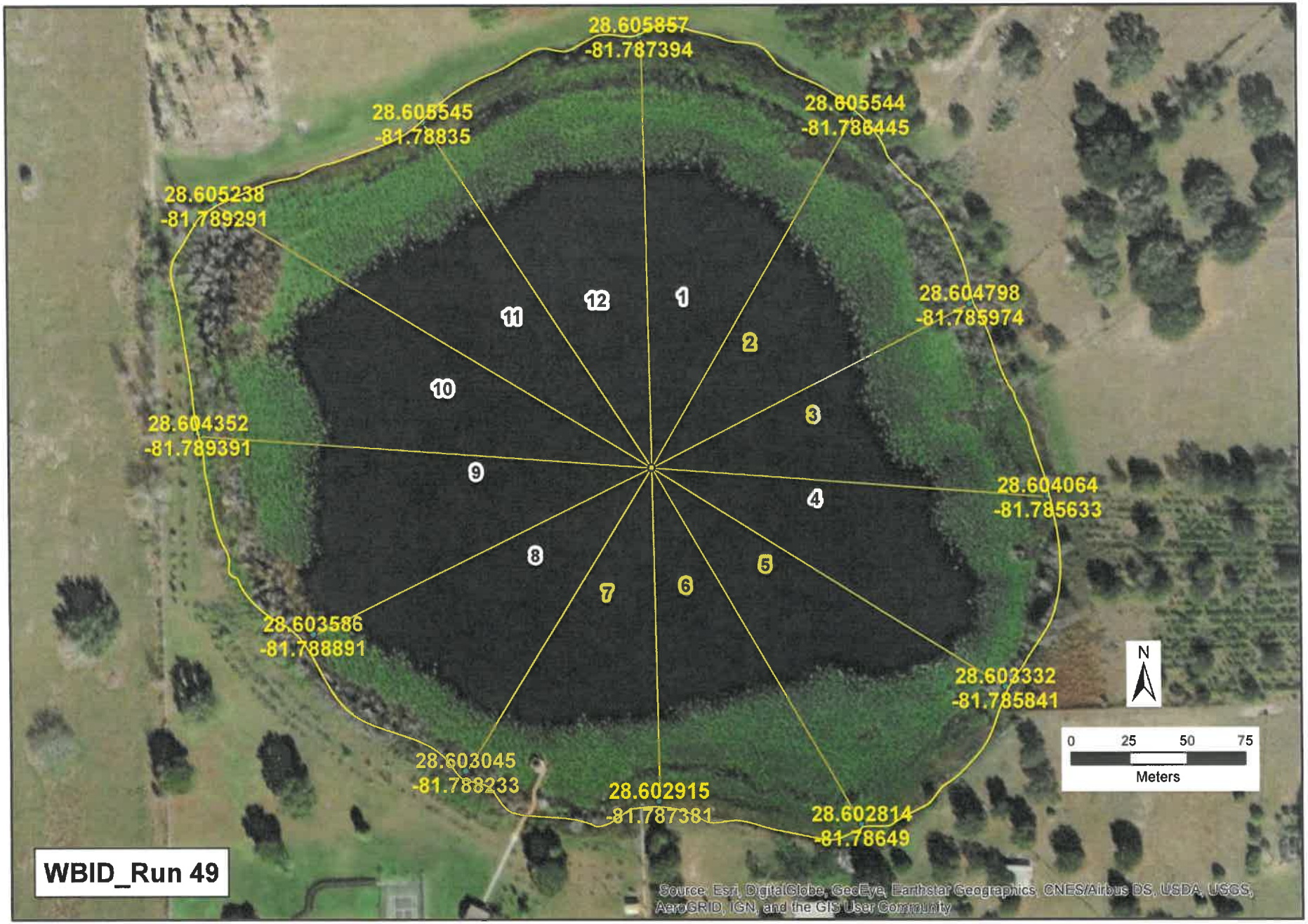
Site: ✓ Clear Lake

Date: 6/26/23

SPECIES	1	4	7	10	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	C	D	D	D	
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 hydropiperoides					
*Polygonum punctatum					
*Polygonum ________					
Pontederia cordata	C ✓	✓	✓	D ✓	not col-
*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					
Mitreola sessilifolia	✓				

SPECIES	1	4	7	10	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					
~~Pepper vine Ampelopsis~~ ?X			Xx		
Sabatia sp. ~~Lar~~ ?X				✓	
Nekemias arborea (prev. Ampelopsis arborea)			✓		

LVI Map for Clear Lake, WBID 2864A



Current Date: 8/2/2021

Date Saved: 8/2/2021