



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End

of Day CCV

Yes

No

WIN Station Name: Panther Lake @ center of central lobe

Date: 6/3/2021

WIN/Field ID: G4CE0156

WBID: 317012

ENR: -

Latitude: 28.4256

County: ORANGE

Org ID: 21FLCEN

Longitude: -81.63

Receiving Body of Water: Kissimmee River

RQ: ~~2021-05-08-14~~

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Leif Boman		x		x	x
☒	Katie March	x		x		
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Sonar	
Secchi Equipment ID:	
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: NO		Flow: NA		Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers: SBIO 82513				MACROPHYTE 11829							
Notes: METER NOT CRAW DADDY. DR. PHIL'S METER, NOT AVAILABLE TO CHOOSE ON COLLECTOR APP. BOTTOM READINGS ARE MAX CORD LENGTH FOR METER. COOLER LOST IN TRANSIT, NO WATER CHEMISTRY OR METER READINGS FOR THIS LVI											

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_DDDMMYY)
DI Source:	Location:		
DI Type:	Equipment ID:		
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets Migrate Data to WIN: Verify Data In WIN:



RQ-2021-05-03-14

Customer: WQAP

Project ID: SMP

Collected By: Leif Boman, Katie March

Field Report Prepared By: Leif Boman

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G4CE0156

Location: Panther Lake @ center of central lobe

Comments:

COOLER LOST IN TRANSIT,
NO WATER CHEMISTRY
OR METER READINGS FOR
THIS LVI

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)
6/3/2021	1210 EST	7.88	102.3	28.9	7.61	0.3	2.8 ☐ VOB (S)	6	184.8	0.09
	1213	7.81	100.1	28.2	7.58	2.0	Central Lab please use top row for login purposes		184.9	0.09
	1218 EST	7.59	95.5	27.1	7.32	5.5			180.6	0.08

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 # SA1105060 Exp: 4/30/22	☒ Ice ☒ H2SO4*	☒ <2	1	A
Metals (P-500ML)	☐ W-ICPMS ☐ W-ICP ☐ W-HARD Lot # Exp:	☐ Ice ☐ HNO3*	☐ <2		
Filtered Nutrients (P125ML)	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter Filter Lot # 171355566 Syringe Lot # 1091364	☒ Ice		1	A
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			
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	☐ 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) ☐ W-DIELDRIN	☐ Ice			
Phytoplankton/Periphyton	DTM-QL-C PEN-QL-C DTY-QN-C PKD-QN-C DTM-QN-C PRN-QN-C PKD-QN-BV	☐ Ice			

Name:
Leif Boman
Katie March

Signature:

Date:

6/3/2021

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

Waterbody: <u>Panther Cooter</u>		County: <u>613/21</u>		Date: <u>Orange</u>	
Analyst: <u>K. Marsh, L. Roman</u>		Signature: <u>K. Marsh</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		25811		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	
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	
Cladium jamaicense				*Juncus scirpoides	
Colocasia esculenta				Lachnanthes caroliniana	
*Commelina				Leersia hexandra	
Crinum americanum				Landoltia punctata (Spirodela punctata)	
*Cyperus alternifolius (C. involucratus)				Lemna sp.	
Cyperus articulatus				Leucothoe racemosa (Eubotrys racemosa)	
Cyperus haspan				Limnobium spongia	
*Cyperus lecontei				Limnophila sessiliflora	
*Cyperus polystachyos				Liquidambar styraciflua	
*Cyperus odoratus				*Ludwigia arcuata	
*Cyperus surinamensis				*Ludwigia grandiflora	
Cyrilla racemiflora				*Ludwigia hexapetala	
Decodon verticillatus				*Ludwigia leptocarpa	
Diodia virginiana				Ludwigia (native)	
*Echinochloa crus-galli				*Ludwigia octovalvis	
*Echinochloa muricatum				*Ludwigia peruviana	
Echinochloa walteri				*Ludwigia repens	
Eclipta prostrata (E. alba)				Ludwigia suffruticosa	
Eichhornia crassipes				Luziola fluitans (Hydrochloa carolinensis)	
*Eleocharis				Magnolia virginiana	
Eleocharis cellulosa				Mayaca fluviatilis	
*Eleocharis elongata				Melaleuca quinquenervia	
Eleocharis equisetoides				Micranthemum glomeratum	
Eleocharis interstincta				Micranthemum umbrosum	
Eleocharis submersa viviparous				Mikania scandens	
*Eriocaulon compressum				Mimosa pigra	
*Eriocaulon decangulare				Myrica cerifera	
Eupatorium capillifolium					
Fraxinus					

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.		DD			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)									
Proserpinaca pectinata									
*Rhexia									
*Rhynchospora corniculata									
*Rhynchospora inundata									
Rhynchospora nitens									
Ricciocarpus natans									
Sabal palmetto									
Sacciolepis striata									
*Sagittaria filiformis									
*Sagittaria graminea									
*Sagittaria isoetiformis									
Sagittaria lancifolia	/	/	/	/					
Sagittaria latifolia									

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
 COUNTY: Orange STORET #: G460158 LONGITUDE: _____
 DATE: 6/3/21 TIME: _____ SAMPLING AGENCY: _____
 SITE NAME: Panther Center WBID: _____
 FIELD ID/NAME: _____ 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 ☒ 100 Commercial ☐ Industrial ☐ Other (Specify) ☐					LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI:									
Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy					Artificially Impounded ☒ Yes ☐ No					Land Use Source & Year:				
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy														
STORMWATER INPUTS <u>2</u>		Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation 20 19 18 17 16			Some direct stormwater inputs (ditches, pipes, cultivated vegetation < 10%) but good BMPs in place 15 14 13 12 11			Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6			Much direct input of stormwater (ditches, pipes, cultivated vegetation > 51%) and no or ineffective BMPs in place 5 4 3 2 1			
LAKESIDE ALTERATIONS <u>2</u>		Very few man-made structures, roads, or other disturbance adjacent to lake (<10% lakeside affected) 20 19 18 17 16			Moderate disturbance visible - structures, roads or other (10%-49% lakeside affected) 15 14 13 12 11			Many structures, roads or other human disturbance visible (50%-70% lakeside affected) 10 9 8 7 6			Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1			
BUFFER ZONE <u>2</u>		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20 19 18 17 16			89%-51% of shoreline with >18m buffer or >75% with 10m to 18m buffer 15 14 13 12 11			50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 10 9 8 7 6			< 29% of shoreline with >18m buffer 5 4 3 2 1			

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ No 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: Top: <u>0.3</u> <u>28.9</u> <u>7.61</u> <u>7.88</u> <u>102.3</u> <u>184.9</u> <u>0.09</u> Mid-Depth: <u>2.0</u> <u>28.2</u> <u>7.58</u> <u>7.81</u> <u>100.1</u> <u>184.9</u> <u>0.09</u> Bottom: <u>5.5</u> <u>27.1</u> <u>7.32</u> <u>7.59</u> <u>95.5</u> <u>180.6</u> <u>0.08</u>								Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☒ Clear ☐ Tannic ☐ Green							
Meter ID: _____								SECCHI (M) <u>2.4</u> Total Station Depth (M) <u>6</u> VOB ☐							
Sediment Type: (may check more than one) ☐ 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:															
Weather Conditions :															
SAMPLING TEAM: <u>K March, L Roman</u>								SIGNATURE: <u>K March</u>				DATE: <u>6/3/21</u>			

LVI Map for Panther Lake, WBID 3170I2

