



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Lake Killarney Date: 09-04/2020
WIN/ Field ID: GTLHR0166 WBID: 6475 Latitude: _____
County: Leon ORG ID: 21FTLHR Longitude: _____
Receiving Body of Water: N/A RQ-2020 22 01-03-58

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
<u>Jon Woods</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>Paul Blair</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

Sampling Equipment	
☒ Sample Container	☐ Van Dorn
☒ Syringe	☐ Pole
☐ Dipper	☐ Other _____
Depth Measured with <u>YSI</u>	
Equipment ID <u>153484</u>	
Collection Method	
☐ Wading	☐ Canoe/Kayak
☐ From Shore	☒ Electric Motor
☐ Other _____	☐ Gasoline Motor

Water Level: Dry/ Pooled/ Low / <u>Normal</u> / High / Flooded	Meter ID# <u>153484</u>
Photos: Yes / <u>No</u>	Flow: No Flow / Flowing <u>NA</u>
Tide: Rising/ Falling/ Slack / <u>NA</u>	Tide Times: High _____ Low _____
Biological Samples Collected: None HA SCI RPS Algae ID LVS <u>LVI</u> Other:	
SBIO ID Numbers: _____	SBIO-ID: _____
HA-ID: _____	RPS-ID: _____
Macrophyte-ID: _____	LIMS#: _____
Notes:	

Duplicate Sample

Time Zone: EST CEN Time: _____	Field ID: _____ (WIN ID_DUP)
WIN DMT Activity ID: _____	

Blank

Time Zone: EST CEN Time: _____	Field ID: _____ (Blank Type_DDMMYYYY)
DI Source: _____	Location: _____
☐ Field Blank	☐ Equipment Blank
☐ Field Cleaned Equipment Blank	Equipment ID: _____

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: _____


 2022
 RQ-2020-01-03-56

Customer: DEP-TLHR

Project ID: SMP

Collected By: Woods / Blaic

Field Report Prepared By: Woods

Sampling Agency: 21FLTLHR

WIN ID / Field ID → KIT: SCI kit (LVI) WBID: 6473 Location							Comments:				
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)	
5/4/22	1025	3.95	50.0	27.0	6.42	0.3	0.7	0.7	68.1	0.03	
EST / CST						☒ VOB (S)					
Cental Lab please use top row for login purposes											
EST / CST											
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 # 1308030		Exp: 12/1/22							
Metals (P-500ML)		☒ W-ICPMS ☐ W-ICP ☐ W-HARD				☐ Ice ☐ HNO3*		☐ <2	1	A	
		Lot # 1286110		Exp: 11/16/22							
Filtered Nutrients (P125ML)		☒ W-PO4-F ☐ Field Filtered 0.45 µm Filter				☒ Ice			1	A	
		Filter Lot # 17347262									
		Syringe Lot # 1091364									
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			1	A	
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD ☐ See Notes				☐ Ice					
Tracers (BG-500ML)		☒ W-E8321-DI ☒ W-E8221-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			3	A	
Name: Jon Woods						Signature:			Date: 5/4/22		

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

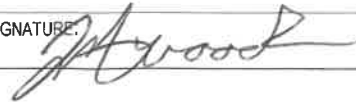
Waterbody: LAKE KILLARNEY		County: Leban		Date: 5-4-22							
Analyst:		Signature: Paul BQ		STORET:							
Except where noted as "sp." species level identification required. *Genera that may require lab verification* Plants in bold= FLEPPC invasive exotic. It is important to note dominant or co-dominant 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	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides	D	D	D	✓		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 equisetifolia						*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						Limnium spongia					
Crinum americanum						Limnophila sessiliflora	✓	✓	✓	✓	
* Cyperus alternifolius (C. involucratus)						Liquidambar 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						Ceratophyllum	✓	✓			
Eleocharis interstincta						Carex Canosa	✓	✓			
*Eriocaulon compressum						Sparganium					
*Eriocaulon decangulare						Iris virginica	✓				
Eupatorium capillifolium	✓		✓								
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site:						Date:					
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	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 odorata						*Sesbania	✓		✓		
Nymphoides aquatica						Solidago sp.					
Nyssa sylvatica var. biflora						Sparganium americanum					
Orontium aquaticum						Spartina bakeri					
Osmunda cinnamomea						Spirodela polyrhiza					
Osmunda regalis						Taxodium sp.					
Panicum hemitomon	✓	✓	✓	✓		Thalia geniculata					
Panicum repens	✓		✓	✓		Thelypteris palustris					
Paspalidium geminatum						Triadenum virginicum					
*Paspalum repens						Typha sp.					
Paspalum urvillei						Urochloa mutica (Brachiaria mutica)					
Peltandra sp.						*Utricularia gibba (U. biflora)					
Persea sp.						*Utricularia floridana					
Pennisetum purpureum						*Utricularia foliosa					
Phragmites australis						*Utricularia inflata					
Pinus elliotii						*Utricularia purpurea					
Pistia stratioides						*Utricularia cornuta					
Pluchea sp.						*Utricularia radiata					
*Polygonum glabrum (densiflorum)						Vallisneria americana					
*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 tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											
Oxycaryon cubensis			✓								

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

STORET STATION NUMBER: G-ITC H26166	DATE (M/D/Y) 05/04/2022	LAKE NAME Lake Killarney		FIELD ID / NAME:	
ECO-REGION:	COUNTY: Leam	SAMPLING LOCATION/DESCRIPTION: West Center		LAKE SIZE:	
PARAMETER	No surface inflow or outflow present, very long water residence time, groundwater seepage dominates ☐	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 ☒	
HYDROLOGY					
Color	Very clear, uncolored water (benthic sampling appropriate) ☐	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 7	Secchi >3 m Or VOB 20 19 18 17 16	3 2.6 2.2 1.8 1.4 15 14 13 12 11	1.0 0.9 0.8 0.7 0.6 10 9 8 7 6	0.5 0.4 0.3 0.2 0.1 5 4 3 2 1	
Vegetation Quality 10	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa 20 19 18 17 16	Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants 15 14 13 12 11	Large masses (21%-40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats 10 9 8 7 6	Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed) 5 4 3 2 1	
Stormwater Inputs 3	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	
Bottom Substrate Quality 8	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present 20 19 18 17 16	Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present 15 14 13 12 11	Moderate layer of CPOM/mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom 10 9 8 7 6	Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom 5 4 3 2 1	
Lakeside Adverse Human Alterations 2	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%) 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	
Upland Buffer Zone 2	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	
Adverse Watershed Land Use 4	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 36	COMMENTS:				

ANALYSIS DATE: 5/4/22	ANALYST: Woods	SIGNATURE: 
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DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ **MACROPHYTE ID:** _____ **LATITUDE:** _____
COUNTY: Leon **STORET #:** G1TLHR0166 **LONGITUDE:** _____
DATE: 5/4/22 **TIME:** 1025 **SAMPLING AGENCY:** 21FLTLHR
SITE NAME: Lake Killamey **WBID:** 6475
FIELD ID/NAME: G1TLHR0166 **LAKE SIZE:** _____ **RQ:** 2022-01-03-56

WATERSHED / LAKESIDE FEATURES

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	Other (Specify)														
				100																	
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)										
2		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										
2		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 ☐ No pH<2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # <u>1306030</u> Exp. Date: <u>12/1/22</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High										Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____									
Meter Readings: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top: <u>0.3</u> <u>22.0</u> <u>6.42</u> <u>3.95</u> <u>50.0</u> <u>66.1</u> <u>0.03</u> Mid-Depth: _____ Bottom: _____ Meter ID: <u>153464</u>										Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____									
Clarity: ☐ Clear ☒ Turbid ☐ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green										SECCHI (M) <u>0.7</u> Total Station Depth (M) <u>0.7</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 :

Partly cloudy

SAMPLING TEAM:

Woods/Blair

SIGNATURE:

[Signature]

DATE:

5/4/22