



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PLAN FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Dead Lakes @ SR22 **Date:** 10/13/2021
WIN/Field ID: G2TLHR0047 **WBID:** 51A **ENR:** - **Latitude:** 30.1276
County: GULF **Org ID:** 21FLTLHR **Longitude:** -85.18
Receiving Body of Water: Apalachicola - Chipola **RQ:** 2021-01-11-47

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Jonathan Woods	x		x		
☒	Jade Burtchett		x		x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☒ Syringe	☐ Pole
Depth measured with: Meter	
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# 154177					
Photos: NO	Flow: FLOW			Tide:		Tide Times: High: Low:					
Biological Samples Collected: ☒ None ☐ HA ☐ SCI ☐ RPS ☐ Algae ID ☐ LVS ☐ LVI Other:											
SBIO ID Numbers:											
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_DDDMMYYY)
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:
(Initials/Date) (Initials/Date)
Scan/Save Field Sheets Migrate Data to WIN: Verify Data In WIN:
(Initials/Date) (Initials/Date) (Initials/Date)



RQ-2021-01-11-47

Customer: WQAP

Project ID: SMP

Collected By: Jonathan Woods, Jade Burtchett

Field Report Prepared By: Jonathan Woods

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G2TLHR0047

Location: Dead Lakes @ SR22

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 _h)		
	1130 EST	3.05	37.1	25.2	6.4	0.3	1 ☐ VOB (S)	5.5	135.9	0.06		
10/13/2021	1132	2.85	34.3	24.5	6.3	2.0			135.9	0.06		
	1135 EST	2.74	33	24.5	6.21	5			138	0.06		
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 #	1105060	Exp:	4/30/22							
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 #	1723873									
		Syringe Lot #	1091364									
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice						
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice						
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 ☐ Contract Lab				☐ Ice						
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3				☐ Ice						
		☐ PCR-GULL2 ☐ PCR-GFD ☐										
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	☐ Ice						
Phytoplankton/Periphyton		W-PCL-TQ-R	W-CARB-AA (5 ml of MCAA** Buffer Solution)									
				DTY-QN-C								
				PKD-QN-BV		☐ Ice						
Name: Jonathan Woods Jade Burtchett					Signature:					Date:		

*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: 6ulf **STORET #:** _____ **LONGITUDE:** _____
DATE: 10-13-21 **TIME:** 11:30 **SAMPLING AGENCY:** 21FLTLHR
SITE NAME: Dead Lakes **WBID:** _____
FIELD ID/NAME: 62TLHR0047 **LAKE SIZE:** _____ **RQ:** 2021-01-11-47

WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>40</u> Silviculture <u>40</u> Field/Pasture _____ Agricultural _____ Residential <u>20</u> Commercial _____ Industrial _____ Other (Specify) _____				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 <u>18</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	
LAKESIDE ALTERATIONS <u>19</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	
BUFFER ZONE <u>20</u>		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20 19 18 17 16		50%-30% of shoreline with >18m buffer or 50%-74% with 10m to 18m buffer 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	

WATER / SUBSTRATE / BIOLOGICAL: SAMPLES AND OBSERVATIONS

Water: Nutrient Sample Taken? ☒ Yes ☐ No Preserved? ☒ Yes ☐ pH<2 ☐ No Color Sample Taken? ☒ Yes ☐ No Lot # <u>SA1105060</u> Exp. Date: <u>4-30-22</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☐ Normal ☒ High				Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____			
Meter Readings: Top: _____ Mid-Depth: _____ Bottom: _____ Meter ID: _____				Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____			
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____				Clarity: ☐ Clear ☐ Turbid ☒ Slightly Turbid 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 ☒ Don't Know Active Vegetation Mgmt? ☐ Yes ☐ No ☒ Don't Know				Abundance: Absent Rare Common Abundant Periphyton ☐ ☒ ☐ ☐ Nuisance Plants ☒ ☐ ☐ ☐ Submersed Plants ☒ ☐ ☐ ☐ Exotic Apple Snails ☒ ☐ ☐ ☐			
Sediment Odors: ☒ Normal ☐ Other (Specify): _____ ☐ Anaerobic				Additional Notes: 			
Weather Conditions : <u>Clear</u>							
SAMPLING TEAM: <u>Woods/Burtchett</u>				SIGNATURE: _____		DATE: <u>10-13-21</u>	

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

STORET STATION NUMBER: G2TLHR0047		DATE (M/D/Y) 10/13/2021		LAKE NAME Dead lakes		FIELD ID / NAME: G2TLHR0047	
ECO-REGION:		COUNTY: COUNTIES_22		SAMPLING LOCATION/DESCRIPTION: SOUTHERN END		LAKE SIZE (AC):	
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 ☒	
HYDROLOGY						Impounded, hydrology of system artificially controlled ☐	
Color		Very clear, uncolored water (benthic sampling appropriate) ☐		Water somewhat tannin stained (benthic sampling appropriate) ☒		Dark, discolored water (water color 20 PCU or higher) ☐	
		Optimal		Suboptimal		Marginal	
Secchi		Secchi > 3 m Or VOB		3 2.6 2.2 1.8 1.4		1.0 0.9 0.8 0.7 0.6	
10		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Vegetation Quality		Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa 18		Mostly expected native plants, but moderate growths (6%-20% of lake) of nuisance macrophytes, or more than 50% of lake covered with plants		Large masses (21%-40%) of nuisance macrophytes (e.g., Hydrilla, hyacinth, cattail, etc.) or algal mats	
		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Stormwater Inputs		Stormwater enters system via sheet flow over non-cultivated and/or natural vegetation 18		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	
		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Bottom Substrate Quality		Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present 16		Mixture of sand or clay and detritus with higher % CPOM/mud/muck content. SAV may be present		Moderate layer of CPOM/ mud/muck, or hardpacked sand only, or moderate algal growth (mats or Chara) on bottom	
		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Lakeside Adverse Human Alterations		Very few man-made structures, roads, or other disturbance adjacent to lake (<10%) 19		Moderate disturbance visible (structures, roads or other), 10%-49% lakeside affected		Many structures, roads or other human disturbance visible (50%-70%) lakeside affected	
		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Upland Buffer Zone		Expected native vegetation between uplands and littoral zone, greater than 90% of shore with >18 m buffer 20		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	
		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
Adverse Watershed Land Use		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 15					
		20 19 18 17 16		15 14 13 12 11		10 9 8 7 6	
TOTAL SCORE		116		COMMENTS:			
ANALYSIS DATE: 10/13/2021		ANALYST: Woods		SIGNATURE:			

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Deer Lakes</u>		County: <u>Gulf</u>		Date: <u>10/13/21</u>							
Analyst: <u>J. Burchett</u>		Signature: <u>Jade</u>		STORET: <u>G2TLR0047</u>							
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 <u>3, 6, 9, 12</u>							
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	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides	✓					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					
Cyrtia 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						Lycopus					
Eleocharis equisetoides						unknown 1 Cyrtol					
Eleocharis interstincta						unknown 2 Cyrtol					
*Eriocaulon compressum						Eleocharis aquatic					
*Eriocaulon decangulare						Eleocharis					
Eupatorium capillifolium						Panicum rigidulum					
*Fuirena						Biden frondosa					
Fuirena scirpoidea											
Gordonia lasianthus											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Deer Lakes</u>					Date: <u>12/13/21</u>						
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)						<u>Olmus americana</u>	✓	✓	✓	✓	
Proserpinaca pectinata						<u>Triadenum Walteri</u>	✓	✓	✓	✓	
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

LIMS ID: 2283317

12039

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Deer Lakes</u>		County: <u>Gulf</u>		Date: <u>10/13/21</u>							
Analyst: <u>J. Burtchett</u>		Signature: <u>Jade</u>		STORET: <u>G2LH20047</u>							
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 <u>3, 6, 9, 12</u>							
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Alternanthera philoxeroides						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					
Cynilla 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						Lycopus		✓	✓	✓	
Eleocharis equisetoides						Eleocharis + Cyrtol		✓	✓	✓	
Eleocharis interstincta						Eleocharis 2 (bush)		✓	✓	✓	
*Eriocaulon compressum						Gleditsia aquatica		✓	✓	✓	
*Eriocaulon decangulare						Grasses		✓	✓	✓	
Eupatorium capillifolium						Panicum rigidulum		✓	✓	✓	
*Fuirena						Bidens frondosa		✓	✓	✓	
Fuirena scirpoidea											
Gordonia lasianthus											

Add New Taxa

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Deer Lakes</u>					Date: <u>10/13/21</u>						
SPECIES	3	6	9	12	Collected? (✓)	SPECIES	3	6	9	12	Collected? (✓)
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*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 comuta					
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)						Ulmus americana					
Proserpinaca pectinata						Triadenum walteri					
*Rhexia											
*Rhynchospora corniculata											
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											

17145

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

STORET STATION NUMBER: G2TLHR0047	DATE (M/D/Y) 10/13/2021	LAKE NAME Dead lakes		FIELD ID / NAME: G2TLHR0047
ECO-REGION:	COUNTY: COUNTIES_22	SAMPLING LOCATION/DESCRIPTION: SOUTHERN END		LAKE SIZE (AC):
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 10	Secchi >3 m Secchi(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 18	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 18	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 16	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 Alternations 19	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 20	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 15	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 116	COMMENTS:			
ANALYSIS DATE: 10/13/2021	ANALYST: Woods		SIGNATURE:	

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

Station Visit 83669

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: _____
COUNTY: Gulf STORET #: _____ LONGITUDE: _____
DATE: 10-13-21 TIME: 11:30 SAMPLING AGENCY: 21FLTLHR
SITE NAME: Dead Lakes WBID: _____
FIELD ID/NAME: 62TLHR0047 LAKE SIZE: _____ RQ: 2021-01-11-47

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)							
<u>40</u>	<u>40</u>			<u>20</u>										
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			
<u>18</u>		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)			
<u>19</u>		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			
<u>20</u>		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>SA1105060</u> Exp. Date: <u>4-30-22</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: Mid-Depth: Bottom:						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____					
Meter ID:						Clarity: ☐ Clear ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☒ Tannic ☐ Green					
Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☒ Organic smooth (muck) ☐ Other (Specify): _____						Sediment Odors: ☒ Normal ☐ Anaerobic ☐ Other (Specify): _____					
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 ☒ ☐ ☐ ☐					
Weather Conditions: <u>Clear</u>						Additional Notes: 					
SAMPLING TEAM: <u>Woods/Burtchett</u>						SIGNATURE: _____					
DATE: <u>10-13-21</u>											

