

LVI

Site Name Jacks Lake Sample Date 05/15/2018

WBID 2862 E WIN ID G1CE0077 RQ -2018-05-14-37

	Initial/Date	QC Initial/Date
Water chemistry data to LIMS	LMD 5/29/18	MKL 6/11/18
Create SBIO station visit 78410	LMD 5/29/18	n/a
Vascular Entry (add LIMS ID) 10939	LMD 5/30/18	MKL 6/11/18
Lake Observation Sheet Entry	LMD 5/30/18	MKL 6/11/18
Authorize SBIO data	MKL 6/11/18	n/a
Scan all sheets to 21FLCEN folder		n/a
LIMS/WIN migration		n/a
File in cabinet		n/a

Comments/notes:



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2018

Data Qualified?

Yes / No

WIN Station Name: Jack's Lake @ 115m NW of Center

Date: 05/15/2018
(mm/dd/yyyy)

WIN/ Field ID: G1CE0077

WBID: 2862 E

Latitude: 28.55501

County: Lake

ORG ID: 21 FL CEN

Longitude: -81.73308
(Decimal Degrees)

Receiving Body of Water: _____

RQ-2018-

Sampling Team Members				WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment			
Mike Linger									☒ Sample Container	☐ Van Dorn	☐ Pole	
Mike Diennan									☐ Carboy	☒ Syringe		
									☐ Dipper	☐ Other		
									Depth Measured with <u>SECCHI DISK LINE</u>			
									Equipment ID <u>Lead foot</u>			
Collection Method												
☐ Wading									☒ Canoe/Kayak			
☐ From Shore									☒ Electric Motor			
☐ Other									☐ Gasoline Motor			
Water Level: <u>Dry</u> / Pooled / Low / <u>Normal</u> / High / Flooded				Meter ID# <u>Boop/Non</u>				Matrix: <u>Fresh</u> / Marine / DI				
Photos: <u>Yes</u> / No				Flow: <u>No Flow</u> / Intestinal / Flowing / <u>NA</u>				Tide: <u>Rising</u> / Falling / Slack / <u>NA</u>				
Tide Times: High _____ Low _____												
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)		
<u>EST</u>	<u>1121</u>	<u>3.1</u>	<u>0.3</u>	<u>2.0</u>	<u>5.42</u>	<u>66.1</u>	<u>6.57</u>	<u>0.04</u>	<u>86</u>	<u>25.60</u>		
<u>CEN</u>			<u>2.6</u>		<u>5.10</u>	<u>63.7</u>	<u>6.54</u>	<u>0.04</u>	<u>86</u>	<u>25.03</u>		
Biological Samples Collected: <u>None</u> HA SCI RPS Algae ID LVS <u>LVI</u> Other:												
SBIO ID Numbers: SBIO-ID: <u>78410</u> HA-ID: <u>15161</u> RPS-ID: _____ Macrophyte-ID: <u>10939</u> LIMS#: <u>1993087</u>												
Parameter Suite	Parameter Methods				Preservation	Lot#	Expiration	pH Check				
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4	<u>SA8085170</u>	<u>3/26/19</u>	☒ <2				
Metals	☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO3			☐ <2				
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 um Filter				☒ Ice	<u>13615055</u>						
Chlorophyll	☒ CHLSUTE-W				☒ Ice							
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CI-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice							
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY				☐ Ice							
Macroinvertebrates	☐ MI-FW-QLDC				☐ Formalin							
Periphyton	☐ ALGAE-ID				☐ Ice							
Microbiology	☐ E Coli ☐ F Coli ☐ Enterococci				☐ Ice							
Molecular	☐ PCR-FILTER ☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-GFD				☐ Ice							
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA				☐ Ice							
Pesticides	☐ W-PSNP-TQ ☐ W-UHERB-AA ☐ W-AHERB-AA ☐ W-CARB-AA				☐ Ice							
	☐ W-PCL-SQ-R ☐ W-PYR-AA-R ☐ W-GLYPH ☐ W-SUC-AA-R				☐ Other							

Notes:

28.55675
-81.73136

NO E. coli collected (CM instructions)

Signature: _____

WIN ID / Field ID →

Jack's Lake @ 115m
NW of Center (2862E)



G1CE0077

Date: 5/15/18

Enter Field Parameters, Verify Station ID In LIMS DMT: 5/29/18 LMD

QC Station ID, Field Parameters In LIMS DMT: _____

Scan/Save Field Sheets _____

Migrate Data to WIN: _____

Verify Data In WIN: _____

(Initials/Date)

(Initials/Date)

(Initials/Date)

(Initials/Date)

Waterbody: <u>Jack's Lake</u>		County: <u>Lake</u>		Date: <u>5/15/18</u>							
Analyst: <u>Mike Linger / Mike Drannan</u>		Signature: <u>[Signature]</u>		STORET: <u>61CE0077</u>							
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 <u>(2, 5, 8, 11)</u> 3, 6, 9, 12							
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	Collected? (✓)
Acer rubrum						Fraxinus					
Alternanthera philoxeroides						Fuirena scirpoides	/	/	/	/	
Amaranthus australis						Gordonia lasianthus					
Andropogon sp.	/	/	/	/		Habenaria repens					
Azolla filiculoides (A. caroliniana)						Hibiscus coccineus					
Baccharis sp.						Hibiscus grandiflora					
Bacopa caroliniana						Hydrilla verticillata					
Bacopa monnieri						Hydrocotyle sp.	/			/	
Bidens alba						Hygrophila polysperma					
Bidens laevis						Hymenocallis sp.					
Bidens mitis						*Hypericum fasciculatum	/	/	/	/	
Blechnum serrulatum						*Hypericum hypericoides	/	/	/	/	
Boehmeria cylindrica						*Hypericum myrtifolium					
Brasenia schreberi						Ilex cassine					
Cabomba caroliniana						Ipomoea aquatica					
Canna						Ipomoea sagittata					
Centella asiatica			/	/		Itea virginica					
Cephalanthus occidentalis	/	/	/	/		Juncus effusus					
Ceratophyllum demersum						*Juncus marginatus			/		
Chara sp.						*Juncus megacephalus					
Cicuta maculata						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						Limnium spongia					
Cyperus haspan			/	/		Limnophila sessiliflora					
*Cyperus lecontei						Liquidambar styraciflua					
*Cyperus polystachyos						*Ludwigia arcuata					
*Cyperus odoratus						*Ludwigia grandiflora					
*Cyperus surinamensis						*Ludwigia hexapetala					
Cyrilla racemiflora						*Ludwigia leptocarpa					
Decodon verticillatus						Ludwigia (native)	/	/	/	/	
Diodia virginiana			/	/		*Ludwigia octovalvis					
*Echinochloa crus-galli						*Ludwigia peruviana					
*Echinochloa muricatum						*Ludwigia repens					
Echinochloa walteri						Ludwigia suffruticosa					
Eclipta prostrata (E. alba)						Luziola fluitans (Hydrochloa carolinensis)					
Eichhornia crassipes						Magnolia virginiana					
*Eleocharis <u>sp. elongata</u>	/	/	/	/		Mayaca fluviatilis					
Eleocharis cellulosa						Melaleuca quinquenervia					
*Eleocharis elongata						Micranthemum glomeratum					
Eleocharis equisetoides						Micranthemum umbrosum					
Eleocharis interstincta						Mikania scandens	/	/	/	/	
Eleocharis submersed viviparus						Mimosa pigra					
*Eriocaulon compressum	/	/	/	/		Myrica cerifera	/	/	/	/	
*Eriocaulon decangulare											
Eupatorium capillifolium											

E. baldwinii

No dom: 8

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Site: <u>Jacks Lake</u>						Date: <u>5/15/18</u>					
SPECIES	2	5	8	11	Collected? (✓)	SPECIES	2	5	8	11	Collected? (✓)
Myriophyllum aquaticum	<u>LAD</u>	<u>/</u>	<u>/</u>	<u>/</u>		<i>Salix caroliniana</i>		<u>/</u>			
* <i>Myriophyllum heterophyllum</i>						Salvinia minima					
* <i>Myriophyllum laxum</i>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>		<i>Sambucus canadensis</i>	<u>/</u>	<u>/</u>			
* <i>Myriophyllum pinnatum</i>						Sapium sebiferum					
Myriophyllum spicatum						<i>Saururus cernuus</i>					
* <i>Najas filifolia</i>						Schinus terebinthifolius					
* <i>Najas guadalupensis</i>						* <i>Schoenoplectus californicus</i>					
* <i>Najas minor</i>						* <i>Schoenoplectus pungens</i>					
<i>Nelumbo lutea</i>						* <i>Schoenoplectus tabernaemontani</i> (<i>Scirpus validus</i>)					
<i>Nitella</i> spp.				<u>/</u>		<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>	<u>0</u>	<u>0</u>	<u>/</u>	<u>/</u>		<i>Solidago</i> sp.					
<i>Nymphoides aquatica</i>						<i>Sparganium americanum</i>					
<i>Nyssa sylvatica</i> var. <i>biflora</i>						<i>Spartina bakeri</i>			<u>/</u>		
<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>			<u>/</u>	<u>/</u>		<i>Thelypteris interrupta</i>					
Panicum repens						<i>Thelypteris palustris</i>					
<i>Paspalidium geminatum</i>						<i>Triadenum virginicum</i>					
* <i>Paspalum repens</i>						<i>Typha</i> sp.		<u>/</u>			
<i>Paspalum urvillei</i>						Urochloa mutica (<i>Brachiaria mutica</i>)					
<i>Peltandra</i> sp.						* <i>Utricularia gibba</i> (<i>U. biflora</i>)	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	
<i>Persea</i> sp.						* <i>Utricularia foliosa</i>					
Pennisetum purpureum						* <i>Utricularia inflata</i>					
<i>Phragmites australis</i>						* <i>Utricularia purpurea</i>					
<i>Pinus elliotii</i>				<u>/</u>		* <i>Utricularia radiata</i> <u>purpurea</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>/</u>	
Pistia stratioides						* <i>Utricularia resupinata</i>					
<i>Pluchea</i> sp.				<u>/</u>		<i>Vallisneria americana</i>					
* <i>Polygonum glabrum</i> (<i>densiflorum</i>)						<i>Vitis</i> sp.					
<i>Polygonum hirsutum</i>	<u>/</u>					* <i>Websteria confervoides</i>					
* <i>Polygonum hydropiperoides</i>						Wedelia trilobata (<i>Sphagneticola trilobata</i>)					
* <i>Polygonum punctatum</i>						<i>Wolffiella</i> spp.					
* <i>Polygonum</i>						<i>Woodwardia virginica</i>					
<i>Pontederia cordata</i>	<u>/</u>	<u>/</u>				<i>Xyris</i> sp.		<u>/</u>	<u>/</u>	<u>/</u>	
* <i>Potamogeton diversifolius</i>						<i>Zizania aquatica</i>					
* <i>Potamogeton illinoensis</i>						<i>Zizaniopsis milacea</i>					
* <i>Potamogeton pusillus</i>						<i>Brown Sagittaria?</i> <i>Sagittaria canadensis</i>			<u>/</u>		X LAD
* <i>Potamogeton pectinatus</i> (<i>Stuckenia pectinatus</i>)						<i>Sagittaria graminea</i>			<u>/</u>		X MKL
<i>Proserpinaca pectinata</i>						<i>Large cupeta</i> (<i>Juncus marginatus</i>)			<u>/</u>		X LAD
* <i>Rhexia</i>						<i>Pink flower-Sagittaria grandiflora</i>	<u>/</u>	<u>/</u>	<u>/</u>		X MKL
* <i>Rhynchospora corniculata</i>						<i>Dichanthelium dichotomum</i>		<u>/</u>			
* <i>Rhynchospora inundata</i>											
<i>Rhynchospora nitens</i>											
<i>Ricciocarpus natans</i>											
<i>Sabal palmetto</i>											
<i>Sacciolepis striata</i>											
* <i>Sagittaria filiformis</i>											
* <i>Sagittaria graminea</i>											
* <i>Sagittaria isoetiformis</i>											
<i>Sagittaria lancifolia</i>				<u>/</u>							
<i>Sagittaria latifolia</i>											

Synonym for →
 is *D. erectifolium*
 according to FL Plant Atlas.
D. dichotomum not on
 SB10

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 78410 MACROPHYTE ID: _____ LATITUDE: 28.55501
 COUNTY: LAKE STORET #: 61CE0077 LONGITUDE: -81.73308
 DATE: 5/15/18 TIME: 1121 SAMPLING AGENCY: FDEP- CEROC
 SITE NAME: Jack's Lake @ 115m NW of Center WBID: 2862E
 FIELD ID/NAME: 61CE0077 LAKE SIZE: 39 acres RQ: 2019-05-14-37

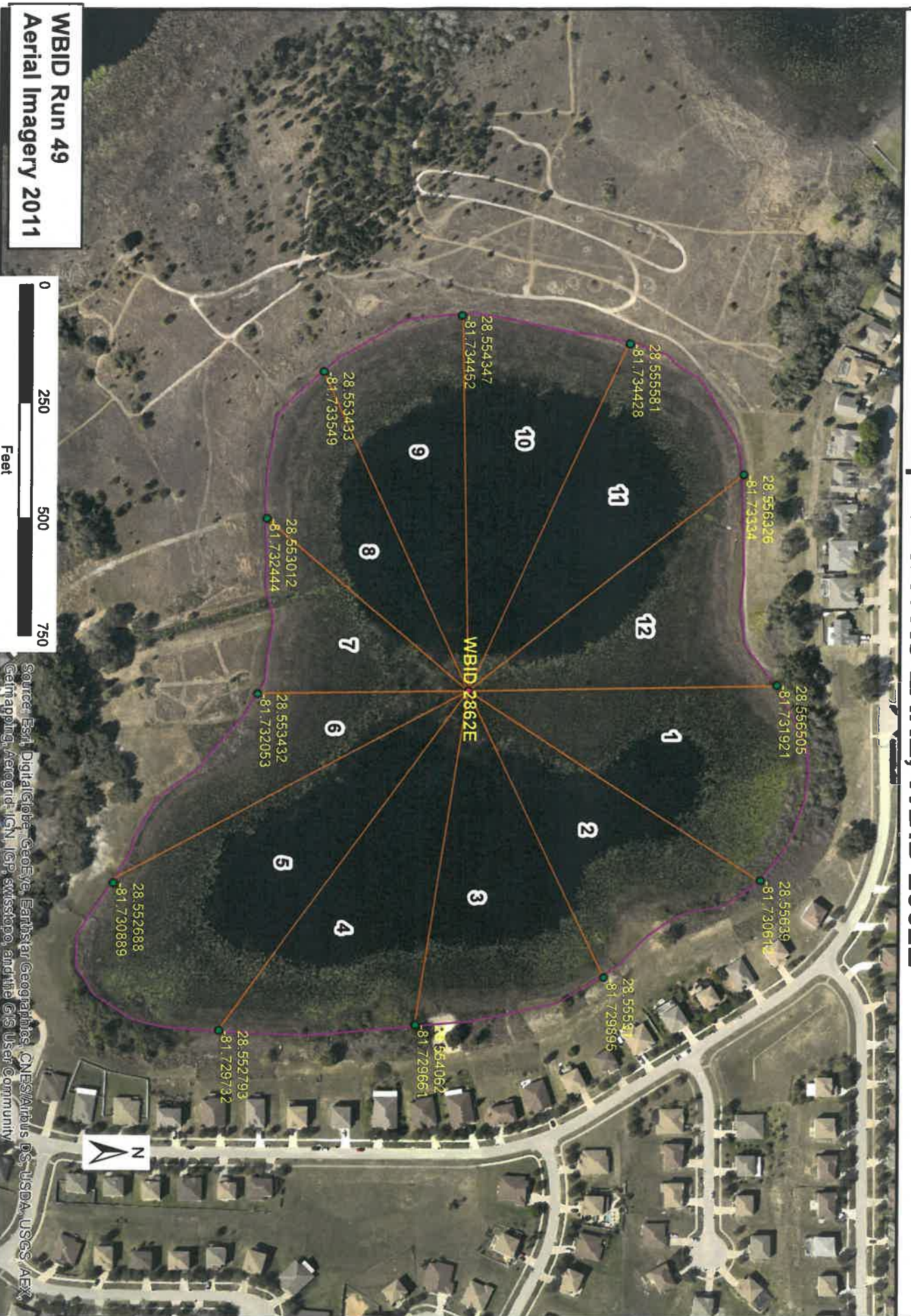
WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : Forest/Natural <u>25</u> Silviculture _____ Field/Pasture _____ Agricultural _____ Residential <u>75</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>12</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>6</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>7</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	
				Moderate direct inputs of stormwater (ditches, pipes, cultivated vegetation 11%-50%) but few BMPs in place 10 9 8 7 6	
				Many structures, roads or other human disturbance visible (50%-70% lakeside affected) 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	
				Highly developed or disturbed (>70% of lakeside affected) 5 4 3 2 1	
				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 # <u>SAB085170</u> Exp. Date: <u>3/26/19</u> Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High				Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____			
Meter Readings: Top: <u>0.3</u> <u>25.0</u> <u>6.57</u> <u>5.42</u> <u>66.1</u> <u>86</u> <u>0.04</u> Mid-Depth: _____ Bottom: <u>2.6</u> <u>25.03</u> <u>6.54</u> <u>5.10</u> <u>63.7</u> <u>86</u> <u>0.04</u> Meter ID: <u>BOOP NON</u>				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): _____				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 ☒ ☐ ☐ ☐			
Weather Conditions : <u>80's cloudy</u>				Additional Notes:			
SAMPLING TEAM: <u>Mike Linger / Mike Drennan</u>				SIGNATURE: _____		DATE: <u>5/15/18</u>	

LVI Map for JACKS LAKE, WBID 2862E



Florida Department of Environmental Protection
Central Laboratory Submittal Form

Customer: CEN-DIST

Project ID: SMP

Requester: Michael Linger

Field Report Prepared By: Mike Linger

Collected By: Mike Linger / Mike Dorman

Sampling Agency: FOEP

CE-ROC

WIN ID / Field ID →

Jack's Lake @ 115m
 NW of Center (2862E)



G1CE0077

Location	☐ Comp ☒ Grab		Collection (comp begin or grab)	Time	Composite end	Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	Time	Total Res. Chlorine (mg/L)	A
WIN/STORE #	Temp (C) 25.60 pH 6.57 Salinity (ppt) 25.60		Sample Depth 0.3	Sp. Conductance (umho/cm) 86		
Latitude	Comments: No CD-FLR-ECQ collected					
Location	☐ Comp ☐ Grab		Collection (comp begin or grab)	Time	Composite end	Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	Time	Total Res. Chlorine (mg/L)	
WIN/STORE #	Temp (C) pH Salinity (ppt)		Sample Depth	Sp. Conductance (umho/cm)		
Latitude	Comments					
Location	☐ Comp ☐ Grab		Collection (comp begin or grab)	Time	Composite end	Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	Time	Total Res. Chlorine (mg/L)	
WIN/STORE #	Temp (C) pH Salinity (ppt)		Sample Depth	Sp. Conductance (umho/cm)		
Latitude	Comments					
Location	☐ Comp ☐ Grab		Collection (comp begin or grab)	Time	Composite end	Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	Time	Total Res. Chlorine (mg/L)	
WIN/STORE #	Temp (C) pH Salinity (ppt)		Sample Depth	Sp. Conductance (umho/cm)		
Latitude	Comments					
Location	☐ Comp ☐ Grab		Collection (comp begin or grab)	Time	Composite end	Bottle Group(s)
Field ID	Matrix (type, e.g., Salt, Fresh, etc)		Diss. Oxygen	Time	Total Res. Chlorine (mg/L)	
WIN/STORE #	Temp (C) pH Salinity (ppt)		Sample Depth	Sp. Conductance (umho/cm)		
Latitude	Comments					

Relinquished By: MKL	Date/Time: 5/15/18 1600	Shipping Method: FedEx	Number of Coolers Shipped: 1	Received By: [Signature]	Date/Time: 5/16/18/1000
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Group: A	Bottle Type:	P-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	ALKALINITY						
	TURBIDITY						
	W-CL-IC						
	W-COLOR						
	W-F						
	W-SO4-IC						
	W-TDS						
	W-TSS						
Group: A	Bottle Type:	P-250ML-WI-THI	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CD-FLR-ECQ						
Group: A	Bottle Type:	BP-1L	# of Bottles: 1	Preservative:	ICE	Enter Number of Bottles Sent to Lab	1
	CHLSUITE-W						
Group: A	Bottle Type:	P-500ML	# of Bottles: 1	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab	1
	W-NH3						
	W-NO2NO3						
	W-S-A-TP						
	W-TKN						
	W-TOC						
Group: A	Bottle Type:	P-125ML	# of Bottles: 1	Preservative:	FILTER-ICE	Enter Number of Bottles Sent to Lab	
	W-PO4-F						