

Site Name Z1SL12033 (Center)

Date 10/17/2018

Field ID 21SL12033 Win ID 54313

Project: Status Small Lakes

Visit ID 79299

RQ: 2018-09-03-12

RPS ID N/A

LIMS ID 2033878

VPDB ID 11250

Sampled By: Frank Butera

HA ID 15712

Mike King

☒ LVI

☐ RPS/LVS Only

☒ Sample Site Created in SBIO

☒ Phys/Chem entered in SBIO

☒ HA entered in SBIO

Initial FR 2/21/2019

☒ Date and Initial QA: mm 4/3

☐ RPS entered in SBIO

Initial

☐ Date and Initial QA:

☒ LVI entered in SBIO

Initial FR 4/02/2019

☒ Date and Initial QA: mm 4/3

☐ < 2 m² vegetation

☒ Plants getting verified

Date submitted: 11/05/2019

☒ Plants verified

Date returned: 03/26/2019

☒ LVI authorized in SBIO

mk
4/3/2019

☐ LVI score: FLEPPC %

C of C Avg.

LVI Score 78

Ref:
Dep:

Date: 27Aug18
Wgt: 25.00 LBS
DV:

SHIPPING:
SPECIAL:
HANDLING:
TOTAL:

0.00
0.00
0.00
0.00

Sys: PRIORITY OVERNIGHT Master 4385 6032 8840
TRACK: 4385 6032 8894

Delivered by Fed Ex
10/17/2018 9:54am



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
SURFACE WATER FIELD SHEET
Watershed Monitoring Section
October 2017

STATION INFORMATION

Station Name (Random ID for Status): Z1-SL-12033 Date: 10/17/2018
(MM/DD/YYYY)
Waterbody Name: Lake Kennedy All Times Are: (circle one)
(if known) ETZ or CTZ or EST (daylight savings time never observed)
Waterbody Type: Small Lake (≥ 4 and < 10 hectares) / Large Lake (≥ 10 hectares)
(Circle One) (collect samples in middle of open water) (collect samples at selected location point)
Stream / Canal / River
(collect samples in representative area) (collect samples in representative area) (collect samples in representative area)
Field Sheet Completed by: F. Butler WQ Sample Collected by: Mike King

WATER CHARACTERISTICS

Total Water Depth: 2.3 (meters) Secchi Depth: 2.3 (meters) ☒ Check if Secchi Visible on Bottom
(Average of 2 measurements) (from SHADED side) ("S" qualifier needed)
Stream/River/Canal Flow: N/A / No Flow, Water within Banks / Flowing within Banks / Flow Above Banks
(Circle One) (waterbody not stream / river / canal) (comment if avg. velocity < 0.05 m/s) (For Status sites, DO NOT sample if flooded above banks.)
Water Level: (Circle One) Low / Normal / High
Water Sample Collection Device: Direct Grab with Sample Bottle / Van Dorn: _____ # of grabs & Equipment ID: _____
(Circle One)

FIELD MEASUREMENTS

Time (24 hr.)	Surface Depth Collected (meters)	Temperature (°C)	Specific Conductance (µmhos/cm)	D.O. (%)	D.O. (mg/L)	pH (SU)
<u>1115</u>	<u>0.3</u>	<u>26.9</u>	<u>32.6</u>	<u>99.3</u>	<u>7.93</u>	<u>5.89</u>
Time (24 hr.)	Bottom Depth Collected (meters)	Temperature (°C)	Specific Conductance (µmhos/cm)	D.O. (%)	D.O. (mg/L)	pH (SU)
<u>1120</u>	<u>1.8</u>	<u>26.0</u>	<u>33.0</u>	<u>72.9</u>	<u>5.90</u>	<u>5.77</u>

☐ Check here if bottom measurements not collected because total depth < 1.5 m.

DATA COLLECTION DEPTHS: Total depth < 0.1 m → no data collection. Total depth ≥ 0.1 m and ≤ 0.6 m → surf. meas. & sample at mid-depth.
Total depth ≥ 0.6 m & ≤ 1.5 m → surface meas. & sample at 0.3 m. Total depth ≥ 1.5 m → surface meas. & sample at 0.3 m, bottom meas. 0.5 m above bottom.

PRESERVATION INFORMATION

☐ N/A (No samples collected; please state why in comments.)
Were all samples (including QA/QC blanks) properly preserved within 15 minutes of collection? Yes / No
1 vial sulfuric acid added to nutrients sample(s)? Yes / No Sulfuric acid info: (circle one) Chem ID SA-8101020
1 vial nitric acid added to metals sample(s)? Yes / No Nitric acid info: (circle one) Chem ID NA-3080070
pH of all acidified samples verified to be < 2? Yes / No
All water & sediment samples submerged in wet ice (≤ 6°C)? Yes / No
SCI samples preserved with buffered formalin? Yes / No NA
(Please describe any variations to this preservation protocol in the comments section below.)
Preserved By: M. King

QA/QC SAMPLE INFORMATION

QA/QC Sample: N/A / Field Blank / Equipment Blank
(Circle One) (Field-cleaned) or (Lab-cleaned)
Van Dorn Equipment ID: _____ Time: 11:45 (24 hr.)
Collected by: M. King

Photos Taken? Yes / No / Not Due (Required for all Status sites. Required annually for Trend sites.)

Fuel Powered Equipment Used? (e.g. boat motor) Yes / No

Access Method for Sample Collection (circle one):

Wading / Bank or Structure (e.g. bridge, dock) / Motorized Boat /

Non-Motorized Boat (e.g. canoe, kayak) / Air Boat / Other _____

Weather Conditions: Overcast, 70's, Rain Expected P.M.
(comment on back if weather may affect water quality parameter values)

Personnel/Visitors On Site: Frank Butler
Mike King



Z1-SL-12033

Z1SL1809 Z1-SL-12033 LAKE KENNEDY



QA/QC BLANK SW 1

Z1SL1809

Station Name (Random ID for Status):

Z2-SC-12433

Date:

10/17/2018

SEDIMENT INFORMATION (for Lakes only)

☐ N/A (Site not a lake or no samples collected. If no samples collected, please state why in comments.)Collection Depth: 1125^m 2.3 (meters)
(Total Water Depth)Collection Time: 1125 (24 hr.)
(Different than surface and bottom time in Field Measurements section)

Collection Interval: (Circle)

Top 3-5 cm

Other:

(If top 3-5 is too flocculent)

General Sample Collection Area:

Lake Center

(Describe-- near shore, central, north side near dock, etc.)

Sample Collection Device: (Circle One)

Corer

Ekman

Petite Ponar

Equipment ID:

ED1

Sediment Type: (Circle All That Apply)

Clay/Silt

Sand

Gravel/Shell Rubble

*Organic Muck

*(very fine-grained flocculent organic material)

Sediment Odors: (Circle One)

Normal

Sewage

Petroleum

Hydrogen Sulfide

Other:

Sediment Color:

Brown

Number of Grabs Collected (3 minimum):

3

Collected by:

Mike King

BIOASSESSMENT INFORMATION

Stream Condition Index Information (Appropriate Trend sites)

Was the SCI sample collected? Yes / No / Not Due / NA (not an appropriate Trend site)
(Circle One)Collection Time: _____ (24 hr.)
(Different than surface and bottom time in Field Measurements section)

If site was an appropriate Trend stream or river but "NO" was selected, why was the SCI not collected (flooded, <0.05 m/s velocity, etc.)?

Collected by:

Habitat Assessment Information (All Status Streams, Rivers, & Canals; Trend sites appropriate for SCI)

Was the HA performed? (Circle One) Yes / No / Not Due / NA (site not a Status Stream/River/Canal or appropriate Trend site)

If site was a stream, river or canal but "NO" was selected, why was the HA not performed (dangerous site conditions, etc.)?

HA ID 15712

Performed by:

F. Butera

Rapid Periphyton Survey Information (Trend sites appropriate for SCI)

Was the RPS performed? (Circle One) Yes / No / Not Due / NA (not an appropriate Trend site)ALGAL-ID sample collected? (circle one) Yes No

If site was an appropriate Trend stream or river but "NO" was selected, why was the RPS not performed (dangerous site conditions, etc.)?

Performed by:

Linear Vegetation Survey Information (Trend sites appropriate for SCI) / Lake Vegetation Index Information (Status Lakes)

Was the LVS performed? (Circle One) Yes / No / Not Due / NA (not an appropriate Trend site)

Number of Plant ID specimens collected:

Was the LVI performed? (Circle One) Yes / No / Not Due (LVI performed previous year) / NA (not a Status Lake)

8

If site was an appropriate Trend stream or river but "NO" was selected, why was LVS not performed (<2 m² aquatic vegetation, dangerous site conditions, etc.)?

If site was a Status Lake but "NO" was selected, why was LVI not performed (LVI will be performed at later date, dangerous site conditions, etc.)?

Performed by:

F. Butera

Comments: Include information such as: estimated level of impact to the system (ex. obvious pollution, etc.), any variations from normal preservation protocols (ex. adding more than 1 vial acid, etc.), any problems experienced with collecting samples (ex. sediment grab 1 lost due to fall-out, etc.), any site specifics (ex. dense submerged vegetation, etc.), any site conditions (ex. recent heavy rains, etc.), description of any photos taken, etc., any qualifiers needed (ex. "J" for failed calibration verification, etc.), etc.

SB10 ID 79299

Sampler Names:

Frank Butera

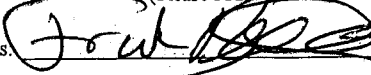
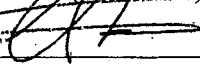
Mike King

(Please PRINT)

(Please PRINT)

(Please PRINT)

Sampler Signatures:

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 79299 MACROPHYTE ID: 11250 LATITUDE: N 30.78228
 COUNTY: Okaloosa (Crestview) STORET #: 54313 LONGITUDE: W - 86.59406
 DATE: 10/17/18 TIME: 10:00 AM SAMPLING AGENCY: FL DEP - NWROC (21FLPNS)
 SITE NAME: Z1-SL-12033 WBID: 255
 FIELD ID/NAME: "Kennedy Lake" LAKE SIZE: 22.0 acres RQ: 2018-09-03-12

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) ☐					LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: <u>5.66</u>				
Local Watershed Erosion (select one) : ☐ None ☐ Slight ☒ Moderate ☐ Heavy					Artificially Impounded ☒ Yes ☐ No				
Local Watershed NPS Pollution : ☐ No evidence ☐ Slight ☐ Moderate ☒ Heavy					Land Use Source & Year:				
STORMWATER INPUTS <u>4</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 <u>4</u> 3 2 1	
LAKESIDE ALTERATIONS <u>12</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 <u>12</u> 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>8</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 <u>8</u> 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>8101020</u> 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: Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat. (%) Cond. (UMHO/CM) Salinity (PPT) Top <u>0.3</u> <u>26.9</u> <u>5.81</u> <u>7.93</u> <u>99.3</u> <u>32.6</u> <u>0.01</u> Mid-Depth: _____ Bottom: <u>1.8</u> <u>26.0</u> <u>5.77</u> <u>6.10</u> <u>72.9</u> <u>33.0</u> <u>0.01</u>					Clarity: ☐ Clear ☐ Opaque ☐ Turbid ☒ Slightly Turbid Color: ☐ Clear ☐ Tannic ☒ Green SECCHI (M) <u>2.3</u> Total Station Depth (M) <u>2.3</u> VOB ☒				
Meter ID: <u>154179</u> <u>Pro-DSS</u>									

Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☒ Sand/Silt ☒ Organic smooth (muck) ☒ Other (Specify): <u>Clay</u>					Sample Taken? ☒ Yes ☐ No 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 ☒ ☐ ☐ ☐				
Additional Notes: Kennedy Lake. One of a series of impoundments. <u>Surface 11:15</u> <u>B. In 11:20</u> <u>Sediment 11:20</u> <u>Dam Draining</u>									

Weather Conditions: Overcast, 70's. Rain expected p.m. NO Floating plants

SAMPLING TEAM: F. Butler, M. King SIGNATURE: [Signature] DATE: 10/17/18

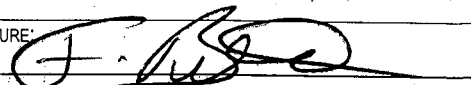
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
Lake Habitat Assessment Field Sheet

Store/ WIN ID NUMBER: 54313	DATE (M/D/Y) 10/17/18	LAKE NAME: Z1-SL-12033 (Kennedy Lake)		FIELD ID / NAME: Z1SL12033
ECO-REGION: 255	COUNTY: Okaloosa	SAMPLING LOCATION/DESCRIPTION: Crestview, FL		LAKE SIZE: 22.0 Acres
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 VOB ☐ 20	Secchi > 3 m Secchi(m) 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 No Floating plants ☐ 14	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 ☐ 4	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 ☐ 13	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 ☐ 12	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 ☐ 8	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 ☐ 12	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 83	COMMENTS:			

ANALYSIS DATE:

10/17/18ANALYST: Frank Butera, **M. King**

SIGNATURE:



SBO ID:

79299

HA ID:

15712

RQ-2018-09-03-12

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Z1-SL-12033 (Kennedy Lake)					County: Okaloosa (Crestview)					Date: 10/17/2018				
Analyst: F Butler					Signature: [Signature]					STORET: 59313				
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.														
SBIO ID 79299					Macro ID					Lake units sampled (circle one group):				
SPECIES					SPECIES					1, 4, 7, 10 2, 5, 8, 11				
										3, 6, 9, 12				
Acer rubrum					Habenaria repens									
Alternanthera philoxeroides					Hydrilla verticillata									
Andropogon sp.					Hydrocotyle sp.									
Azolla filiculoides (A. caroliniana)					Hygrophila polysperma									
Baccharis sp.					*Hypericum fasciculatum Sagittale									
Bacopa caroliniana					*Hypericum hypericoides									
Bacopa monnieri					*Hypericum myrtifolium tetraphyllum									
Bidens laevis					Ilex cassine									
Bidens mitis					Ipomoea aquatica									
Blechnum serrulatum					Ipomoea sagittata									
Boehmeria cylindrica					Itea virginica									
Brasenia schreberi					Juncus effusus trigonocarpus									
Cabomba caroliniana					*Juncus marginatus									
Casuarina equisetifolia					*Juncus megacephalus polycephalus									
Centella asiatica					Juncus repens									
Cephalanthus occidentalis					*Juncus scirpoides									
Ceratophyllum demersum					Lachnanthes caroliniana									
Chara sp.					Leersia hexandra									
Cladium jamaicense					Landoltia punctata (Spiro. punctata)									
Cliftonia monophylla					Lemna sp.									
Colocasia esculenta					Leucothoe racemosa (E. racemosa)									
*Commelina					Limnobia spongia									
Crinum americanum					Limnophila sessiliflora									
*Cyperus alternifolius (C. involucratus)					Liquidambar styraciflua									
Cyperus articulatus					*Ludwigia arcuata									
Cyperus haspan					*Ludwigia leptocarpa 4 petals									
*Cyperus lecontei					*Ludwigia linearis									
*Cyperus polystachyos					*Ludwigia octovalvis									
*Cyperus odoratus					*Ludwigia peruviana									
*Cyperus surinamensis					*Ludwigia repens									
Cyrilla racemiflora					*Ludwigia clausenii									
Decodon verticillatus					Luziola fluitans (H. 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					Alnus									
Eleocharis equisetoides					Tulip poplar									
Eleocharis interstincta					Carya glauca									
*Eriocaulon compressum					Dichanthium scab									
*Eriocaulon decangulare					Cyperus									
Eupatorium capillifolium					Oxypolis									
*Fuirena breviset squarrosa					*Hypericum brachy									
Fuirena scirpoides														
Gordonia lasianthus														

RQ-2018-09-03-12

Waterbody: Waterbody: Z1-SL-12033 Storet: 5433		Date: 10/17/2019				SBIO ID				Macro ID			
SPECIES		3	6	9	12	Collect ed? (✓)	SPECIES						
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						
Nitella spp.							Scirpus cubensis (Oxycaryon cubense)						
Nuphar sp.							Scirpus cyperinus						
Nymphaea odorata							*Sesbania						
Nymphoides aquatica							Solidago sp.		1		1		
Nyssa sylvatica var. biflora			1				Sparganium americanum						
Orontium aquaticum							Spartina bakeri						
Osmunda cinnamomea					1		Spirodela polyrhiza						
Osmunda regalis							Taxodium sp.						
Panicum hemitomon					1		Thalia geniculata						
Panicum repens		1			1		Thelypteris palustris						
Paspalidium geminatum							Triadenum virginicum		1	1	1	1	
*Paspalum repens							Typha sp.						1
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 (Sphag. trilobata)						
*Polygonum							Wolffiella spp.						
Pontederia cordata							Woodwardia virginica						
*Potamogeton diversifolius							Xyris sp.		1	1	1	1	
*Potamogeton illinoensis							Zizania aquatica						
*Potamogeton pusillus							Zizaniopsis milacea						
*Potamogeton pectinatus (Stuck. pectinatus)							Paspalum distachyon						
Proserpinaca pectinata							< 8 petals						
*Rhexia white 4 petals		1		1		✓	Sabatia (purple - pink)						
*Rhynchospora corniculata							(5 petals)						
*Rhynchospora inundata		1		1	1	✓	Saracenia rubra		1				
Rhynchospora tracyi							phyllanthus		1		1		
Ricciocarpus natans							Toxicodendron radicans				1		
Sabal palmetto							Sium polycarpum						
Sacciolepis striata							encorodum				1		
*Sagittaria filiformis							Sphagnum					1	
*Sagittaria graminea							*Schoenoplectus tabernaemontani = Scirpus validus						
*Sagittaria isoetiformis													
Sagittaria lancifolia													
Sagittaria latifolia		1			1								
Sachrum gigantea													

RQ-2018-09-03-12

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Z1-SL-12033 (Kennedy Lake)				County: Okaloosa (Crestview)				Date: 10/17/2019			
Analyst: E. Butera				Signature: <i>[Signature]</i>				STORET: 54313			
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			
SBIO ID	3	6	9	12	Collecte	Macro ID	3	6	9	12	Collecte
SPECIES					d? (✓)	SPECIES					ed? (✓)
<i>Hypericum sessile</i> s-petal	1				→	<i>Hypericum myrtifolium</i>	1				(Press)
<i>Paspalum ditichium</i> 2-facens				1	✓ →	<i>Paspalum dilatatum</i>				1	(D) FB
SABATIA	1				→	Unk. Dicot Purple (5-petals, pink dot)	1				✓ Press
<i>Rhexia</i> White	1			1	→	<i>Rhexia mariana</i>	1			1	(D)
Unknown Purple Dicot (5-petals, pink dot)	1				→	<i>Asylinus fasciculata</i> H. Oined	1				✓ H.O.

RQ-2018-09-03-12

DEP-SOP-001/01
FS 7000 General Biological Community Sampling

Form FD 9000-2: COMPOSITE LAKE SAMPLING SHEET (< 1000 ACRES)

Date: 10/17/17	Name of Lake: Z1-SL-12033. Kennedy Lake	Gear used: PONAR	EKMAN	OTHER	
Comments:					
Drop #	Depth (m)	Sediment Type (circle all that apply)	Drop #	Depth (m)	Sediment Type (circle all that apply)
1		sand, silt/clay, CPOM, muck, SAV	7		sand, silt/clay, CPOM, muck, SAV
2		sand, silt/clay, CPOM, muck, SAV	8		sand, silt/clay, CPOM, muck, SAV
3		sand, silt/clay, CPOM, muck, SAV	9		sand, silt/clay, CPOM, muck, SAV
4		sand, silt/clay, CPOM, muck, SAV	10		sand, silt/clay, CPOM, muck, SAV
5		sand, silt/clay, CPOM, muck, SAV	11		sand, silt/clay, CPOM, muck, SAV
6		sand, silt/clay, CPOM, muck, SAV	12	2.3	sand, silt/clay, CPOM, muck, SAV

CPOM = coarse particulate organic matter; SAV = submerged aquatic vegetation

WIN ID: 54313
WBID 255

Field ID Z1SL12033 Project. Status Small 2018
RQ-2018-09-03-12

SBIO ID: 79299

Paste map here and show location of each dredge drop and where water chemistry parameters were collected.

Revision Date: February 1, 2004

Photo Log

Storet # 54313

Station Name: Z1-SL-12033. Kennedy Lake

Date: 10/17/2019

Samplers: F. Butera,

- 1 Seal. 3 - East
- 2 Seal. 3 - West
- 3 4 petal ludwigia (~~Leptocarpus~~ ^{f. octovalvis})
- 4 " 4 petal ludwigia "
- 5 Sabatia (Purple-Purple-dot - 5 petals)
- 6 " Sabatia "
- 7 White Rhexia - 4 petals
- 8 claspings ludwigia H. tetrapetala
- 9 claspings ludwigia H. tetrapetala
- 10 5-petal flower attached to stem
- 11 " "
- 12 Section 9 Dam
- 13
- 14
- 15
- 16
- 17

Notes.