FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

STRATEGIC MONITORING PLAN Field Sheet

July 2022

Meter Passed End of Day CCV: Yes / No

WIN Station Name:	Coleman Lake					**Sample Date:**	7/13/2022
WIN / Field ID:	G3NW0216	**ORG ID:**	21FLPNS	**ENR:**		**Latitude:**	30.40236
County:	OKALOOSA	**WBID:**	906B	LAKE	3F	**Longitude:**	-86.480025
Receiving Body of Water:	Joes Bayou					**RQ-**	2022-06-13-31

Sampling Team Members	WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Frank Butera	x		x		
Lauren McNally		x		x	x

Sampling Equipment					
x	Sample Container			Carboy	
	Dipper			Van Dorn	
x	Syringe			Pole	
Syringe Lot#	*1005533*		**Filter Lot#**	*17460495*	
Secchi Equipment ID:	*Secchi - 2*				

Collection Method			
	Wading	x	**Canoe/Kayak**
	From Shore		**Electric Motor**
			Gasoline Motor
Depth Measured With	*Meter*		

Water Level:	*High*
Flow:	*NA*
Matrix:	*Fresh*
Tide Stage:	
High Tide:	
Low Tide:	
Photos:	*Yes*
Meter ID:	*155077 (ProDSS)*

Time Zone	Time	Total Depth (m)	Sample Depth (m)	DO (mg/L)	DO (%SAT)	Temp. (ºC)	pH	Secchi Disk (m)	Sp COND (µmhos/cm)	Salinity (PPTh)
CEN	1200	1.7	0.3	5.9	75.7	28.5	7.18	0.5	191.7	0.09
	1207		1.2	3.89	49	27.1	6.58		175.6	0.08

Biological Samples Collected: LVI, Habitat Assessment

SBIO Visit ID: 84718 **HA ID:** 17583 **RPS ID:** N/A **Macrophyte ID:** 12203 **LIMS Sample ID Entered Into The Macrophyte Module:** 2341417

Parameter Suite	Parameter Methods (LIMS Test Codes)			Preservation Type		Lot#	Expiration Date	pH Check
Microbiology								
Chlorophyll	**CHLSUITE-W**			**ICE**				
Physical/Aggregate	**ALKALINITY, TURBIDITY, W-F, W-TSS**			**ICE**				
Nutrients	**W-CL-IC, W-COLOR, W-SO4-IC, W-TDS**			**ICE**				
Filtered Nutrients	**W-PO4-F**	**Field Filtered 0.45 µm Filter**		**ICE**				
Acid Preserved Nutrients	**W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP**			**ICE**	**H2SO4***	*SA1308030*	*12/01/2022*	*H2SO4 pH<2*
Metals	**W-ICPMS**	**W-ICP**	**W-HARD**	**ICE**	**HNO3****	NA1286110	11/16/2022	HNO3 pH<2
Organics (LC)	**W-E8321-DI**	**W-E8321-MS**		**Ice**	**MCAA*****			
Macroinvertebrates								
Organics (GC)				**Ice**				
	W-PSNP-TQ	**W-TR-SQ-R**						
Molecular								
Periphyton								
Phytoplankton								
BOD								
Other(s)								

*2.0 ml of H2SO4 Used Unless Noted Otherwise
**2.0 ml of HNO3 Used Unless Noted Otherwise

Field Comments:	Rain previius 48 hours. Lots of algae.		
Comments on COC:			
Relinquish Date:	07/13/2022	**Signature:**	

LIMS EVENT ID: _____ **WIN Import ID:** _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ (Initials/Date)

QC Station ID, Field Parameters In LIMS DMT: _____ (Initials/Date)

Save Field Sheets on Network: _____ (Initials/Date)

Migrate Data to WIN: _____ (Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 84718 MACROPHYTE ID: 12283 LATITUDE: N 30.40236

COUNTY: Okaloosa (Destin) STORET #: G3NW0216 LONGITUDE: W -86.48003

DATE: 07/13/2022 TIME: 12:00 SAMPLING AGENCY: FL DEP - NWROC

SITE NAME: Coleman Lake WBID: 906B

FIELD ID/NAME: G3NW0216 LAKE SIZE: 4.11 acres RQ: 2022-06-13-31

LIMS ID. 2341417

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)
				X	X	X SWP	X AFB

LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer)

LDI: N/A

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 4	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				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	(4)	3	2	1
LAKESIDE ALTERATIONS 2	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)				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	(2)	1
BUFFER ZONE 7	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				
	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 ☐ 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:	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat. (%)	Cond. (UMHO/CM)	Salinity (PPT)
Top:	0.3	28.5	6.96	5.90	75.7	141.7	0.09
Mid-Depth:			7.16				
Bottom: 12:07	1.2	27.1	6.58	3.89	49.0	175.6	0.08

Meter ID: 155077

Clarity: ☐ Clear ☐ Opaque ☒ Turbid ☐ Slightly Turbid

Color: ☐ Clear ☐ Tannic ☒ Green

SECCHI (M): 0.5 VOB ☐

Total Station Depth (M): 1.7

Sediment Type: (may check more than one) ☐ Sandy ☐ Organic fibrous (peaty, CPOM) ☐ Vegetated ☐ Sand/Silt ☒ Organic smooth (muck) ☐ Other (Specify): _____

Sample Taken? ☐ Yes ☒ No

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: Active Algal Bloom

Weather Conditions : RAIN prev. 48 hrs

SAMPLING TEAM: Frank Butera, Lauren McNally **SIGNATURE:** [signature] **DATE:** 7/13/2022

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

STORET STATION NUMBER: G3NW0216	DATE (M/D/Y): 7/13/22	LAKE NAME: Coleman Lake	FIELD ID / NAME: Coleman Lake
WBID: 906B	COUNTY: Okaloosa	SAMPLING LOCATION/DESCRIPTION: Lake Center	LAKE SIZE: 4.1 acres

PARAMETER				
HYDROLOGY	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 ☒
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 5	Secchi >3 m				Secchi(m)	3	2.6	2.2	1.8	1.4	1.0	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1
	Or VOB 20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Vegetation Quality 7	Diverse, expected native vegetation (emergent or submersed), less than 5% nuisance taxa					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					Lake choked (>40%) with nuisance macrophytes (duckweed, hyacinth, etc.) or algal mats, or few plants present at all (e.g., plants removed)				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Stormwater Inputs 4	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				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Bottom Substrate Quality 3	Diverse mixture of sand, detritus, with small amounts of CPOM/mud/muck. SAV may be present					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					Thick deposits of CPOM, or fine detritus and anaerobic muck/mud/silt, or algal growth or nuisance plants (Hydrilla) cover bottom				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Lakeside Adverse Human Alternations 2 EB/B	Very few man-made structures, roads, or other disturbance adjacent to lake (<10%)					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)				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Upland Buffer Zone 7	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				
	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Adverse Watershed Land Use 7	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: 35

COMMENTS: Active Algal Bloom

ANALYSIS DATE: 7/13/21 | ANALYST: Frank Butera | SIGNATURE: Frank Butera

SBIO Sample ID: 84778 HA ID: 17583 QC✓: _____

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET RQ-2022-06-13-31

Waterbody: Coleman Lake	County: Okaloosa (Destin)	Date: 7/13/2022
Analyst: F. Butera	Signature:	STORET: G3NW0216

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 84718 SPECIES	1	4	7	10	Collected? (√)	Macro ID 12243 SPECIES	1	4	7	10	Collected? (√)
Acer rubrum						Habenaria repens					
Alternanthera philoxeroides	1	F	1	F		**Hydrilla verticillata**					
Andropogon sp.			1			Hydrocotyle sp.				1	
Azolla filiculoides (A. caroliniana)						**Hygrophila polysperma**					
Baccharis sp.						*Hypericum fasciculatum					
Bacopa caroliniana						*Hypericum hypericoides					
Bacopa monnieri						*Hypericum myrtifolium					
Bidens laevis						Ilex cassine					
Bidens mitis				1		**Ipomoea aquatica**					
Blechnum serrulatum						Ipomoea sagittata					
Boehmeria cylindrica	1		1	1		Itea virginica					
Brasenia schreberi						Juncus effusus					
Cabomba caroliniana						*Juncus marginatus					
Casuarina equisitifolia						*Juncus megacephalus					
Centella asiatica						Juncus repens					
Cephalanthus occidentalis						*Juncus scirpoides					
Ceratophyllum demersum						Lachnanthes caroliniana				1	
Chara sp.						Leersia hexandra					
Cladium jamaicense						**Landoltia punctata (Spiro. punctata)**	1	1	1	1	
Cliftonia monophylla						Lemna sp.	1	1	1		
Colocasia esculenta	1	1	1	1		Leucothoe racemosa (E. racemosa)					
*Commelina						Limnobium spongia					
Crinum americanum						**Limnophila sessiliflora**					
***Cyperus alternifolius** (C. involucratus)						Liquidamber styraciflua					
Cyperus articulatus						*Ludwigia arcuata					
Cyperus haspan						*Ludwigia leptocarpa					
*Cyperus lecontei ~~virginiensis~~				1 D		*Ludwigia linearis					
*Cyperus polystachyos						*Ludwigia octovalvis					
*Cyperus odoratus	1					***Ludwigia peruviana**	1	1		1	
*Cyperus surinamensis						*Ludwigia repens					
Cyrilla racemiflora						*Ludwigia					
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	1				
*Eleocharis baldwinii						**Mimosa pigra**					
*Eleocharis						Myrica cerifera	1	1	1	1	
Eleocharis cellulosa						Bidens alba	1				
Eleocharis equisetoides											
Eleocharis interstincta						Dioscorea	1				
*Eriocaulon compressum											
*Eriocaulon decangulare											
Eupatorium capillifolium						Panicum sp.	1				
*Fuirena											
Fuirena scirpoidea											
Gordonia lasianthus											
LIMS ID: 2341417											

FORM FD 9000-27: LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Coleman Lake | Storet: G3NW0216 | Date: 7/13/2022 | SBIO ID 84718 | Macro ID 12203

SPECIES	1	4	7	10	Collected? (√)	SPECIES	1	4	7	10	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					
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 elliottii						*Utricularia purpurea					
Pistia stratioides	O	C	D	~~A~~ √	(C)	*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.					
*Potamogeton illinoensis						Zizania aquatica					
*Potamogeton pusillus						Zizaniopsis milacea					
*Potamogeton pectinatus (Stuck. pectinatus)						toxicodendron radicans			|		
Proserpinaca pectinata						Vitis	|	|	|	|	
*Rhexia ________						Rhus			|		
*Rhynchospora corniculata						phyllanthus urinaria	|				
*Rhynchospora inundata											
Rhynochospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea											
*Sagittaria isoetiformis											
Sagittaria lancifolia											
Sagittaria latifolia											
rubus	|	|	|								
						*Schoenoplectus tabernaemontani = Scirpus validus					

DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: Coleman Lake	County: Okaloosa (Destin)	Date: 7/13/2022
Analyst: F. Butera	Signature:	STORET: G3NW0216

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 8478 SPECIES	1	4	7	10	Collected? (√)	Macro ID 12203 SPECIES	1	4	7	10	Collected? (√)
Lyngbya Green algae	1	1	1	1							
Albizia 9,											
Blue-Green	1										

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

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

Date: 7/13/22	Name of Lake: Coleman 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)	1.7	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		sand, silt/clay, CPOM, muck, SAV

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

Storet G3NW0216 Field ID G3NW0216 Project. SMP / TMDL Studies SBIO ID: 84718
WBID 906B

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

Photo Log
Win ID / Storet: G3NW0216
Station Name: Coleman Lake
Date: 7/13/2022
Samplers. Frank Butera, L. McNally

1 N
2 E
3 S
4 W
5
6
7
8
9
10
11
12
13
14
15
16
17

Notes.

Station: Coleman Lake
GPS Dec. 30.40236 x -86.48003
Storet: G3NW0216 WBID 906B
Sample ID: 84718 Macro ID: 12203
RQ-2022-06-13-31

Sampled : 06/15/2022
Sampled By. F.Butera, L. Boman
Location. Destin, Okaloosa
Receiving Waters: Joe's Bayou
LIMS ID: 2341417

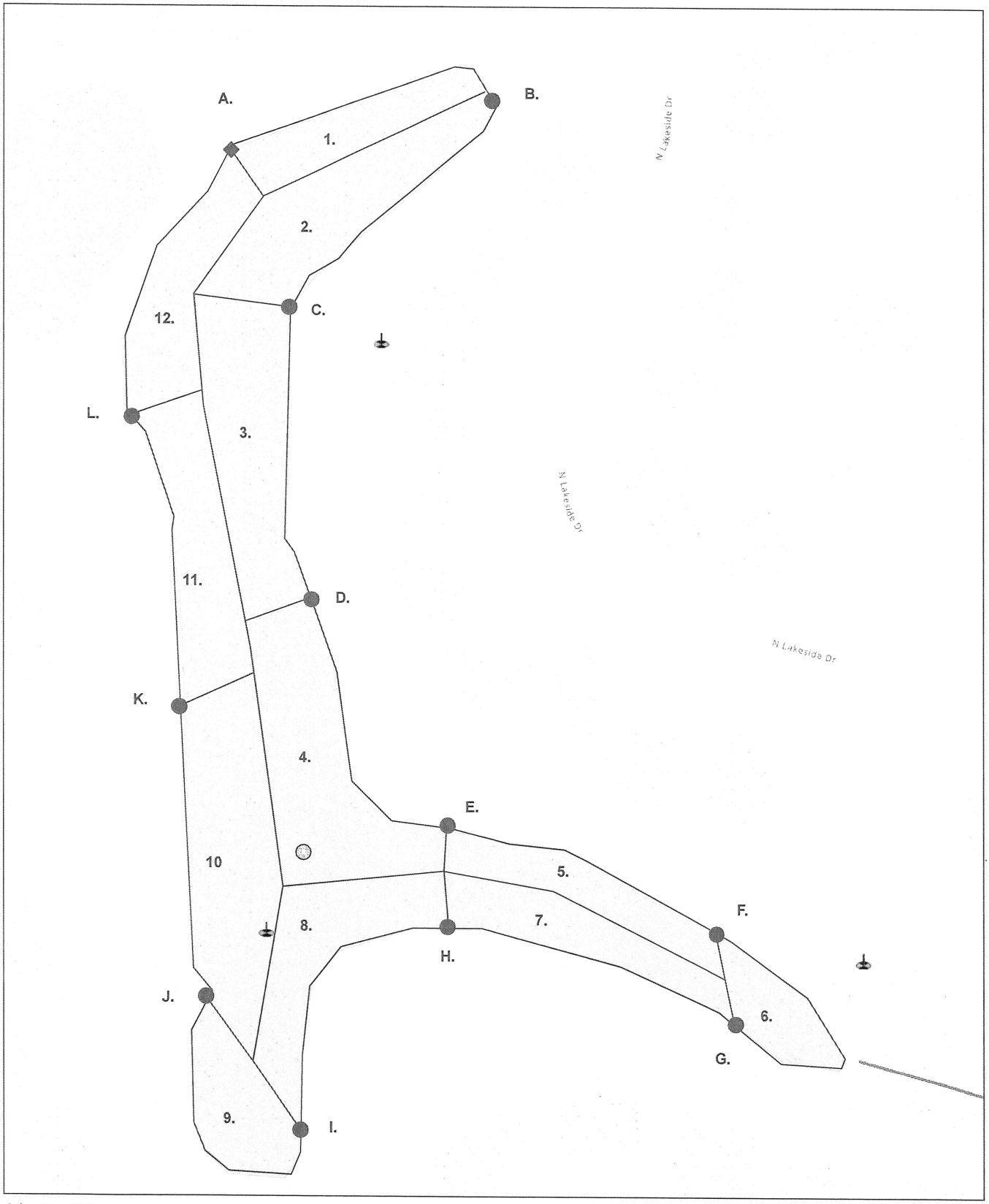
	Taxa	1	4	7	10	Coll.	Verified
1	*Acer rubrum*				1		
2	*Alternanthera philoxeroides*	1	C	1	C		
3	*Andropogon* sp.			1			
4	*Bidens alba*	1		1			
5	*Bidens mitis*				1		
6	*Boehmeria cylindrica*	1		1	1		
7	*Colocasia esculenta*	1	1	1	1		
8	*Cortaderia selloana (Pampas Grass)*	1					
9	*Cyperus lecontei*				1	Y	FB
10	*Cyperus odoratus*	1					
11	*Dioscorea bulbifera*	1					
12	*Hydrocotyle* sp.				1		
13	*Lachnanthes caroliana*				1		
14	*Landoltia punctata*	1	1	1	1		
15	*Lemna* spp.	1	1	1	1		
16	*Ludwigia peruviana*	1	1		1		
17	*Mikania scandens*	1			1		
18	*Myrica cerifera*	1	1	1	1		
19	*Myriophyllum aquaticum*			1			
20	*Osmunda cinnamonmoea*		1	1		Y	FB
21	*Panicum repens*	1	1		1		
22	*Paspalum* urvillei	1					
23	*Phyllanthus urinaria*	1					
24	*Pistia stratiotes*	D	C	D	C		
25	*Rhus copallinum*			1			
26	*Rubus* sp.	1	1	1			
27	*Sapium sebiferum*	1		1			
28	*Toxicodendron radicans*			1			
29	*Typha* sp.				1		
30	*Vitis* sp.	1	1	1	1		
31	*Woodwardia areolata*	1	1	1			
	Taxa per section	19	10	16	14	Herb. Taxa	26
	Exotic Present	11	6	6	6	Woody Taxa	3
	Avg. taxa per section	15				Ferns	2
	sections with exotics	4				Macro Algae	0
	Exotic Taxa	12	Exotics per Section: 7.25			Total Taxa	31

Seen but not counted (Not approp. For LVI or Not in surveyed segment)

Taxon	Section	Section	Section	Section
Albizia julibrissin	4			9
Blue-green Algae	1	2	4	8
Lyngbya	1	4	7	10

Metric	Rep. 1	Rep. 2	Rep. 3	Rep. 4	LVI Average
LVI 2012	0	0	8	8	4
Native Percentage	11.44	45.45	60	68.75	46.41
FLEPPC Pct (Exotic)	33.33	36.36	20	25	28.67
Total Taxa	18	11	15	16	31
C of C over 7.0	0	0	0	0	0.00
Dominant Taxa	P. stratiotes	P. stratiotes A. philox	P. stratiotes	P. stratiotes A. philox	P. stratiotes A. philox
C of C Dominant	0	0	0	0	0.00

G3NW0216 Coleman LVI Zoom



July 12, 2022

STORET Stations

Lake

WMS Flowing Waters Resource

Stream

1:1,128

0 0.01 0.02 0.04 mi

0 0.02 0.04 0.07 km

FDEP, DEAR, FDEP, DEAR, WMS, Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community,

Map created by Map Direct, powered by ESRI.

Coleman Lake

Storet	G3NW0216
Receiving Water	Joe's Bayou
Basin, WBID	Choctawhatchee Bay, 906B
City, County	Destin, Okaloosa
Lake Acreage	3.78 acres /1.53 Hectares
Circumference (M)	987.362
Seg. Length (M)	82.28016667

Section	Location	Dec. Latt.	Dec. Long.
4	Storet	30.40236	-86.48003
1	A	30.40409	-86.48023
	B	30.40421	-86.47948
	C	30.40370	-86.48006
4	D	30.40298	-86.48000
	E	30.40243	-86.47961
	F	30.40216	-86.47884
7	G	30.40194	-86.47879
	H	30.40218	-86.47961
	I	30.40168	-86.48003
10	J	30.40201	-86.48030
	K	30.40272	-86.48038
	L	30.40343	-86.48051

Segments selected 1,4,7,10