

RQ#: 2016-06-13-28 EventID# _____

LAKE ANN (PAULER)

Site(s)/STORET #: 615W0018

Parameter(s): _____

1. Spread Sheet (LIMS Input) _____ / _____
Initials Date
 2. QC 1 _____ / _____
Initials Date
 3. QC 2 _____ / _____
Initials Date
 4. SIM File Generated _____ / _____
Initials Date
 5. STORET Upload _____ / _____
Initials Date

VPDB ID#

6. Site and Event established in SBio _____/_____
Initials Date

7. Habitat Data and YSI Entered Into SBIO _____/_____
Initials Date

8. Habitat Data and YSI QC _____/_____
Initials Date

9. SBio data marked complete _____/_____
Initials Date

10. Macrophyte Data Entered into VPDB _____/_____
Initials Date

12. Field Paperwork Filed In Biology Lab _____/_____
Initials Date

13. Macrophyte Data QC _____/_____ 11. Macrophyte Data Marked Complete _____/_____



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

A-KIT

PAGE 1 OF 1

February 2016

Data Qualified?
Yes / No

STORET Station Name: LAKE ANN (PARKER)

Date: 06-14-16
(mm/dd/yyyy)

STORET Station ID: G1SW0018

Latitude: 28.177917 N
(Decimal Degrees)

WBID: 1464W RQ-2016-06-13-28 ORG ID: 21FLTPA

Longitude: 82.581639 W
(Decimal Degrees)

Receiving Body of Water:

Field ID: G1SW0018

County: PASCO

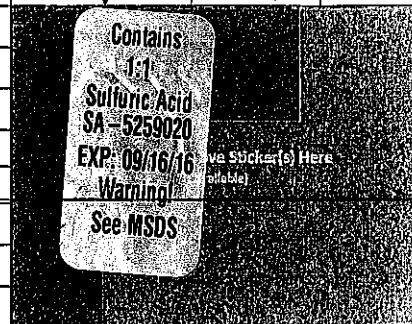
Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
Judy Ashton						X			X
Bobby Sammon					X		X		X

Sampling Equipment		
☒ Sample Container	☐ Van Dorn	☐ Pole
☐ Carboy	☐ Syringe	
☐ Dipper	☐ Other	
Equipment ID		
Collection Method		
☐ Wading	Via Boat	
☐ From Shore	☒ Canoe/Kayak	
☐ Other (note below)	☒ Electric Motor	
	☐ Gasoline Motor	

Water Level: Dry / Low / Normal / <u>High</u> / Flooded	Matrix: <u>Fresh</u> Marine / DI
Meter ID# <u>UL JON</u>	Photos: <u>Yes</u> / No
	Tide Falling: Yes / No / <u>NA</u>

Time Zone	Time	Sample Depth (m)	Total Depth (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (ppt)	Secchi Disk (m)	Sp COND (µmhos/cm)	Temp. (C°)
EST	1340	0.3	5.0	8.7	117	7.3	0.08	1.0	166	32.6
CEN		4.5		0.6	8	6.7	0.08		168	28.6

Biological Samples Collected:		None	<u>HA</u>	SCI	LVS	RPS	<u>LVI</u>	Other
Parameter Suite	Parameter Methods	Preservation	Acid Lot#	Expiration	pH Check			
Preserved Nutrients	☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP	☒ Ice ☒ H2SO4			☒ <2			
Metals	☐ W-ICPMS ☐ W-ICP	☐ Ice ☐ HNO3			☐ <2			
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice						
Chlorophyll	☒ CHLSUITE-W	☒ Ice						
BOD	☒ BOD-UNIN	☒ Ice						
Physical/Aggregate (Kit A)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice						
Physical/Aggregate (Kit B)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice						
Macroinvertebrates	☐ MF-FW-QLDC	☐ Formalin						
Microbiology	☐ E Coli ☐ F Coli ☐ Entero ☐ QPCR	☐ Ice						
Periphyton	☐ ALGAE-ID	☐ Ice						
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PC-AA-SF ☐ W-UHERB-AA ☐ W-GLYPH	☐ Ice ☐ Other						



Notes:

RQ-2016-06-13-28
Date: 06/14/2016
Time:



Signature: Judy Ashton

Date: 6-14-16

Field Parameters Entered into LIMS:

SC 06/14/2016
(Initials/Date)

Field Parameters QC in LIMS:

(Initials/Date)

Date Migrated to STORET:

(Initials/Date)

Field Sheets Scanned/Saved:

(Initials/Date)

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: _____ MACROPHYTE ID: _____ LATITUDE: 28.177917N
 COUNTY: PALCO STORET #: 615W0018 LONGITUDE: 82.581639W
 DATE: 6-14-16 TIME: 1340 SAMPLING AGENCY: FDEP
 SITE NAME: LAKE ANN (PARKER) WBID: 1464W
 FIELD ID/NAME: 615W0018 LAKE SIZE: L RQ: 2016-06-13-28

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>20</u>				<u>80</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>13</u>		20	19	18	17	16	15	14	<u>13</u>	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>11</u>		20	19	18	17	16	15	14	13	12	<u>11</u>	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>10</u>		20	19	18	17	16	15	14	13	12	11	<u>10</u>	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 # _____ 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: Top: Depth (M) <u>0.3</u> Temp. (°C) <u>32.0</u> pH (SU) <u>7.3</u> D.O. (MG/L) <u>8.7</u> D.O. Sat. (%) <u>117</u> Cond. (UMHO/CM) <u>117</u> Salinity (PPT) <u>0.08</u> Mid-Depth: _____ Bottom: <u>4.5</u> <u>28.4</u> <u>6.7</u> <u>0.4</u> <u>8</u> <u>168</u> <u>0.08</u>										Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☒ Clear ☐ Tannic ☐ Green SECCHI (M) <u>1.0</u> Total Station Depth (M) <u>4.5</u> VOB ☐									
Sediment Type: (may check more than one) ☒ Sandy ☐ Organic fibrous (peaty, CPOM) ☒ Vegetated ☐ Sand/Silt ☐ Organic smooth (muck) ☐ Other (Specify): _____										Sediment Odors: ☒ Normal ☐ 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>RECENT RAIN - HIGH WATER LEVELS</u>																			
SAMPLING TEAM: <u>Julie Burton, Kirby Sammons</u>										SIGNATURE: <u>Julie Burton</u>					DATE: <u>6-14-16</u>				

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

STORET STATION NUMBER: 615W0018	DATE (M/D/Y) 6-14-16	LAKE NAME LAKE ANN (MARKER)		FIELD ID / NAME: 615W0018													
ECO-REGION:	COUNTY: PASCO	SAMPLING LOCATION/DESCRIPTION:		LAKE SIZE: L													
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													
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	0.5	0.4	0.3	0.2	0.1	
☐	20 19 18 17 16	15	14	13	12	11	☒	9	8	7	6	5	4	3	2	1	
Vegetation Quality	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	☒	10	9	8	7	6	5	4	3	2	1	
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 ☐											
☐	20 19 18 17 16	15	14	☒	12	11	10	9	8	7	6	5	4	3	2	1	
Bottom Substrate Quality	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 ☒	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Lakeside Adverse Human Alterations	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	☒	10	9	8	7	6	5	4	3	2	1	
Upland 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 ☐											
☐	20 19 18 17 16	15	14	13	12	11	☒	9	8	7	6	5	4	3	2	1	
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 ☐																
☐	20 19 18 17 16	15	14	13	12	11	10	9	8	☒	6	5	4	3	2	1	
TOTAL SCORE	78	COMMENTS:															

ANALYSIS DATE: 6-14-16	ANALYST: Judy Aschman	SIGNATURE: 
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Waterbody: <u>LAKE ANN (PARKER)</u>	County: <u>PAISCO</u>	Date: <u>6/14/16</u>
Analyst: <u>JWAY ASHTON</u>	Signature: <u>[Signature]</u>	STORET: <u>615W001R</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 3, 6, 9, 12
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	4	7	10	1	Collected? (✓)	SPECIES				Collected? (✓)
Acer rubrum	X	X		X		Habenaria repens				
Alternanthera philoxeroides	X	X		X		Hydrilla verticillata				
Andropogon sp.		X		X		Hydrocotyle sp.	X	X		
Azolla filiculoides (A. caroliniana)						Hygrophila polysperma				
Baccharis sp.						*Hypericum fasciculatum				
Bacopa caroliniana						*Hypericum hypericoides				
Bacopa monnieri						*Hypericum myrtifolium				
Bidens laevis						Ilex cassine				X
Bidens mitis						Ipomoea aquatica				
Blechnum serrulatum	X	X	X	X		Ipomoea sagittata				
Boehmeria cylindrica	X	X				Itea virginica				X
Brasenia schreberi						Juncus effusus	X			
Cabomba caroliniana						*Juncus marginatus	X			
Casuarina equisetifolia						*Juncus megacephalus				
Centella asiatica						Juncus repens				
Cephalanthus occidentalis	X	X	X	X		*Juncus scirpoides				
Ceratophyllum demersum						Lachnanthes caroliniana				
Chara sp.						Leersia hexandra				
Cladium jamaicense				X		Landoltia punctata (Spirodela punctata)				
Cliftonia monophylla						Lemna sp.				
Colocasia esculenta	X	X	X	X		Leucothoe racemosa (Eubotrys racemosa)				
*Commelina	X					Limnium spongia				
Crinum americanum						Limnophila sessiliflora				
*Cyperus alternifolius (C. involucratus)	X					Liquidambar styraciflua				
Cyperus articulatus						*Ludwigia arcuata				
Cyperus haspan		X				*Ludwigia leptocarpa				
*Cyperus lecontei		X				*Ludwigia linearis				
*Cyperus polystachyos						*Ludwigia octovalvis				
*Cyperus odoratus	X	X				*Ludwigia peruviana	X			
*Cyperus surinamensis		X				*Ludwigia repens				
Cyrtilla racemiflora						*Ludwigia	X		X	
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)				
Diodia virginiana						Lyonia lucida				
*Echinochloa crus-galli		X	X			Magnolia virginiana				
*Echinochloa muricatum		X				Mayaca fluviatilis				
Echinochloa walteri						Melaleuca quinquenervia		X	X	X
Eclipta prostrata (E. alba)						Micranthemum glomeratum				
Egeria densa						Micranthemum umbrosum				
Eichhornia crassipes						Mikania scandens	X	X		
*Eleocharis baldwinii						Mimosa pigra				
*Eleocharis						Myrica cerifera	X	X		X
Eleocharis cellulosa						TALL GRASS	X	X		
Eleocharis equisetoides						VITIS	X	X	X	X
Eleocharis interstincta						OLEANDER	X	X		
*Eriocaulon compressum						CANNA - NON-NATIVE				
*Eriocaulon decangulare						BOTTLE BRUSH				X
Eupatorium capillifolium	X	X	X			→ Callistemon				
*Fuirena										
Fuirena scirpoidea										
Gordonia lasianthus						PINK EGGS	X	X		

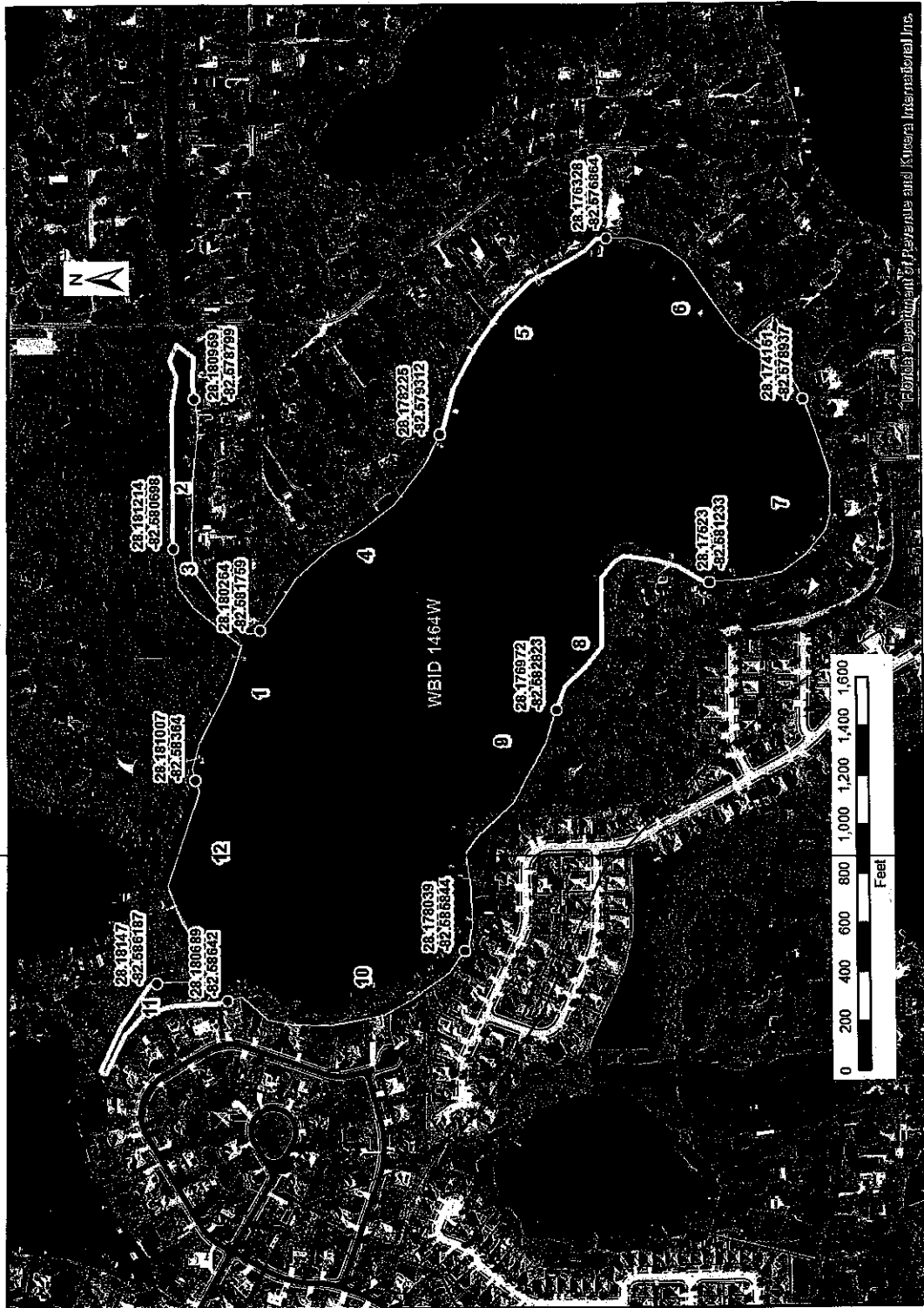
Site: LAKE ANN (PARKER)

Date: 6-14-16

SPECIES	Collected? (✓)	SPECIES	Collected? (✓)
Myriophyllum aquaticum		Salix caroliniana	X
*Myriophyllum heterophyllum		Salvinia minima	X
*Myriophyllum laxum		Sambucus canadensis	X
*Myriophyllum pinnatum		Sapium sebiferum	X
Myriophyllum spicatum		Saururus cernuus	X
*Najas filifolia		Schinus terebinthifolius	X
*Najas guadalupensis		*Schoenoplectus californicus	
*Najas minor		*Schoenoplectus pungens	
Nelumbo lutea		*Schoenoplectus tabernaemontani (Scirpus validus)	
Nitella spp.		Scirpus cubensis (Oxycaryon cubense)	
Nuphar sp.	X	Scirpus cyperinus	
Nymphaea odorata	X	*Sesbania	
Nymphoides aquatica	X	Solidago sp.	
Nyssa sylvatica var. biflora		Sparganium americanum	
Orontium aquaticum		Spartina bakeri	
Osmunda cinnamomea		Spirodela polyrhiza	
Osmunda regalis		Taxodium sp.	X
Panicum hemitomon	X	Thalia geniculata	X
Panicum repens	X	Thelypteris palustris	
Paspalidium geminatum	X	Triadenum virginicum	
*Paspalum repens	X	Typha sp.	X
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.	X	*Utricularia radiata	
*Polygonum glabrum (densiflorum)	X	Vallisneria americana	X
*Polygonum hydropiperoides		*Websteria confervoides	
*Polygonum punctatum		Wedelia trilobata (Sphagneticola trilobata)	X
*Polygonum		Wolffiella spp.	X
Pontederia cordata	X	Woodwardia virginica	
*Potamogeton diversifolius	X	Xyris sp.	
*Potamogeton illinoensis	X	Zizania aquatica	
*Potamogeton pusillus	X	Zizaniopsis milacea	
*Potamogeton pectinatus (Stuckenia pectinatus)		CUPSCULE - Sacciolepis indica	X
Proserpinaca pectinata		COW PEA - Vigna inticola	X
*Rhexia			
*Rhynchospora corniculata			
*Rhynchospora inundata			
Rhynchospora tracyi			
Ricciocarpus natans			
Sabal palmetto			
Sacciolepis striata			
*Sagittaria filiformis			
*Sagittaria graminea			
*Sagittaria isoetiformis			
Sagittaria lancifolia	X		
Sagittaria latifolia	X		

1, 4, 7, 10

LVI Map for LAKE ANN (PARKER), WBID 1464W



**Florida Department of Environmental Protection
Central Laboratory Submittal Form**

Customer: SW-DIST

Project ID: SMP

Requester: Judy Ashton

Field Report Prepared By:

Collected By:

Sampling Agency:

Location	LAKE DEAS LADY										Bottle Group(s)
Field ID	RQ-2016-06-13-28 Date: 06/14/2016 Time:										Composite end
STORE #	G1SW0021										Central
Latitude	G1SW0021										Date
	dd dms										Time
Location	LAKE HIAWATHA										Composite end
Field ID	RQ-2016-06-13-28 Date: 06/14/16 Time:										Central
STORE #	G1SW0017										Date
Latitude	G1SW0017										Time
	dd dms										
Location	LAKE ANN (PARKER)										Bottle Group(s)
Field ID	RQ-2016-06-13-28 Date: 06/14/2016 Time:										Composite end
STORE #	G1SW0018										Central
Latitude	G1SW0018										Date
	dd dms										Time
Location	LAKE ANN - HIGH WATER LEVELS										Bottle Group(s)
Field ID	RQ-2016-06-13-28 Date: 06/14/16 Time:										Composite end
STORE #	G1SW0017										Central
Latitude	G1SW0017										Date
	dd dms										Time
Location	LAKE ANN - HIGH WATER LEVELS										Bottle Group(s)
Field ID	RQ-2016-06-13-28 Date: 06/14/16 Time:										Composite end
STORE #	G1SW0017										Central
Latitude	G1SW0017										Date
	dd dms										Time

Relinquished By:	Date/Time	Shipping Method	Number of Coolers Shipped:	Received By:	Date/Time
John A. Brown	7-24-10 5:00	Phd Ex	1		