



Reference Lake LVI

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

June 2016

PAGE ____ OF ____

Data Qualified?

Yes / No

STORET Station Name: Wildcat Lake - Center of Lake Date: 07/20/2016

STORET Station ID: 20020504 WBID: 2905C Latitude: 29.1563889

County: Lake RQ - 2016-07-18-40 ORG ID: 2IFLCEN Longitude: -81.6275000

Receiving Body of Water: N/A Field ID: G2CE0053

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
<u>Mike Lingg</u> <u>Leif Boman</u>					/	/	/	/	/

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 / High / Flooded Matrix: Fresh / Marine / DI

Meter ID# Betty / 67 Photos: Yes / No NEWS Tide Falling: Yes / No / NA

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	11:09	0.3	4.1	6.7	90	6.7 ^{5.0}	0.02	3.0	52	31.6
CEN		3.6		6.6	89	5.0	0.02		52	31.2

Biological Samples Collected: None HA SCI LVS RPS LVI 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	6168040	6/16/17	☒ <2
Metals	☒ W-ICPMS ☒ W-ICP	☒ Ice ☐ HNO2	5259030	9/16/16	☒ <2
Filtered Nutrients	☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter	☒ Ice	Contains 1:1 Sulfuric Acid SA-6168040 EXP. 06/16/17 Warning! See SDS		
Chlorophyll	☒ CHLSUITE-W	☒ Ice			
BOD	☐ BOD-UNIN	☐ Ice			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS	☒ Ice			
Physical/Aggregate (Marine)	☐ Alkalinity / W-F / W-TSS / TURBIDITY	☐ Ice			
Macroinvertebrates	☐ MI-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: Flow for rivers/streams: _____ m/s

LVI conducted 7/19/2016 & 7/20/2016

Large rain event of on 7/19/2016

Wildcat Lake - Center of Lake

Date: 07/19/2016

RQ-2016-07-18-40

G2CE0053

Field ID ↑

STORET ↓

20020504

Signature: [Signature] Date: 7/20/16

Field Parameters Entered into LIMS: _____ T.Sheet Updated: ☐ Field Parameters QC in LIMS: _____ T.Sheet Updated: ☐

Date Migrated to STORET: _____ (Initials/Date) T.Sheet Updated: ☐ Field Sheets Scanned/Saved: _____ (Initials/Date) T.Sheet Updated: ☐

DEP FORM FD 9000-31: LAKE OBSERVATION FIELD SHEET

SAMPLE ID: 76553 MACROPHYTE ID: 9927 LATITUDE: 29.1563889
COUNTY: Lake STORET #: 20020504 LONGITUDE: -81.6275000
DATE: 7/20/16 TIME: 1100 SAMPLING AGENCY: FDAP CE-ROC
SITE NAME: Wildcat Lake - Center of Lake WBID: 2905C
FIELD ID/NAME: 62CE0053 LAKE SIZE: Med RQ: 2016-07-18-40

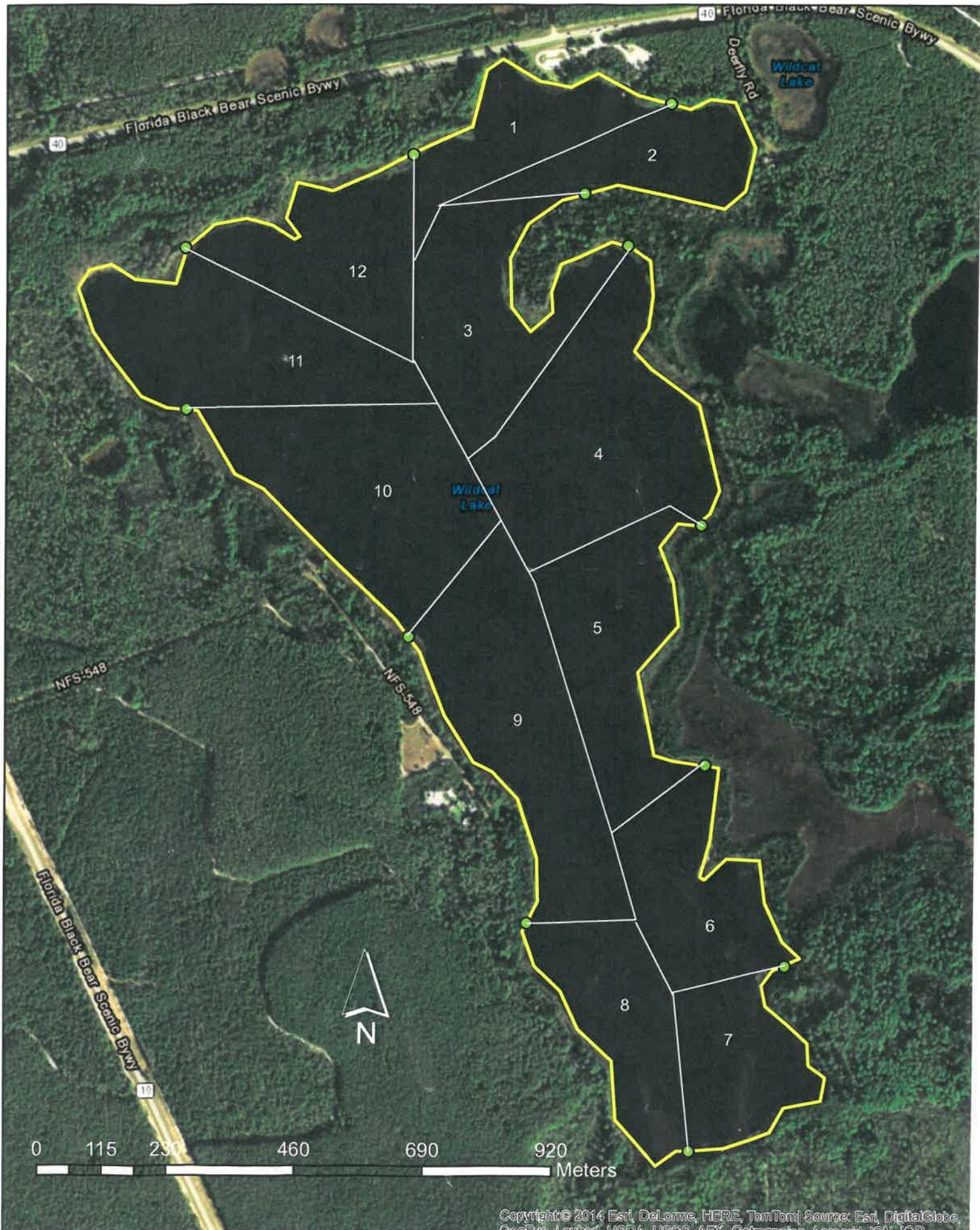
WATERSHED / LAKESIDE FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category – from GIS) : <u>Art & Road</u> Forest/Natural <u>92</u> Silviculture <u>0</u> Field/Pasture <u>0</u> Agricultural <u>0</u> Residential <u>4</u> Commercial <u>0</u> Industrial <u>0</u> Other (Specify) <u>4</u>					LANDSCAPE DEVELOPMENT INTENSITY (100 m buffer) LDI: <u>0</u> Land Use Source & Year:				
Local Watershed Erosion (select one) : ☒ None ☐ Slight ☐ Moderate ☐ Heavy					Artificially Impounded ☐ Yes ☒ No				
Local Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy									
STORMWATER INPUTS <u>19</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 4 3 2 1	
LAKESIDE ALTERATIONS <u>18</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		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>19</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 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 # _____ Exp. Date: _____ Alkalinity Sample Taken? ☒ Yes ☐ No Water Level ☐ Low ☒ Normal ☐ High						Water Odors: ☒ Normal ☐ Sewage ☐ Petroleum ☐ Other _____					
Meter Readings: Top: <u>0.3</u> <u>31.6</u> <u>5.0</u> <u>6.7</u> <u>90</u> <u>52</u> <u>0.02</u> Mid-Depth: _____ Bottom: <u>3.6</u> <u>31.2</u> <u>5.0</u> <u>6.6</u> <u>89</u> <u>52</u> <u>0.02</u> Meter ID: <u>Betty / 67</u>						Water Surface Oils: ☒ None ☐ Sheen/Slick ☐ Glob ☐ Other _____ Clarity: ☒ Clear ☐ Opaque ☐ Turbid ☐ Slightly Turbid Color: ☒ Clear ☐ Tannic ☐ Green SECCHI (M) <u>3.0</u> Total Station Depth (M) <u>4.1</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 #: <u>by lab</u> 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:											
Weather Conditions: <u>90's clear, humid</u> <u>Large rain event on 7/19/2016</u>											
SAMPLING TEAM: <u>Mike Geyer, Leif Roman</u>						SIGNATURE: <u>[Signature]</u>			DATE: <u>7/20/16</u>		

Wildcat lake 2905C



DEP FORM FD 9000-27 LAKE VEGETATION INDEX FIELD SHEET

Waterbody: <u>Wildcat Lake - Center of Lake</u>		County: <u>Lake</u>		Date: <u>7/19/16</u>							
Analyst: <u>Mike Linger, Jeff Boman</u>		Signature: <u>[Signature]</u>		STORET: <u>20020504</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 <u>suffruticosa</u>	✓	✓	✓	✓	
*Cyperus polystachyos						*Ludwigia octovalvis					
*Cyperus odoratus						*Ludwigia peruviana					
*Cyperus surinamensis						*Ludwigia repens					
Cyrilla racemiflora						*Ludwigia					
Decodon verticillatus						Luziola fluitans (Hydrochloa carolinensis)					
Diodia virginiana						Lyonia lucida					
*Echinochloa crus-galli						Magnolia virginiana					
*Echinochloa muricatum						Mayaca fluviatilis	✓				3 MKL
Echinochloa walteri						Melaleuca quinquenervia					
Eclipta prostrata (E. alba)						Micranthemum glomeratum					
Egeria densa						Micranthemum umbrosum					
Eichhornia crassipes	✓					Mikania scandens					
*Eleocharis baldwinii						Mimosa pigra					
*Eleocharis <u>free floating</u>	✓	✓				Myrica cerifera	✓	✓	✓	✓	
Eleocharis cellulosa											
Eleocharis equisetoides											
Eleocharis interstincta <u>elongata</u>	✓	✓		✓							
*Eriocaulon compressum sp											
*Eriocaulon decangulare			✓								
Eupatorium <u>capitatum</u> sp			✓	✓							
*Fuirena <u>scirpoides</u>	✓		✓	✓	3 MKL						
Fuirena scirpoidea											
Gordonia lasianthus	✓	✓	✓	✓							

Site: Wildcat Lake - Center of Lake					Date: 7/25/16						
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	D/	C/	D/	D/	2 ncl	Thalia geniculata					
Panicum repens	✓	✓	✓	✓	12 ncl	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)											
Proserpinaca pectinata						Vitis	✓	✓	✓	✓	
*Rhexia						Watercress? p. repens	✓	✓	✓	✓	3
*Rhynchospora corniculata						Submersed pulfs - Websteria confervoides	✓				3
*Rhynchospora inundata											
Rhynchospora tracyi											
Ricciocarpus natans											
Sabal palmetto											
Sacciolepis striata											
*Sagittaria filiformis											
*Sagittaria graminea	✓	✓			6 ncl						