



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

PAGE 1 OF 4

RQ-2016-05-23-08

6/13/2016
WBID1761J



26010511*
Field ID

Data Qualified?
Yes / No

STORET Station Name:

Arbuckle Creek @
US98

STORET
26010511*
Field ID

Date:

(mm/dd/yyyy)

STORET Station ID:

Latitude:

(Decimal Degrees)

County: Highlands

RQ -

ORG ID:

Longitude:

(Decimal Degrees)

Receiving Body of Water: Lake Istokpoga

Field ID:

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Duplicate Collection	Blank Collection
Danny Barger		X	X					
Kaitlin DeAeth		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 / High / <u>Flooded</u>	Matrix:	<u>Fresh</u> / Marine / DI
Meter ID#	<u>7</u>	Photos:	Yes / <u>No</u>
		Tide Falling:	Yes / No / <u>NA</u>

Field Sample

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	1015	0.3	3.5	3.4	44	6.0	-	0.7	98	28.2
CEN		3.0		2.8	36	5.9	-		95	28.2

Biological Samples Collected:		None	HA	SCI	<u>LVS</u>	<u>RPS</u>	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	5259020	9-16-16	☒ <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			
Physical/Aggregate (Fresh)	☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CH-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 ☐ Enterococcus ☐ 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			

Place Preservative Sticker(s) Here
(If Available)

DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

RQ-2016-05-23-08



SAMPLE ID see sticker upper right ORG ID 21FLFTM LATITUDE 6/13/2016
STORET # see sticker upper right COUNTY Highlands LONGITUDE WBID1761J
DATE see sticker upper right TIME 1015 SAMPLING Arbuckle Creek @
SITE NAME US98
FIELD ID/NAME see sticker upper right RECEIVING BODY OF WATER Lake Istokpoga

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category):								Landscape Development Intensity Index (LDI)	
Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)		
<u>30</u>		<u>40</u>		<u>30</u>					
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy								Typical Width (m) Depth (m)/Velocity (m/sec) Transect	
Local Watershed NPS Pollution: ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy									
Width of Riparian Vegetation (m) on Each Buffer Side				Hydrologic Modification Score (per FT 3101)					
Left Bank: <u>18+</u> Right Bank: <u>18+</u>				<u>✓</u>					
High Water Mark: <u>0.5</u> + <u>3.5</u> = <u>4.0</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No					
Artificially ☒ No ☐ Mostly recovered, more sinuous				Canopy Cover % ☒ Open ☐ Lightly Shaded (11-45%)					
Channelized: ☐ Some recovery ☐ Recent, severe				☐ Heavily Shaded ☐ Moderate Shaded (46-80%)					

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse			Sediment Odors ☒ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ Other (Specify):			Smothering of Substrates Sand Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐ Silt Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐ Algae Smothering: None ☒ Slight ☐ Moderate ☐ Severe ☐					
SUBSTRATE TYPE Assessment Tool: ☐ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.3</u> <u>28.2</u> <u>6.0</u> <u>3.4</u> <u>44+</u> <u>98</u> <u>-</u> <u>0.7</u> Mid: <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>-</u> <u>VOB</u> Bottom: <u>3.0</u> <u>28.2</u> <u>5.9</u> <u>2.8</u> <u>36+</u> <u>95</u> <u>-</u> <u>TOTAL DEPTH</u> Meter ID: <u>7</u>								
Woody Debris (Snags) <u>-</u> <u>-</u> <u>-</u> Undercut Banks / Roots <u>-</u> <u>-</u> <u>-</u> Leaf Packs or Mat <u>-</u> <u>-</u> <u>-</u> Aquatic Vegetation <u>-</u> <u>-</u> <u>-</u> Rock or Shell Rubble <u>-</u> <u>-</u> <u>-</u> Sand <u>-</u> <u>-</u> <u>-</u> Mud / Muck / Silt <u>-</u> <u>-</u> <u>-</u> Other <u>-</u> <u>-</u> <u>-</u> Other <u>-</u> <u>-</u> <u>-</u>			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐ Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐					
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☒ ☐ ☐ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☒ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>5254020</u> Exp: <u>9-16-16</u> Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: <u>-</u> Exp: <u>-</u>			Clarity Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐					
SAMPLING TEAM <u>Danny Berger Kaitlin De'Aeth</u>			SIGNATURE: <u>[Signature]</u>			DATE: <u>6-13-16</u>					
AMBIENT FIELD CONDITIONS / NOTES: <u>Was very flooded and water was moving fast.</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.											

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26010511*
Field ID ▲
STORET ▼
26010511*

Waterbody:

Date:

County: Highlands

Analyst:

Signature: _____

Arbuckle Creek @

US98

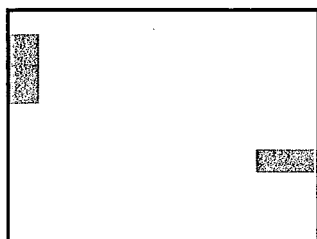
Comments: Flooded

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m² of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

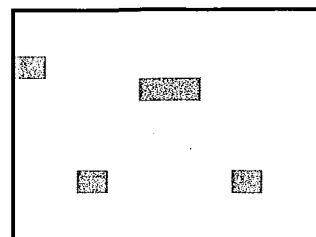
HERBACEOUS SPECIES												Specime n collected (check)	HERBACEOUS SPECIES												Specime n collected (check)
0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	0-10	10-20		20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100					
Alternanthera philoxeroides	✓	✓	✓	✓	✓	✓	✓	✓	✓	Micranthemum glomeratum															
Bacopa caroliniana										Micranthemum umbrosum															
Bacopa monneri										Myriophyllum aquaticum															
Bidens mitis										Najas guadelupensis	✓	✓	✓	✓											
Boehmeria cylindrica										Nuphar luteum	✓	✓	✓	✓											
Centella asiatica										Orontium aquaticum															
Ceratophyllum demersum										Panicum hemitomon	✓		✓	✓			✓		✓						
Chara										Panicum repens	✓						✓								
Cicuta maculata										Panicum rigidulum															
Cladium jamaicense										Pistia stratioides				✓	✓		✓		✓						
Colocasia esculenta										Polygonum glabra															
Commelina diffusa										Polygonum hydropiperoides															
Commelina virginica										Polygonum punctatum	✓			✓			✓	✓							
Crinum americanum										Pontedaria cordata				✓			✓	✓							
Diodia virginiana										Potamogeton illinoensis															
Eichhornia crassipes										Ruellia simplex															
Eleocharis (wispy viviparous)										Sacciolepis striata															
Hydrilla verticillata			✓				✓		✓	Sagittaria kurziana		✓	✓			✓				✓					
Hydrocotyle sp.			✓					✓	✓	Sagittaria lancifolia		✓	✓			✓			✓	✓					
Hygrophila polysperma										Sagittaria latifolia								✓	✓	✓					
Hymenachne amplexicaulis										Salvinia minima	✓		✓	✓	✓		✓	✓		✓					
Hymenocallis										Samolus parviflora															
Lachnanthes caroliniana										Saururus cernuus															
Landoltia punctata										Sparganium americanum															
Lemna										Sphagneticola trilobata (Wedelia)															
Limnophila sessiflora										Typha															
Ludwigia leptocarpa										Urochloa mutica (Brachiaria)															
Ludwigia palustris										Vallisneria americana															
Ludwigia peruviana										Zizania aquatica															
Ludwigia repens			✓		✓					Cephalanthus occidentalis			✓		✓				✓	✓					
Luziola fluitans										Rhynchospora spp			✓					✓	✓						

Percent Cover Categories for macrophytes in a 10 m segment of a stream 5 m wide

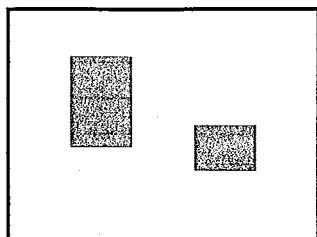
5% Macrophyte Coverage



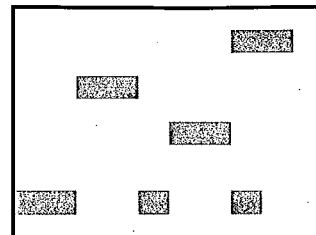
5% Macrophyte Coverage



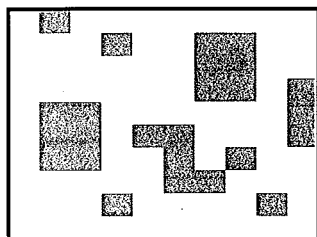
10% Macrophyte Coverage



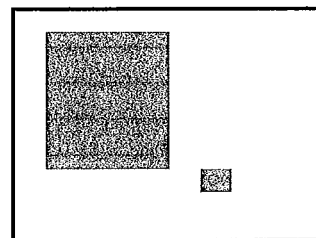
10% Macrophyte Coverage



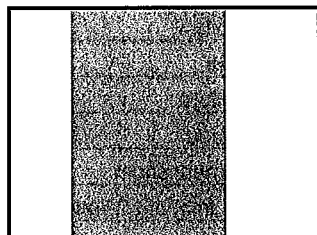
25% Macrophyte Coverage



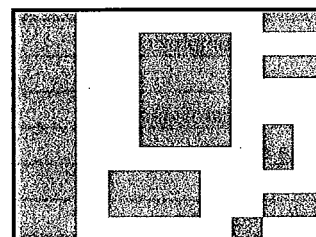
25% Macrophyte Coverage



50% Macrophyte Coverage



50% Macrophyte Coverage



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6/13/2016

WBID1761J

Arbuckle Creek @

US98



DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

County:		Investigators								STORET Station Number:		
Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover			
0	1	N	α		60	1	N	α				
	2					2						
	3					3						
	4					4						
	5			0		5				0		
	6					6						
	7					7						
	8					8						
	9					9						
10	1	N	α		70	1	N	α				
	2					2						
	3					3						
	4					4						
	5			0		5				0		
	6					6						
	7					7						
	8					8						
	9					9						
20	1	N	α		80	1	N	α				
	2					2						
	3					3						
	4					4						
	5			0		5				0		
	6					6						
	7					7						
	8					8						
	9					9						
30	1	N	α		90	1	N	α				
	2					2						
	3					3						
	4					4						
	5			0		5				0		
	6					6						
	7					7						
	8					8						
	9					9						
40	1	N	α		100	1	N	α				
	2					2						
	3					3						
	4					4						
	5			0		5				0		
	6					6						
	7					7						
	8					8						
	9					9						
50	1	N	α		Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached. Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank. Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6. Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.							
	2											
	3											
	4											
	5			0								
	6											
	7											
	8											
	9											

Secchi depth	0.7
Estimated?	

# points ranked 4-6	0
total points assessed	
% points ranked 4-6	0

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	X
Habitat Assessment	
SCI/Biorecon	
Water sample	
RQ-	

Algal Thickness Rank	
N	rough, no algae, slimy, algae up to 1mm
3	>1mm - 6mm
4	>6mm - 20mm
5	>20mm - 10 cm
6	>10 cm