4-8

DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

SAMPLING AGENCY:		STORET STATION NUMBER:	DATE (MM/DD/YY):	RECEIVING BODY OF WATER:
FDEP		3101051	9/25/14	Apalachicola River
REMARKS:	COUNTY:	LOCATION:		FIELD ID/NAME:
cool, overcast + HA benchmark site SCI reference site	Liberty	Sweetwater Branch		SWTREF

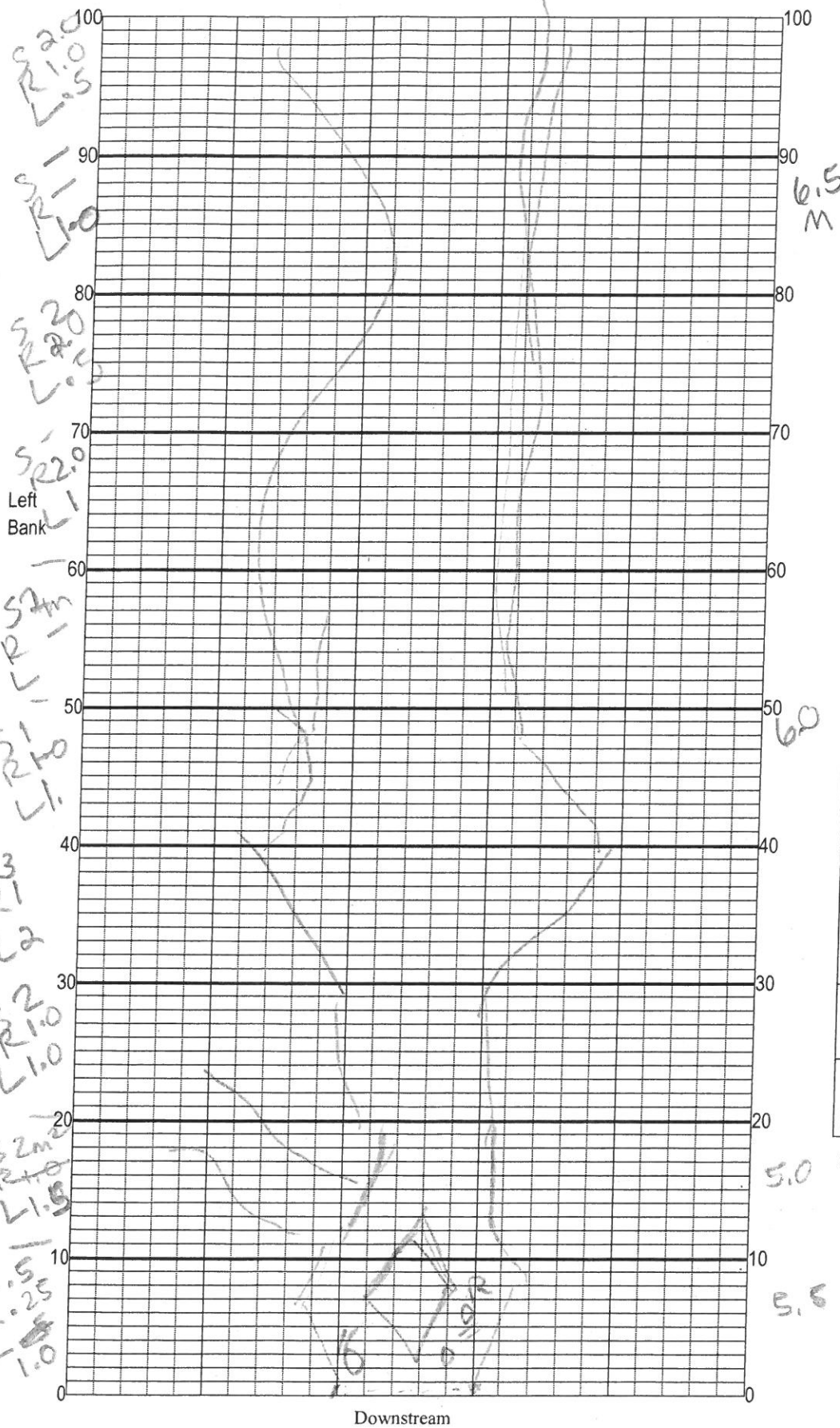
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components **Substrate Diversity** 14	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags) 15 14 13 12 11	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed 10 9 8 7 6	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered 5 4 3 2 1
Substrate Availability 5	Greater than 30% major productive habitat present at site 20 19 18 17 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat (5) 4 3 2 1
Water Velocity 20	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 (20) 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering 17 Primary Score 56	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 (17) 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 11	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components **Artificial Channelization** 20	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks. (20) 19 18 17 16	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered. 15 14 13 12 11	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area. 10 9 8 7 6	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks. 5 4 3 2 1
Bank Stability Right Bank 10 Left Bank 10	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankful to top of bank. Bankfull is within or above the root zone with few raw, eroded areas. (10) 9	Only meets 2 of the 3 requirements for optimal bank stability. 8 7 6	Only meets 1 of the 3 requirements for optimal bank stability. 5 4	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas. 3 2 1
Riparian Buffer Zone Width Right Bank 10 Left Bank 10	Width of vegetation greater than 18 m (10) 9	Width of vegetation >12 to 18m 8 7 6	Width of vegetation 6 to 12 m. human activities close to system 5 4	Less than 6 m of buffer zone due to intensive human activities 3 2 1
Riparian Zone Vegetation Quality Right Bank 10 Left Bank 10 Secondary Score 80	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance. (10) 9	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed. 8 7 6	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious. 5 4	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). 3 2 1

136 **TOTAL SCORE**

Date:	Analyst:	Signature:
9/25/14	O'Neal, Coker, Winn	Ashley Oneal

✓leaf ✓leaf ✓snags ✓roots ✓sand

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Length of grid represents 100 m of stream (not linear meters).
(Horizontal scale is double vertical scale, draw proportionately).

Location: Sweetwater Branch

Date: 9/25/14

Sampler: O'Neal

100 m: Latitude _____
Longitude _____

0 m: Latitude _____
Longitude _____

Substrates: Code key, draw proportionate habitat abundance. %

//	Snags	2 %
55	Roots/undercut banks	1 %
0	Leaf Packs (or mats)	1.5 %
	Aquatic Macrophytes	
	~~Hay~~	
	Pools — total # observed = ____ ; # range expected = ____	

Average width 6 m
Average depth .2 m

Velocity measured at 50 meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering:
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability: very stable
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:
½ .5m

totals
snag 14.5 m²
root 8.25 m²
leaf 10.5 m²

4+? pools

sand
some smothering, silty, but smag not buried

62-160.800, F.A.C

Revision Date: March 1, 2014

FDEP FORM FD 9000-3: PHYSICAL/CHEMICAL CHARACTERIZATION FIELD SHEET

SAMPLE ID _____ ORG ID _____ LATITUDE 30.524 → get more digits

COUNTY Liberty Co. STORET # 3101005 LONGITUDE -84.9735

DATE 9/25/14 TIME 0945 SAMPLING AGENCY FDEP

SITE NAME Sweetwater Branch

FIELD ID/NAME SWTREF RECEIVING BODY OF WATER Apalachicola River

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) : check %

Forest/Natural	Silviculture	Field/Pasture	Agricultural	Residential	Commercial	Industry	Other (Specify)
X	X		X				

Landscape Development Intensity Index (LDI): _____

Local Watershed Erosion (select one) : ☐ None ☒ Slight ☐ Moderate ☐ Heavy

Local Watershed NPS Pollution : ☐ No evidence ☒ Slight ☐ Moderate ☐ Heavy

Width of Riparian Vegetation (m) on Each Buffer Side
Left Bank : 718M Right Bank : 718M

Hydrologic Modification Score (per FT 3101) did not conduct

High Water Mark: .8 (m) + .2 (above present water level) = 1m (present depth) (above bed)

Artificially Impounded ☐ Yes ☒ No

Typical Width (m) Depth (m)/Velocity (m/sec) Transect

_____ m wide

.1 m/s	.2 m/s	.05 m/s
_____ m deep	_____ m deep	_____ m deep

Artificially Channelized : ☒ No ☐ Some recovery ☐ Mostly recovered, more sinuous ☐ Recent, severe

Canopy Cover % ☐ Open ☐ Lightly Shaded (11-45%) ☒ 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

	None	Slight	Moderate	Severe
Sand Smothering:	☐	☒	☒	☐
Silt Smothering:	☒	☐	☐	☐
Algae Smothering:	☒	☐	☐	☐

SUBSTRATE TYPE

Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon

	% Coverage	INVERT # Times Sampled	PERI # Times Sampled
Woody Debris (Snags)	2%	5	
Undercut Banks / Roots	1%	5	
Leaf Packs or Mat	1.5%	5	
Aquatic Vegetation			
Rock or Shell Rubble..			
Sand.....	95	5	
Mud / Muck / Silt			
Other			
Other			

WATER QUALITY

	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)
Top :	.05m	19.46	6.11	9.55	103.9	34		~~.8~~ .2
Mid:								☒ VOB
Bottom								TOTAL DEPTH

Meter ID: ~~YSI #7~~ LO. YSI #7 .2m

Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐

Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐

Water Sample Taken? ☒ Yes ☐ No
Sample Preserved? ☒ Yes ☐ No
Lot Number: 135111 Exp: 11/13/14

Color Tannic ☐ Green (Algae) ☐ Clear ☐ Other (Specify) ☐ _____

Algae Sample Taken? ☐ Yes ☒ No
Sample Preserved? ☒ Yes ☐ No
Lot Number: ~~135111~~ Exp: ~~11/13/14~~

Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐ leaf particles in water column moving downstream

ABUNDANCE

	Not Obs.	Rare	Common	Abundant
Periphyton:	☒	☐	☐	☐
Fish:	☒	☐	☐	☐
Aquatic Plants:	☐	☒	☐	☐
Iron/Sulfur Bacteria:	☒	☐	☐	☐

System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐ _____

AMBIENT FIELD CONDITIONS / NOTES:
overcast, high 60s

☒ The antecedent hydrologic conditions have been met to my best knowledge.

SAMPLING TEAM Weilendorf, O'Neal, Coker, Wiwi

SIGNATURE : Ashley O'Neal DATE: 9/25/2014

Revision Date: September 19, 2012

Form FD9000-28 Water Field Form 031306_FD9000-28.doc

SITE NAME: Sweetwater Branch DATE: 9/25/14 TIME 0945 (military) (EST)/CST DEPTH^: .2 ft (m) FIELD ID: SWTREF

SAMPLING TEAM MEMBERS	WQ MEASUREMENTS	DOCUMENTATION	SAMPLE COLLECTION	PRESERVATION	PRESERVATION CHECK
AO					
~~O'Neal (Other)~~ O'Neal		X			
Wellendorf			X		
Coker			X	X	X
Wiwi	X				

SAMPLING EQUIPMENT

- [x] Sample Container
- [ ] Pole
- [ ] Pump ID#: _____
- [ ] Tubing type: _____
- [ ] Other _____
- [ ] Other _____

WATER QUALITY MEASUREMENTS

Instrument ID: ~~YSI #1~~ YSI #7

COLLECTION MODE

- [x] Wading
- [ ] Diving
- [ ] From Shore
- [ ] Other _____

Via Boat
- [ ] Canoe
- [ ] Electric Motor
- [ ] Gasoline Motor

Parameter Suite	Parameter(s)/Method	Matrix Code*	Preservation**	Preservative Lot #	pH Check	# Bottles ***
Preserved Nutrients	[x] TKN [x] TP [x] NOx [x] NH3 [x] TOC [ ] Total N [ ] Other:	S W	[x] Ice [x] H_2SO_4	135111	[x] <2	1
Filtered Nutrients	[ ] oP [ ] Other:	W	[ ] Ice [ ] .45 um Filter			
Unpreserved Nutrients	[ ] NO_2 [ ] NO_3 [ ] SO4 [ ] Other:	W	[ ] Ice			
Physical/Aggregate Properties	[x] TDS [x] TSS [ ] TS [x] Turbidity [x] Alk [x] Color [ ] Other:	S W	[x] Ice			1
Chlorophyll	[x] CHL-PPTN-W	S W	[x] Ice			1
BOD	[ ] BOD-INHB [ ] BOD-UNIN	W	[ ] Ice			
Microbiology	MF: [x] E coli [ ] T Coli [x] F Coli [ ] Entero [ ] F Strep	S W	[x] Ice			3
Macroinvertebrates	[x] MI-FW-QLDC [ ] MI-FW-QLBR [ ] MI-FW-QNNC [ ] MI-MN-QNNC	S W	[x] Formalin			3
Phytoplankton	[ ] PKD-QN-C [ ] DTY-QN-C	W	[ ] Lugol's			
Periphyton	[ ] PRN-QL-C [ ] DTM-QL-C [ ] PRN-QN-C [ ] DTM-QN-C	W	[ ] Formalin			
AGP	[ ] AA-AGP [ ] AA-LIM-NUT	W	[ ] Ice			
Metals	[ ] W-ICP [ ] W-FIAS [ ] W-ICPMS [ ] W-ICP-Tr	W	[ ] HNO_3		[ ] <2	
Filtered Metals	[ ] W-ICP-F [ ] W-FIAS-F [ ] W-ICPMS-F [ ] W-ICP-Tr-F	W	[ ] HNO_3 [ ] .45 um Filter		[ ] <2	
Mercury	[ ] W-HG-AF	W				
BaseNeutral / Acid Extractable	[ ] W-BNA [ ] W-AE [ ] W-BN [ ] W-PAH	W	[ ] Ice			
	[ ] W-FL-PRO [ ] W [ ] Other:	W	[ ] Ice [ ] H_2SO_4		[ ] <2	
Pesticides	[ ] W-PEST-CL [ ] W-PCB [ ] W PEST-NP [ ] W-PSCL-PCB	W	[ ] Ice			
	[ ] W-NP-AA-SF [ ] W-PC-AA-SF [ ] W-PSHRB-NP [ ] W-SLFN-UREA [ ] W-SULFN-LC [ ] Other:	W	[ ] Ice			
	[ ] W-ACIDHERB	W	[ ] Ice [ ] H_2SO_4			
	[ ] W-CARB	W	[ ] Ice [ ] MCAA			
Purgeables	[ ] W-VOC-MS	W	[ ] Ice			
	[ ] W-VOC-MS-A	W	[ ] Ice [ ] HCl			
Bioassay	Specify Test:	W	[ ] Ice			
OTHER	QPCR	S W	[ ] Other:			2

Notes: → overcast, high 60s

→ LAT / LONG (d/d)

30.524 / -84.9735

→ long gloves used for micro / QPCR collection

Use one line for each set of sample (as supplied by the laboratory) containers. Use separate sheet for field or laboratory duplicate or blank or different water depth

^Enter "S" for surface if collected at a depth less than or equal to 1 foot

*Matrix Codes (Insert prefix): **SW** = Surface Water **GW** = Groundwater **DW** = Drinking Water **WW** = Wastewater **O** = Other: _____

****PRESERVATIVES:1 ml added unless otherwise noted**

***Enter number of containers supplied by the laboratory for the test (e.g., 3 for volatile organics, etc.)

DEP Bureau of Laboratories Water Sample Collection Record

(Use with FDEP SOP-001/01 Form FD 9000-3 Physical/Chemical Characterization Field Sheet)

Florida Department of Environmental Protection

Central Laboratory Sample Submittal Form

Event ID *

Request Number: RQ-2014-08-04-10
SCI reference sites

Requester: Larry Olney
Field Report Prepared By: Ashley O'Neal

Customer: BSSP
Project ID: SCIREF
PMAS:

Collected By: Ashley O'Neal
Sampling Agency: FDEP
Send Final Report To: Joy Jackson

Lab ID *
Location: Sweetwater Branch
Field ID: Sweetwater Branch
Matrix (include type e.g. Salt, Fresh, etc): Fresh
Temp (C): 19.46
pH: 6.11
Latitude: 30.524 N ☒ dd ☐ dms
Longitude: 84.9735 W ☒ dd ☐ dms
☐ Comp ☒ Grab
Collection (comp begin or grab) Eastern Date: 9/25/14 Time: 0945 Central
Composite end Eastern Date Time Central
Tot Res Chlorine (mg/L)
Diss Oxygen (mg/L): 9.55
Storet Station Number: 31010051
Bottle Group(s)**: A, B
Sample Depth: ☒ m ☐ ft: .05
Salinity (PPTh): 34
☒ Sp Conductance (umho/cm)
NPDES Number
Comments

Lab ID *
Location: Crooked Creek
Field ID: Crooked Creek
Matrix (include type e.g. Salt, Fresh, etc): Fresh
Temp (C): 19.67
pH: 6.24
Latitude: 30.583196N ☒ dd ☐ dms
Longitude: 84.880575 W ☒ dd ☐ dms
☐ Comp ☒ Grab
Collection (comp begin or grab) Eastern Date: 9/25/14 Time: 1300 Central
Composite end Eastern Date Time Central
Tot Res Chlorine (mg/L)
Diss Oxygen (mg/L): 9.77
Storet Station Number: 31010050
Bottle Group(s)**: A, B
Sample Depth: ☒ m ☐ ft: .1
Salinity (PPTh): 32
☒ Sp Conductance (umho/cm)
NPDES Number
Comments

Lab ID *
Location
Field ID
Matrix (include type e.g. Salt, Fresh, etc)
Temp (C)
pH
Latitude ☐ dd ☐ dms
Longitude ☐ dd ☐ dms
☐ Comp ☐ Grab
Collection (comp begin or grab) Eastern Date Time Central
Composite end Eastern Date Time Central
Tot Res Chlorine (mg/L)
Diss Oxygen (mg/L)
Storet Station Number
Bottle Group(s)**
Sample Depth: ☐ m ☐ ft
Salinity (PPTh)
☐ Sp Conductance (umho/cm)
NPDES Number
Comments

Lab ID *
Location
Field ID
Matrix (include type e.g. Salt, Fresh, etc)
Temp (C)
pH
Latitude ☐ dd ☐ dms
Longitude ☐ dd ☐ dms
☐ Comp ☐ Grab
Collection (comp begin or grab) Eastern Date Time Central
Composite end Eastern Date Time Central
Tot Res Chlorine (mg/L)
Diss Oxygen (mg/L)
Storet Station Number
Bottle Group(s)**
Sample Depth: ☐ m ☐ ft
Salinity (PPTh)
☐ Sp Conductance (umho/cm)
NPDES Number
Comments

Relinquished By:	Date/Time	Shipping Method:	Received By:	Date/Time	Relinquished By:	Date/Time	Received By:	Date/Time
Ashley O'neal	9/25/14 1634	hand delivered						9/25/14 1635

* Shaded Areas for Lab use only.

** Please see reverse side for Bottle Group information.

last revised October 1, 2003

Group: A	Bottle Type: MI-FW-QLDC	PJ-2L	# of Bottles: 4	Preservative:	Formalin	**Enter Number of Bottles Sent to Lab**	6
Group: B	Bottle Type: CHLSUITE-W	BP-1L	# of Bottles: 2	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	2
Group: B	Bottle Type: TURBIDITY W-ALK W-COLOR W-TDS W-TSS	P-1L	# of Bottles: 2	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	2
Group: B	Bottle Type: W-NH3 W-NO2NO3 W-S-A-TP W-TKN W-TOC	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	**Enter Number of Bottles Sent to Lab**	2
Group: B	Bottle Type: W-SUC-AA-R	BG-1L	# of Bottles: 3	Preservative:	ICE	**Enter Number of Bottles Sent to Lab**	3

W - Fecal Coliforms } ~~# of bottles~~
W - E Coli } # of bottles 6

W - QPCR # of bottles 2

Form FD 9000-32 **FDEP Linear Stream Vegetation Survey (DEP SOP FS 7320)** Revised 6/12/12

Waterbody: SWEETWATER BRANCH | Date: 9/25/14 | County: LIBERTY | Storet Number: 3101005L

Analyst: L. OLNEY | Signature: L. Olney

Comments: < $1 m^2$ MACROPHYTES

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1 m^2 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	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Alternanthera philoxeroides											
Bacopa caroliniana											
Bacopa monneri											
Bidens mitis											
Boehmeria cylindrica											
Centella asiatica											
Cephalanthus occidentalis											
Ceratophyllum demersum											
Chara											
Cicuta maculata											
Cladium jamaicense											
Colocasia esculenta											
Crinum americanum											
Diodia virginiana											
Eichhornia crassipes											
Eleocharis (wispy viviparous)											
Hydrilla verticillata											
Hydrocotle											
Hygrophila polysperma											
Hymenocallis											
Itea virginica											
Lachnanthes caroliniana											
Landoltia punctata											
Lemna											
Limnophila sessiflora											
Ludwigia leptocarpa											
Ludwigia palustris											
Ludwigia peruviana											
Ludwigia repens											
Luziola fluitans											
If no Dominant or Co-Dominant were selected, indicate with an "X"											

HERBACEOUS SPECIES	Meter Mark 0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	Specimen collected (check)
Micranthemum glomeratum											
Micranthemum umbrosum											
Myriophyllum aquaticum											
Najas guadelupensis											
Nuphar luteum											
Orontium aquaticum											
Panicum hemitomon											
Panicum repens											
Panicum rigidulum											
Pistia stratioides											
Polygonum glabra											
Polygonum hydropiperoides											
Polygonum punctatum											
Pontedaria cordata											
Potamogeton illinoensis											
Ruellia simplex											
Sacciolepis striata											
Sagittaria kurziana											
Sagittaria lancifolia											
Sagittaria latifolia											
Salix caroliniana											
Salvinia minima											
Samolus parviflora											
Saururus cernuus											
Typha											
Vallisneria americana											
Zizania aquatica											

Indicate % cover macrophytes per section											
0-5% Macrophyte Coverage											
>5 and ≤10% Macrophyte Coverage											
>10 and ≤25% Macrophyte Coverage											
>25 and ≤50% Macrophyte Coverage											
> 50% Macrophyte Coverage											

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Sweetwater Brandt | County: Liberty | Date: 9/25/14 | Investigators: R. Coker

STORET Station Number:

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
0	1	N		
	2			
	3			
	4			
	5			90
	6			
	7			
	8			
	9			
10	1	N		
	2			
	3			
	4			
	5			81
	6			
	7			
	8			
	9			
20	1	N		
	2			
	3			
	4			
	5			82
	6			
	7			
	8			
	9			
30	1	N		
	2			
	3			
	4			
	5			80
	6			
	7			
	8			
	9			
40	1	N		
	2			
	3			
	4			
	5			95
	6			
	7			
	8			
	9			
50	1	N		
	2			
	3			
	4			
	5			91
	6			
	7			
	8			
	9			

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover
60	1	N		
	2			
	3			
	4			
	5			89
	6			
	7			
	8			
	9			
70	1	N		
	2			
	3			
	4			
	5			56
	6			
	7			
	8			
	9			
80	1	N		
	2			
	3			
	4			
	5			75
	6			
	7			
	8			
	9			
90	1	N		
	2			
	3			
	4			
	5			60
	6			
	7			
	8			
	9			
100	1	N		
	2			
	3			
	4			
	5			90
	6			
	7			
	8			
	9			

Secchi depth	
Estimated?	

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

Check accompanying data collected at same site/date.	
Algal mat sample	
Linear Veg Survey	
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

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%.