

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

SAMPLE ID _____ ORG ID _____ LATITUDE 30° 28' 36.5" N
 COUNTY Jefferson STORET # 22030061 LONGITUDE 84° 00' 24.7" W
 DATE 7/23/14 TIME 1530 SAMPLING AGENCY FDEP
 SITE NAME Lloyd Creek
 FIELD ID/NAME Lloyd Ref RECEIVING BODY OF WATER _____

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)		
☐	☐	☐	☐	☐	☐	☐	☐	☐	
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								☐ m wide	
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>				☐				☐ m/s <u>0.5</u> m/s ☐ m/s	
High Water Mark: <u>2.5</u> + <u>0.25</u> = <u>2.75</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No				☐ m deep <u>0.2</u> m deep ☐ m deep	
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): <u>some</u>			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)	
Woody Debris (Snags)			☐	<u>24.4</u>	<u>6.97</u>	<u>8.48</u>	<u>101.3</u>	<u>61</u>			
Undercut Banks / Roots			☐							☐ VOB	
Leaf Packs or Mat			☐							TOTAL DEPTH	
Aquatic Vegetation			☐								
Rock or Shell Rubble			☐								
Sand			☐								
Mud / Muck / Silt			☐								
Other			☐								
Other			☐								
			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐			Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Sticky ☐ Other ☐					
			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>126185</u> Exp: <u>9/3/14</u>			Color Tannic ☒ Green (Algae) ☐ Clear ☐ Other (Specify) ☐					
			Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: _____ Exp: _____			Clarity Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐					
ABUNDANCE Not Obs. Rare Common Abundant			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐								
Periphyton: ☐ ☒ ☐ ☐			AMBIENT FIELD CONDITIONS / NOTES: <u>hot, humid ~90°</u>								
Fish: ☐ ☐ ☒ ☐			☒ The antecedent hydrologic conditions have been met to my best knowledge.								
Aquatic Plants: ☒ ☐ ☐ ☐											
Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐											

SAMPLING TEAM

SIGNATURE

DATE

Ashley O'Neal, Cheryl Swanson, Larry Olney, Meghann Wiesen

Cheryl Swanson

7/23/14

DEP-SOP-001/01: Form FD 9000-5
STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION
STREAM/RIVER HABITAT ASSESSMENT FIELD SHEET

SUBMITTING AGENCY CODE: _____		STORET STATION NUMBER: _____	DATE (MM/DD/YY): <u>07/23/14</u>	RECEIVING BODY OF WATER: _____
SUBMITTING AGENCY NAME: _____				
REMARKS: _____	COUNTY: <u>Jefferson</u>	LOCATION: <u>Lloyd Creek</u>	FIELD ID/NAME: _____	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock]	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity <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
Substrate Availability <u>3</u>	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 <u>3</u> 2 1
Water Velocity <u>20</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec ≥0.33 0.31 0.29 0.27 >0.25 <u>20</u> 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 <u>11</u> ----- Primary Score <u>47</u>	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 <u>11</u>	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 <u>20</u>	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 <u>5</u> Left Bank <u>5</u>	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull 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 <u>10</u> Left Bank <u>10</u>	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 <u>10</u> Left Bank <u>10</u> ----- Secondary Score <u>70</u>	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

117

TOTAL SCORE

Date: <u>7/23/14</u>	Analyst: <u>Cheryl Swanson</u>	Signature: <u>Cheryl Swanson</u>
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Waterbody: Lloyd Creek

Date: 7/23/14

County: Jefferson

Storet Number: 22030061

Analyst:

L. OLIVER

Signature:

Comments: No PLANTS IN WATER

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.

[illegible]

Group: A	Bottle Type:	PJ-2L	# of Bottles: 4	Preservative:	Formalin	Enter Number of Bottles Sent to Lab
	MI-FW-QLDC					5
Group: B	Bottle Type:	BP-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	CHL-CORR-W					2
Group: B	Bottle Type:	P-1L	# of Bottles: 2	Preservative:	ICE	Enter Number of Bottles Sent to Lab
	TURBIDITY					2
	W-ALK					
	W-COLOR					
	W-TDS					
	W-TSS					
Group: B	Bottle Type:	P-500ML	# of Bottles: 2	Preservative:	ICE And H2SO4	Enter Number of Bottles Sent to Lab
	W-NH3					2
	W-NO2NO3					
	W-S-A-TP					
	W-TKN					
	W-TOC					

SCI Reference Sites

RQ-2014-07-07-13

Ship Cooler On: 6/9/2014

Requester: Joy Jackson

Customer/Project: BSSP/SCIREF

Priority: 3

80-245-8074

2600 Blair Stone Road, MS 6511

Tallahassee, FL 32399

Attn: Joy Jackson

Comments:

Sandy & S. Fork Bear Creek

Lloyd + WELAUNEZ CREEK

Requested Analyses:

Group: A

of Sites: 2

Container ID: PJ-2L

Qty: 4

Preservation: Formalin

Lot #

Bio-Wash

Description: Plastic Jar 2 L

Analysis

MI-FW-QLDC

Description

No. Taxa of FW macroinverts, qual samp, 20 dipnets.

Group: B

of Sites: 2

Container ID: BP-1L

Qty: 2

Preservation: ICE

Lot #

110653

Description: Brown Plastic Bottle 1L

Analysis

CHLSUITE-W

Description

Phytoplankton chlorophyll-a corrected, uncorrected, phaeophytin and ratio by spectrophotometry

Container ID: P-1L

Qty: 2

Preservation: ICE

Lot #

~~005906~~
00058886

Description: Plastic Bottle 1L

Analysis

TURBIDITY

W-ALK

W-COLOR

W-TDS

Description

Turbidity in aqueous matrices

Alkalinity in aqueous matrices as mg CaCO3/L

True Color measured at 450 nm

Total Dissolved Solids in aqueous matrices

Container ID: P-500ML

Qty: 2 Preservation: ICE And H2SO4

Lot # 00058661

Description: Plastic Bottle 500 mL

Affix YELLOW sulfuric acid dot to container.

Analysis

W-NH3

W-NO2NO3

W-S-A-TP

W-TKN

W-TOC

Description

Ammonia in aqueous matrices as mg N/L

Nitrite/Nitrate in aqueous matrices as mg N/L

Total Phosphorus in aqueous matrices as mg P/L

Total Kjeldahl Nitrogen in aqueous matrices

Nonpurgeable Organic Carbon in aqueous matrices

Container ID: BG-1L

Qty: 6 Preservation: ICE

Lot # 00059061

Description: Brown Glass Bottle 1L

Analysis

W-SUC-AA-R

Description

Analysis of sucralose in water matrices by HPLC/MS/MS

Cooler Packed By: MB

Date: 6/13/14

DEP Cooler ID #(s): 2 coolers

Kit must also include:

☒ Field Sheets☒ Temperature Control Bottle (1 per cooler)☒ FedEx Bills, if applicable (1 per cooler) MB☒ Plastic Bags

If Preservation Included:

ID _____

Lot # _____

ID _____

Lot # _____

ID _____

Lot # _____

ID _____

Lot # _____

Cooler received intact? (Circle one) Yes No

Received By/Date: _____

PLEASE RETURN ALL COOLERS FOR RQ-2014-06-23-41