



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

March 2017

PAGE 1 OF 1

Data Qualified?

Yes / No

Location/STORET Station Name: Mosquito Crk @ SR 269

Date: 08/31/2017
(mm/dd/yyyy)

STORET # G2TLHR0015

WBID: 376A

Latitude: 30.6886088

County: RQ - 2017-05-22-43

ORG ID: 21FLTLHR

Longitude: 84.8415925

Receiving Body of Water: N/A

Field ID: G2TLHR0015-2017-02

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment		
P. Blair										☒ Sample Container	☒ Van Dorn	☐ Pole
J. Burdett										☐ 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 / Pooled / Low / Normal / High / Flooded

Matrix: Fresh / Marine / DI

Meter ID#

Photos: Yes / No

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	1110	0.3	0.8	7.08	86	6.4	0.03	0.3	60	25.2
CEN	31997	31978	78242							

Biological Samples Collected: None / HA / SCI / RPS / Algae ID / LVS / LVI / Other

SBIO ID Numbers: 31978 SBIO-ID: 31974 RPS-ID: 8921 Macrophyte-ID: LIMS#:

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	7086060	3-27-18	☒ <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-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			
Periphyton	☐ ALGAE-ID	☐ Ice			
Microbiology	☒ E Coli ☐ F Coli ☐ Enterococci ☐ qPCR	☒ Ice			
Tracers	☐ W-SUC-AA-R ☐ W-UHERB-AA ☐ W-AHERB-AA	☐ Ice			
Pesticides	☐ W-PSNP-TQ ☐ W-AHERB-AA ☐ W-PYR-AA-R ☐ W-PCL-SQ-R ☐ W-UHERB-AA ☐ W-GLYPH ☐ W-SUC-AA-R	☐ Ice ☐ Other			

Notes:

G2TLHR0015-2017-02

WBID 376A Field ID ↑ STORET ↓

Mosquito Creek @
SR 269

G2TLHR0015

Signature: [Signature]

Date: 08/31/2017

Field Parameters Entered into LIMS: JB 11/9/17

Field Parameters QC in LIMS: JB 3/7/18

Date Migrated to STORET: [Initials/Date]

Field Sheets Scanned/Saved: [Initials/Date]

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

SAMPLE ID G2TLHR0015 ORG ID _____ LATITUDE _____
 COUNTY Galsen STORET # _____ LONGITUDE _____
 DATE 8-31-17 TIME _____ SAMPLING AGENCY 8034
 SITE NAME WBID 376A Mosquito Creek @ 269
 FIELD ID/NAME G2TLHR0015 RECEIVING BODY OF WATER N/A

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☒ 80 Commercial ☒ 20 Industry ☐ Other (Specify) ☐							Landscape Development Intensity Index (LDI) ☐	
Local Watershed Erosion (select one): ☐ None ☒ Slight ☐ Moderate ☐ Heavy Local Watershed NPS Pollution: ☒ No evidence ☐ Slight ☐ Moderate ☐ Heavy					Typical Width (m) Depth (m)/Velocity (m/sec) Transect 10m m wide 0.33 m/s 0.33 m/s 0.33 m/s 0.4 m deep 0.8 m deep 0.5 m deep			
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: 10m Right Bank: 10m			Hydrologic Modification Score (per FT 3101) ☐					
High Water Mark: 0.3 + 0.8 = 1.1 (m) (above present water level) (present depth) (above bed)			Artificially Impounded ☒ Yes ☐ No					
Artificially ☒ No ☐ Mostly recovered, more sinuous Channelized: ☐ Some recovery ☐ 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 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 <table border="1"> <thead> <tr> <th></th> <th>% Coverage</th> <th>INVERT # Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td>1.4</td> <td></td> <td></td> </tr> <tr> <td>Undercut Banks / Roots</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Leaf Packs or Mat</td> <td>0.2</td> <td></td> <td></td> </tr> <tr> <td>Aquatic Vegetation</td> <td>0.2</td> <td></td> <td></td> </tr> <tr> <td>Rock or Shell Rubble</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand</td> <td>98.2</td> <td></td> <td></td> </tr> <tr> <td>Mud / Muck / Silt</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Other</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				% Coverage	INVERT # Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	1.4			Undercut Banks / Roots				Leaf Packs or Mat	0.2			Aquatic Vegetation	0.2			Rock or Shell Rubble				Sand	98.2			Mud / Muck / Silt				Other				Other				WATER QUALITY <table border="1"> <thead> <tr> <th></th> <th>Depth (M)</th> <th>Temp. (°C)</th> <th>pH (SU)</th> <th>D.O. (MG/L)</th> <th>D.O. Sat (%)</th> <th>Cond. (UMHO/CM)</th> <th>Salinity (PPT)</th> <th>SECCHI (M)</th> </tr> </thead> <tbody> <tr> <td>Top</td> <td>0.3</td> <td>25.2</td> <td>6.4</td> <td>7.1</td> <td>86</td> <td>60</td> <td></td> <td>0.3</td> </tr> <tr> <td>Mid</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bottom</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Meter ID: _____ TOTAL DEPTH: 0.9						Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top	0.3	25.2	6.4	7.1	86	60		0.3	Mid									Bottom								
	% Coverage	INVERT # Times Sampled	PERI # Times Sampled																																																																																
Woody Debris (Snags)	1.4																																																																																		
Undercut Banks / Roots																																																																																			
Leaf Packs or Mat	0.2																																																																																		
Aquatic Vegetation	0.2																																																																																		
Rock or Shell Rubble																																																																																			
Sand	98.2																																																																																		
Mud / Muck / Silt																																																																																			
Other																																																																																			
Other																																																																																			
	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)																																																																											
Top	0.3	25.2	6.4	7.1	86	60		0.3																																																																											
Mid																																																																																			
Bottom																																																																																			
			Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐		Water Surface Oils Normal ☒ Sheen ☐ Globbs ☐ Slick ☐ Other ☐																																																																														
			Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: _____ Exp: _____		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 Periphyton: ☐ ☒ ☐ ☐ Fish: ☒ ☐ ☐ ☐ Aquatic Plants: ☐ ☒ ☐ ☐ Iron/Sulfur Bacteria: ☒ ☐ ☐ ☐			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐																																																																																
AMBIENT FIELD CONDITIONS / NOTES: ☒ The antecedent hydrologic conditions have been met to my best knowledge.																																																																																			
SAMPLING TEAM <u>Blair/Burchett</u>				SIGNATURE <u>Paul Blair</u>		DATE: <u>8-31-17</u>																																																																													

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

SAMPLING AGENCY: <u>8034</u>		STORET STATION NUMBER: <u>G2TLHR0015</u>	DATE (MM/DD/YY): <u>8-31-17</u>	RECEIVING BODY OF WATER: <u>N/A</u>
REMARKS:	COUNTY: <u>Gadsden</u>	LOCATION:	FIELD ID/NAME: <u>WID576A Mosquito Creek</u>	

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>6</u>	20 19 18 17 16	15 14 13 12 11	10 9 8 7 <u>6</u>	5 4 3 2 1
Substrate Availability <u>2</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 3 <u>2</u> 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 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 <u>14</u> ----- Primary Score <u>42</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 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	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging in the past (>25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization <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
Bank Stability	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.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the root zone with raw, eroded areas.
Right Bank <u>8</u> Left Bank <u>8</u>	10 9	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>5</u> Left Bank <u>5</u>	10 9	8 7 6	5 4	3 2 1
Riparian Zone Vegetation Quality	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.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>7</u> Left Bank <u>7</u> ----- Secondary Score <u>50</u>	10 9	8 7 6	5 4	3 2 1

92 TOTAL SCORE

Date: <u>8-31-17</u>	Analyst: <u>Paul Blair</u>	Signature: <u>Paul Blair</u>
----------------------	----------------------------	------------------------------

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: WBID376A Mosquito Creek @ 269 County: Gadsden Date: 8-31-17 Investigators: Blair

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			60	1	N		
	2	N	✓			2	N	✓	
	3	N	✓			3	N	✓	
	4	N	✓			4	N	✓	
	5	N	✓	90		5	N	✓	95
	6	N	✓			6	N	✓	
	7	N	✓			7	N	✓	
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	
10	1	N	✓		70	1	N	✓	
	2	N	✓			2	N	✓	
	3	N	✓			3	N	✓	
	4	N	✓			4	N	✓	
	5	N	✓	88		5	N	✓	88
	6	N	✓			6	N	✓	
	7	N	✓			7	N	✓	
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	
20	1	N	✓		80	1	N	✓	
	2	N	✓			2	N	✓	
	3	N	✓			3	N	✓	
	4	N	✓			4	N	✓	
	5	N	✓	90		5	N	✓	90
	6	N	✓			6	N	✓	
	7	N	✓			7	N	✓	
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	
30	1	N	✓		90	1	N	✓	
	2	N	✓			2	N	✓	
	3	N	✓			3	N	✓	
	4	N	✓			4	N	✓	
	5	N	✓	86		5	N	✓	80
	6	N	✓			6	N	✓	
	7	N	✓			7	N	✓	
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	
40	1	N	✓		100	1	N	✓	
	2	N	✓			2	N	✓	
	3	N	✓			3	N	✓	
	4	N	✓			4	N	✓	
	5	N	✓	76		5	N	✓	75
	6	N	✓			6	N	✓	
	7	N	✓			7	N	✓	
	8	N	✓			8	N	✓	
	9	N	✓			9	N	✓	
50	1	N	✓						
	2	N	✓						
	3	N	✓						
	4	N	✓						
	5	N	✓	83					
	6	N	✓						
	7	N	✓						
	8	N	✓						
	9	N	✓						

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%.

Secchi depth 0.3
Estimated? N

points ranked 4-6 8
total points assessed 99
% points ranked 4-6 0

Check accompanying data collected at same site/date.
Algal mat sample ☐
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☐
Water sample ☒
RQ-2017-05-22-43

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

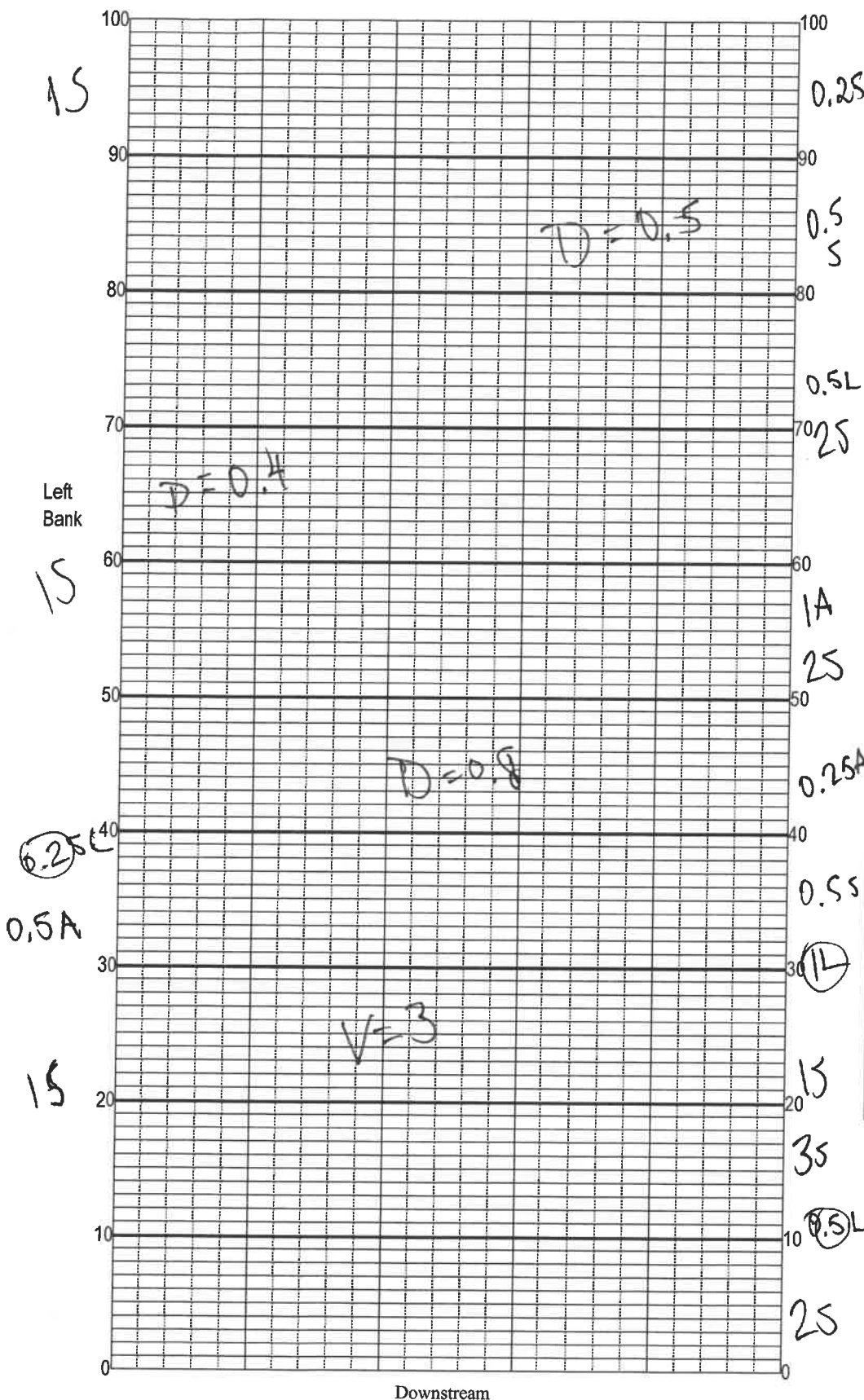
Waterbody: <u>WBD 376A Mosquito Creek @ 269</u>	Date: <u>8-31-17</u>	County: <u>Gadsden</u>	Storet Number: <u>G2TLHR0015</u>
Analyst: <u>Paul Blair</u>		Signature: <u>Paul Blair</u>	

Comments:

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]

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



Location: WBD 376A
 Date: 8-31-17
 Sampler: Blair/Burchett

100 m: Latitude _____
 Longitude _____
 0 m: Latitude _____
 Longitude _____

Substrates: Code key, draw proportionate habitat abundance.		%
☒ S	Snags	1.4
☐ R	Roots/undercut banks	
☐ L	Leaf Packs (or mats)	0.2
☐ A	Aquatic Macrophytes	0.2
☐ K	rock	
☐		
☐	Pools	total # observed = _____ # range expected = _____

Average width 10 m
 Average depth 0.56 m

Velocity measured at 25 meter mark.

WQ & chemistry taken at 6 meter mark.

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

Bank Stability:
 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:

S = 14
 A = 2
 L = 2.25

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

← 10m →