



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2020

Meter Passed End
of Day CCV
Yes / No

WIN Station Name: Marshall Creek @ SR2

Date: 6/30/2021

WIN/Field ID: G2TLHR0007

WBID: 151A

ENR: -

Latitude: 30.9365

County: JACKSON

Org ID: 21FLTLHR

Longitude: -85.3

Receiving Body of Water: Apalachicola - Chipola

RQ: 2021-03-15-35

Sampling Team Members		WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check
☒	Jonathan Woods	x		x		
☒	Jade Burtchett		x		x	x
☐						
☐						

Sampling Equipment	
☒ Sample Container	☐ Carboy
☐ Dipper	☐ Van Dorn
☐ Syringe	☐ Pole
Depth measured with: Meter	
Secchi Equipment ID:	
Collection Method	
☒ Wading	☐ Canoe/Kayak
☐ From Shore	☐ Electric Motor
☐ Other	☐ Gasoline Motor

Water Level: ☒ Normal ☐ Low ☐ High ☐ Dry ☐ Pooled ☐ Flooded						Meter ID#	154177		
Photos: NO	Flow: FLOW			Tide:		Tide Times:			
		High:		Low:					
Biological Samples Collected: ☐ None ☒ HA ☒ SCI ☒ RPS ☐ Algae ID ☒ LVS ☐ LVI Other:									
SBIO ID Numbers:									
Notes:									

Duplicate Sample

Time Zone: EST	Time:	Field ID: N/A	(WIN ID_DUP)
WIN DMT Activity ID:			

Blank

Time Zone:	Time:	Field ID:	(Blank Type_DDDMMYY)
DI Source:	Location:		
DI Type:	Equipment ID:		
DI Container (Name/ID):		DI Container Type:	

LIMS EVENT ID: WIN Import ID:

Enter Field Parameters, Verify Station ID In LIMS DMT: QC Station ID, Field Parameters In LIMS DMT:

Scan/Save Field Sheets Migrate Data to WIN: Verify Data In WIN:



RQ-2021-03-15-35

Customer: WQAP

Project ID: SMP

Collected By: Jonathan Woods, Jade Burtchett

Field Report Prepared By: Jonathan Woods

Sampling Agency: FDEP

Place Label Here

WIN ID/Field ID:



G2TLHR0007

Location: Marshall Creek @ SR2

Comments:

Matrix: Fresh

(Check one)

☒ GRAB☐ COMPOSITE

Date	Time	DO (mg/L)	DO (%SAT)	Temp. (C°)	pH	Sample Depth (m)	Secchi Disk (m)	Total Depth (m)	Sp COND (µmhos/cm)	Salinity (PPT _h)
	955 EST	6.18	73.3	23.8	7.28	0.3	0.4 ☐ VOB (S)	1.2	170.7	0.08
6/30/2021										
	EST									
Parameter Suite		Parameter Methods				Preservation		pH Check	# Bottles sent to Lab	Bottle Group
Preserved Nutrients (P-500ML)		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☒ Ice ☒ H2SO4*		☒ <2	1	A
		Lot #	1105060		Exp:	4/30/22				
Metals (P-500ML)		☒ W-ICPMS ☒ W-ICP ☒ W-HARD				☒ Ice ☒ HNO3*		☒ <2	1	A
		Lot #	0344060		Exp:	1/4/22				
Filtered Nutrients (P125ML)		☒ W-PO4-F ☒ Field Filtered 0.45 µm Filter				☒ Ice			1	A
		Filter Lot #	1716587							
		Syringe Lot #	0079900							
Chlorophyll (BP-1L)		☒ CHLSUITE-W				☒ Ice			1	A
Physical/Aggregate (Fresh) (P-1L)		☒ Alkalinity / W-F / W-TSS / TURBIDITY / W-CL-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice			1	A
Physical/Aggregate (Marine) (P-1L)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice				
Macroinvertebrates (PJ-2L)		☒ MI-FW-QLDC	Formalin Lot #	0		☐ Formalin			1	
Periphyton (PT-50ML)		☐ ALGAE-ID				☐ Ice				
Microbiology (Contract Lab Bottle)		☒ E Coli ☐ F Coli ☐ Enterococci ☐ Contract Lab				☒ Ice			1	A
Molecular (QPCR-P-500ML)		☐ PCR-HF183 ☐ PCR-BacR ☐ PCR-DG3 ☐ PCR-GULL2 ☐ PCR-GFD				☐ Ice				
Tracers (BG-500ML)		☐ W-E8321-DI ☐ W-E8321-MS				☐ Ice				
Pesticides (BG-500ML) (BG-1L)		☒ W-E8321-DI	☒ W-E8321-MS	☒ W-PSNP-TQ		W-CT-CL-R	☒ Ice		3	A
			W-CARB-AA (5 ml of MCAA** Buffer Solution)							
Phytoplankton/Periphyton					DTY-QN-C		☐ Ice			
					PKD-QN-BV					
Name: Jonathan Woods Jade Burtchett				Signature:				Date:		

*2.0 ml of Preservative used unless noted otherwise.

**MCAA: Monochloroacetic acid buffer solution

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

SAMPLE ID	ORG ID	LATITUDE
COUNTY	STORET # MARSHALL CREEK @ SR2	LONGITUDE
DATE 06/30/2021	TIME 9:55	SAMPLING AGENCY TLHROC
SITE NAME G2TLHR0007		
FIELD ID/NAME G2TLHR0007		RECEIVING BODY OF WATER

RIPARIAN ZONE / STREAM FEATURES

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category) : Forest/Natural 30 Silviculture 10 Field/Pasture 25 Agricultural 25 Residential 10 Commercial 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 10 m wide 0.25 m/s 0.25 m/s 0.25 m/s 1 m deep 1.2 m deep 0.8 m deep
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank : 18 Right Bank : 18 Hydrologic Modification Score (per FT 3101)		
High Water Mark: 0.3 + 1.2 = 1.5 (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># Times Sampled</th> <th>PERI # Times Sampled</th> </tr> </thead> <tbody> <tr> <td>Woody Debris (Snags)</td> <td>7.4</td> <td>7</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></td> <td></td> <td></td> </tr> <tr> <td>Aquatic Vegetation</td> <td>3.4</td> <td>7</td> <td></td> </tr> <tr> <td>Rock or Shell Rubble..</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sand.....</td> <td></td> <td>6</td> <td></td> </tr> <tr> <td>Mud / Muck / Silt</td> <td>89.2</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	# Times Sampled	PERI # Times Sampled	Woody Debris (Snags)	7.4	7		Undercut Banks / Roots				Leaf Packs or Mat				Aquatic Vegetation	3.4	7		Rock or Shell Rubble..				Sand.....		6		Mud / Muck / Silt	89.2			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></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Mid:</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>VOB</td> </tr> <tr> <td>Bottom</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>TOTAL DEPTH</td> </tr> </tbody> </table> Meter ID:			Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)	Top :									Mid:								VOB	Bottom								TOTAL DEPTH
	% Coverage	# Times Sampled	PERI # Times Sampled																																																																												
Woody Debris (Snags)	7.4	7																																																																													
Undercut Banks / Roots																																																																															
Leaf Packs or Mat																																																																															
Aquatic Vegetation	3.4	7																																																																													
Rock or Shell Rubble..																																																																															
Sand.....		6																																																																													
Mud / Muck / Silt	89.2																																																																														
Other																																																																															
Other																																																																															
	Depth (M)	Temp. (°C)	pH (SU)	D.O. (MG/L)	D.O. Sat (%)	Cond. (UMHO/CM)	Salinity (PPT)	SECCHI (M)																																																																							
Top :																																																																															
Mid:								VOB																																																																							
Bottom								TOTAL DEPTH																																																																							
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: 1103050 Exp: 4/30/22		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: 																																																																															
SAMPLING TEAM Woods Burtchett		SIGNATURE :																																																																													
		DATE : 06/30/2021																																																																													

DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: G2TLHR0007					County:		Date: 06/30/2021		Investigators: Woods Burtchett		
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	STORET Station Number: G2TLHR0007	
0	1	X	NO		60	1	X	NO		Secchi depth	0.4
	2	N	YES			2	N	YES		Estimated?	NO
	3	N	YES			3	N	YES		# points ranked 4-6	0
	4	N	YES			4	N	YES		total points assessed	82
	5	N	YES			5	N	YES		% points ranked 4-6	0
	6	N	YES			6	N	YES		Check accompanying data collected at same site/date. Algal mat sample Linear Veg Survey X Habitat Assessment X SCI/Biorecon X Water sample X RQ-2021-03-15-35	
	7	N	YES			7	N	YES			
	8	N	YES			8	N	YES			
	9	X	NO			9	N	YES			
10	1	X	NO		70	1	N	YES		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	
	2	N	YES			2	N	YES			
	3	N	YES			3	N	YES			
	4	N	YES			4	N	YES			
	5	N	YES			5	N	YES			
	6	N	YES			6	N	YES			
	7	N	YES			7	N	YES			
	8	N	YES			8	N	YES			
	9	X	NO			9	X	NO			
20	1	3	NO		80	1	X	NO			
	2	N	YES			2	N	YES			
	3	N	YES			3	N	YES			
	4	N	YES			4	N	YES			
	5	N	YES			5	N	YES			
	6	N	YES			6	N	YES			
	7	N	YES			7	N	YES			
	8	N	YES			8	N	YES			
	9	X	NO			9	X	NO			
30	1	X	NO		90	1	X	NO			
	2	N	YES			2	N	YES			
	3	N	YES			3	N	YES			
	4	N	YES			4	N	YES			
	5	N	YES			5	N	YES			
	6	N	YES			6	N	YES			
	7	N	YES			7	N	YES			
	8	N	YES			8	N	YES			
	9	X	NO			9	X	NO			
40	1	X	NO		100	1	X	NO			
	2	N	YES			2	N	YES			
	3	N	YES			3	N	YES			
	4	N	YES			4	N	YES			
	5	N	YES			5	N	YES			
	6	N	YES			6	N	YES			
	7	N	YES			7	N	YES			
	8	N	YES			8	N	YES			
	9	N	YES			9	3	NO			
50	1	X	NO		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 densimeter 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	N	YES								
	3	N	YES								
	4	N	YES								
	5	N	YES								
	6	N	YES								
	7	N	YES								
	8	N	YES								
	9	X	NO								

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

SAMPLING AGENCY: TLHROC		STORET STATION NUMBER: MARSHALL CREEK	DATE (MM/DD/YY): 06/30/2021	RECEIVING BODY OF WATER:
REMARKS:	COUNTY:	LOCATION:		FIELD ID/NAME: G2TLHR0007

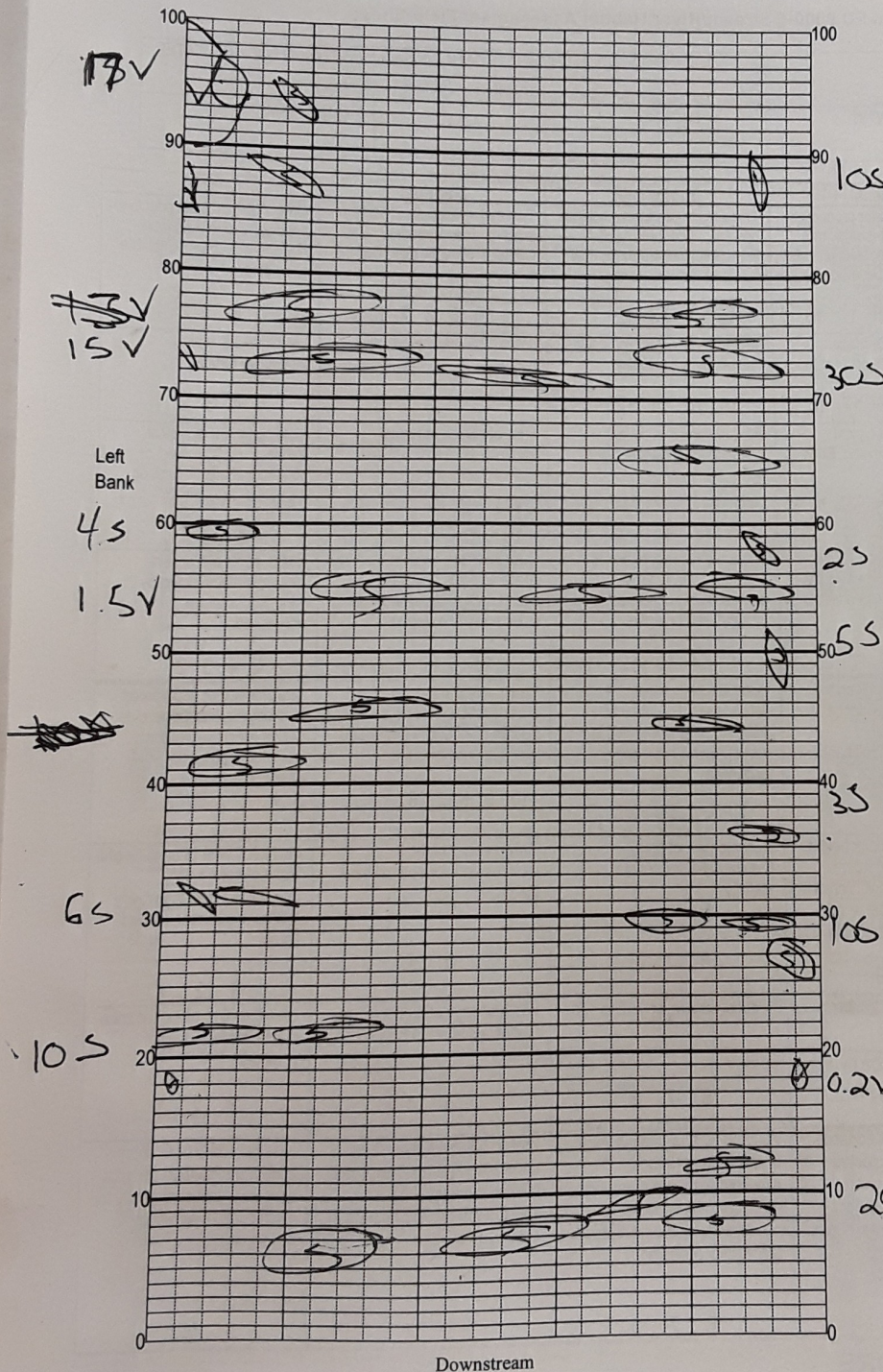
Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components Substrate Diversity <u>8</u>	Four or more major productive habitats present [snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock] 20 19 18 17 16	Three major productive habitats present. Adequate habitat. 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 <u>8</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 2 1
Water Velocity <u>16</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>13</u> ----- Primary Score <u>45</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 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 or straightening 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>10</u> Left Bank <u>10</u>	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody 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 woody 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>80</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

125

TOTAL SCORE

Date: 06/30/202	Analyst: Woods	Signature:
------------------------	-----------------------	------------

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



Location: Marshall @ 2
 Date: 06/30/21
 Sampler: Burtchett, Woods

100 m: Latitude	
Longitude	
0 m: Latitude	
Longitude	
Substrates: Code key, draw proportionate habitat abundance.	
☒ S	Snags 8.4
☐ 1	Roots/undercut banks
☐	Leaf Packs (or mats)
☒	Aquatic Macrophytes 3.37
☐	
☐	
☐	Pools
total # observed =	
# range expected =	

Average width 1.0 m
 Average depth 1.2 m

Velocity measured at 100 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:
 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:

8.4 S = 8.4 S
 33.7 A = 3.37 A

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