

Site: Gum Spring #2

Date: 6/25/10

Investigator: P. Madden;
L. Hester

Transect (m)	Point 1=right 9=left	Algal Thickness (0 - 5)	Algae Type	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness (0 - 5)	Algae Type	Canopy Cover		
0	1		F D O		60	1		F D O			
	2		F D O								
	3		F D O								
	4		F D O								
	5		F D O								
	6		F D O								
	7		F D O								
	8		F D O								
	9		F D O								
10	1		F D O		70	1	5	(F) D O	64/96		
	2		F D O								
	3		F D O								
	4		F D O								
	5		F D O								
	6		F D O								
	7		F D O								
	8		F D O								
	9		F D O								
20	1		F D O		80	1	5	(F) D O	2/96		
	2		F D O								
	3		F D O								
	4		F D O								
	5		F D O								
	6		F D O								
	7		F D O								
	8		F D O								
	9		F D O								
30	1		F D O		90	1	6	(F) D O	18/96		
	2		F D O								
	3		F D O								
	4		F D O								
	5		F D O								
	6		F D O								
	7		F D O								
	8		F D O								
	9		F D O								
40	1		F D O		100	1	5	(F) D O	0/96		
	2		F D O								
	3		F D O								
	4		F D O								
	5		F D O								
	6		F D O								
	7		F D O								
	8		F D O								
	9		F D O								
50	1		F D O		Algal Thickness Rank						
	2		F D O		0	1	2	3	4	5	6
	3		F D O		0 mm	<0.5 mm	0.5 - 1 mm	>1 to <6 mm	6 - 20 mm	2-10 cm	>10 cm
	4		F D O		Record an "X" for points where algae is not sampled because the substrate cannot be seen or reached with the hand.						
	5		F D O		Algae Type: F = Filamentous D = Diatoms O = Other						
	6		F D O		Record canopy cover as the number of small densiometer squares (out of 96) that HAVE TREE COVER. Measure while facing upstream.						
	7		F D O								
	8		F D O								
	9		F D O								

Notes: -avg depth: ~2 ft avg width: ~35 ft.
 -many snail egg clusters
 -only 4 transects could be

completed before Gum Spg. #2's run
 ends at spring bowl of Gum Spg. #3

hydro lab measurements on back →

hydrolab measurements

Temp: 24.73°C

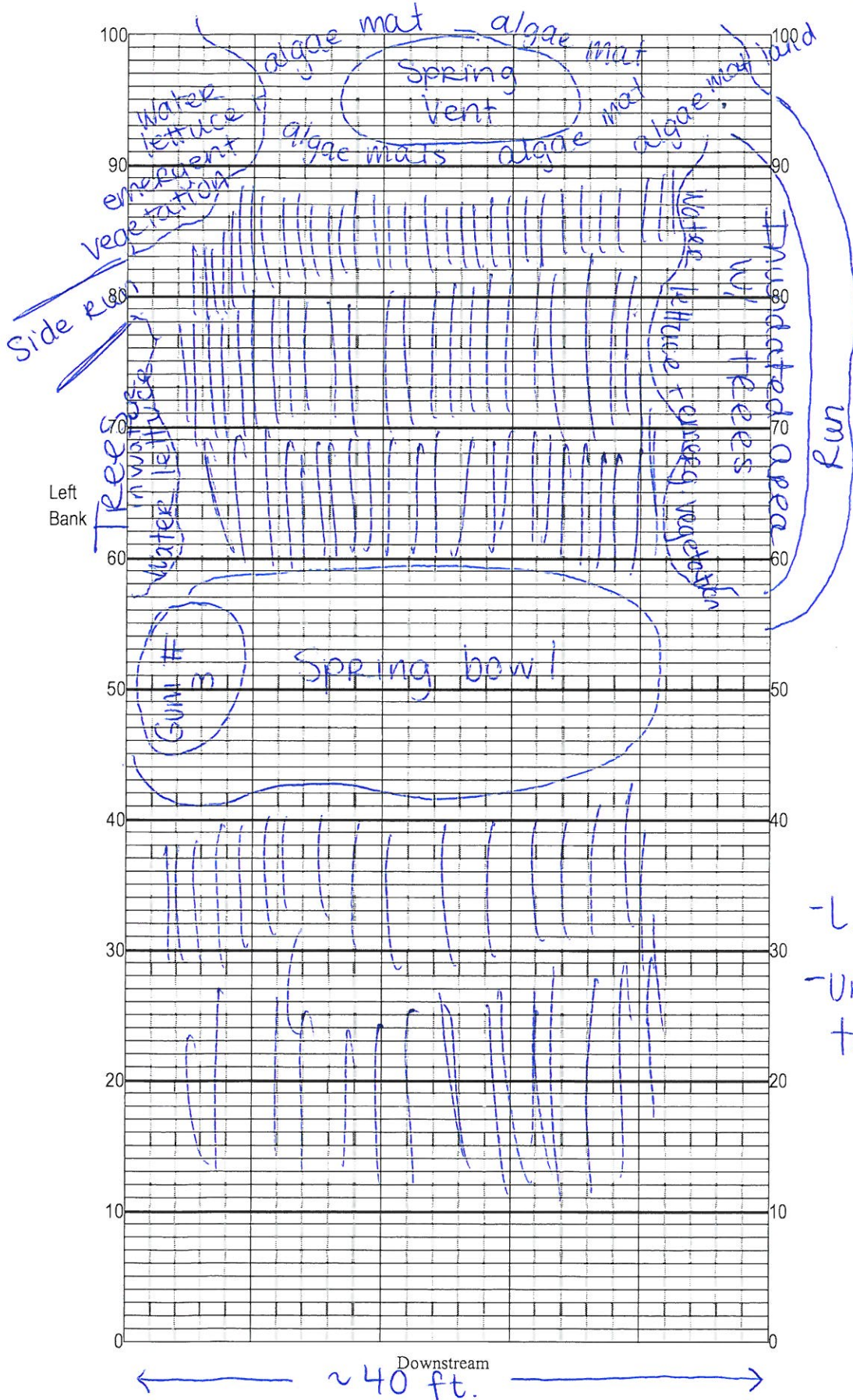
SpC: α^H 345

DO: 6.30 mg/L

pH: 7.40

DEP-SOP-001/01 Form FD 9000-4
Stream/River Habitat Sketch Sheet

Gum Spring #2
6/25/10



Substrates: Code key, draw proportionate habitat abundance.

- ☐ Snags
- ☐ Roots/undercut banks
- ☐ Leaf Packs (or mats)
- ☐ Aquatic Macrophytes
- ☒ grass with algae
- ☐
- ☐

Velocity:
Note where velocity measures were taken.

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.

-L. Hester; P. Madden
-Underwater photos taken

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

Revision Date: September 10, 2008

Gum Spring #2

Upstream
Measurements

L. Hester; P. Madden

6/25/10

36 ft across
tree on REW

interval: 1.8

Ang. Coef	Dist from init point	Width	Depth	Observation Depth (0.6)	Observation Depth Bottom (0.8)	Observation Depth Top (0.2)	Velocity		Adj for horiz angle or	Area	Discharge
							At point	Mean in vert			
REW	0.0										
1.00	0.0	0.00	0.25	0.00			0.00		0.000	0.00	0.00
					0.00						
						0.00					
1.00	1.8	0.00	0.7	0.00			-0.01		0.000	0.00	0.00
					0.00						
						0.00					
1.00	3.6	0.00	0.55	0.00			-0.01		0.000	0.00	0.00
					0.00						
						0.00					
1.00	5.4	0.00	1.00	0.00			-0.02		0.000	0.00	0.00
					0.00						
						0.00					
1.00	7.2	0.00	1.10	0.00			-0.02		0.000	0.00	0.00
					0.00						
						0.00					
1.00	9.0	0.00	1.80	0.00			-0.01		0.000	0.00	0.00
					0.00						
						0.00					
1.00	10.8	0.00	1.45	0.00			0.00		0.000	0.00	0.00
					0.00						
						0.00					
1.00	12.6	0.00	1.70	0.00			0.06		0.000	0.00	0.00
					0.00						
						0.00					
1.00	14.4	0.00	1.78	0.00			0.35		0.000	0.00	0.00
					0.00						
						0.00					
1.00	16.2	0.00	2.20	0.00			0.60		0.000	0.00	0.00
					0.00						
						0.00					
1.00	18.0	0.00	2.30	0.00			0.60		0.000	0.00	0.00
					0.00						
						0.00					
1.00	19.8	0.00	2.60	0.00					0.000	0.00	0.00
					0.00		0.75				
						0.00	0.10				
1.00	21.6	0.00	2.90	0.00					0.000	0.00	0.00
					0.00		0.66				
						0.00	0.50				
1.00	23.4	0.00	3.00	0.00					0.000	0.00	0.00
					0.00		0.50				
						0.00	0.43				
1.00	25.20	0.00	3.00	0.00					0.000	0.00	0.000
					0.00		0.41				
						0.00	0.15				
1.00	27.0	0.00	2.45	0.00			0.39		0.000	0.00	0.000
					0.00						
						0.00					
1.00	28.8	0.00	2.0	0.00			0.63		0.000	0.00	0.000
					0.00						
						0.00					
1.00	30.6	0.00	1.8	0.00			0.49		0.000	0.00	0.000
					0.00						
						0.00					
1.00	32.4	0.00	1.6	0.00			0.36		0.000	0.00	0.00

*Reading 20:

Dist. init pt: 34.2

Depth: 1.5

~~Obs~~ Velocity: 0.26

*Reading 21:

Dist init pt: 36.0

Depth: 1.4

Velocity: 0.09

Gum Spring #2

Downstream
measurements

L. Hester, P. Madden

6/25/10

36 ft across
tree on REW
1.8 interval

Ang Coef	Dist from init point	Width	Depth	Observation Depth (0.6)	Observation Depth Bottom (0.8)	Observation Depth Top (0.2)	Velocity		Adj for horiz angle or	Area	Discharge
							At point	Mean in vert			
REW	0.0										
1.00	0.0	0.00	0.90	0.00			-0.03		0.000	0.00	0.00
					0.00						
						0.00					
1.00	1.8	0.00	0.90	0.00			-0.02		0.000	0.00	0.00
					0.00						
						0.00					
1.00	3.6	0.00	1.50	0.00			-0.01		0.000	0.00	0.00
					0.00						
						0.00					
1.00	5.4	0.00	2.20	0.00			0.05		0.000	0.00	0.00
					0.00						
						0.00					
1.00	7.2	0.00	2.40	0.00			0.13		0.000	0.00	0.00
					0.00						
						0.00					
1.00	9.0	0.00	2.30	0.00			0.03		0.000	0.00	0.00
					0.00						
						0.00					
1.00	10.8	0.00	2.45	0.00			0.15		0.000	0.00	0.00
					0.00						
						0.00					
1.00	12.6	0.00	2.40	0.00			0.00		0.000	0.00	0.00
					0.00						
						0.00					
1.00	14.4	0.00	2.00	0.00			0.58		0.000	0.00	0.00
					0.00						
						0.00					
1.00	16.2	0.00	2.30	0.00			0.23		0.000	0.00	0.00
					0.00						
						0.00					
1.00	18.0	0.00	2.20	0.00			0.33		0.000	0.00	0.00
					0.00						
						0.00					
1.00	19.8	0.00	2.20	0.00			0.33		0.000	0.00	0.00
					0.00						
						0.00					
1.00	21.6	0.00	2.30	0.00			0.25		0.000	0.00	0.00
					0.00						
						0.00					
1.00	23.4	0.00	2.20	0.00			0.15		0.000	0.00	0.00
					0.00						
						0.00					
1.00	25.2	0.00	2.10	0.00			0.08		0.000	0.00	0.000
					0.00						
						0.00					
1.00	27.0	0.00	2.00	0.00			0.20		0.000	0.00	0.000
					0.00						
						0.00					
1.00	28.8	0.00	1.70	0.00			0.10		0.000	0.00	0.000
					0.00						
						0.00					
1.00	30.6	0.00	1.65	0.00			0.01		0.000	0.00	0.000
					0.00						
						0.00					
1.00	32.4	0.00	1.80	0.00			0.17		0.000	0.00	0.00

Reading #20

Dist init pt: 34.2

Depth: 1.6

Velocity: 0.08

Reading #21

Dist init. pt: 36.0

Depth: 1.4

Velocity: 0.02

