

Site: Nichols Spring Date: 6/22/10 Investigator: L. Hester; P. Madden

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			2		F D O			
	3		F D O			3		F D O			
	4		F D O			4		F D O			
	5		F D O			5		F D O			
	6		F D O			6		F D O			
	7		F D O			7		F D O			
	8		F D O			8		F D O			
	9		F D O			9		F D O			
10	1		F D O		70	1		F D O			
	2		F D O			2		F D O			
	3		F D O			3		F D O			
	4		F D O			4		F D O			
	5		F D O			5		F D O			
	6		F D O			6		F D O			
	7		F D O			7		F D O			
	8		F D O			8		F D O			
	9		F D O			9		F D O			
20	1		F D O		80	1		F D O			
	2		F D O			2		F D O			
	3		F D O			3		F D O			
	4		F D O			4		F D O			
	5		F D O			5		F D O			
	6		F D O			6		F D O			
	7		F D O			7		F D O			
	8		F D O			8		F D O			
	9		F D O			9		F D O			
30	1		F D O		90	1	5	F D O	67		
	2		F D O			2	5	F D O			
	3		F D O			3	5	F D O			
	4		F D O			4	0	F D O			
	5		F D O			5	0	F D O			
	6		F D O			6	5	F D O			
	7		F D O			7	5	F D O			
	8		F D O			8	5	F D O			
	9		F D O			9	4	F D O			
40	1		F D O		100	1	5	F D O	42		
	2		F D O			2	4	F D O			
	3		F D O			3	1	F D O			
	4		F D O			4	0	F D O			
	5		F D O			5	3	F D O			
	6		F D O			6	1	F D O			
	7		F D O			7	1	F D O			
	8		F D O			8	5	F D O			
	9		F D O			9	5	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								
	7		F D O								
	8		F D O								
	9		F D O								

 Notes: run before river very short;
could only complete 2 transects
-avg depth: 3 ft
-avg width of run: 15-20 ft.

Record canopy cover as the number of small densiometer squares (out of 96) that HAVE TREE COVER. Measure while facing upstream.

hydrolab measurements →

hydro lab measurements

Temp: 23.72°C

SP_c: 350

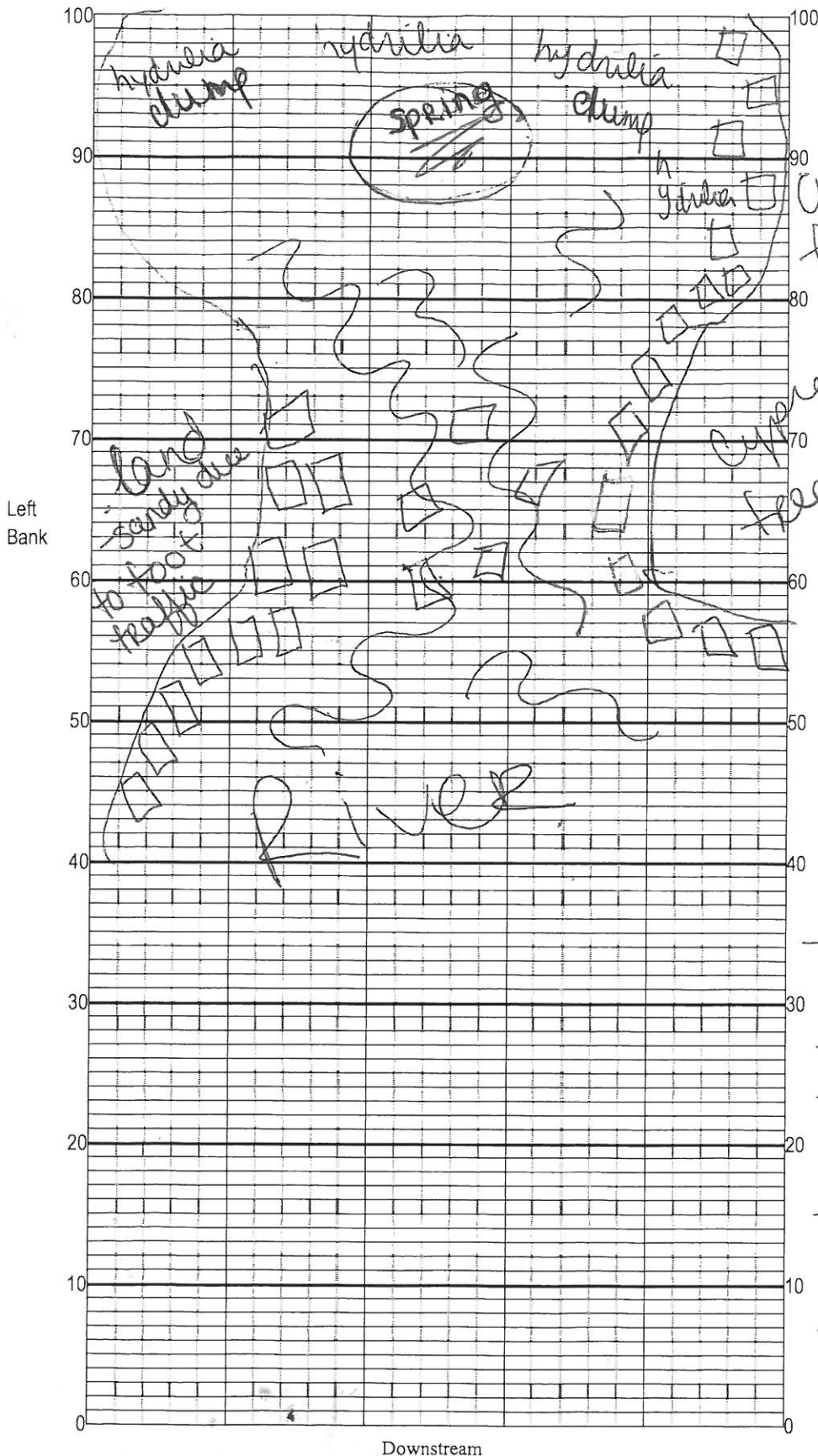
DO: 0.27

3.1% $\leftarrow$ % DO

pH 6.64

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

Nichols Spring
6/22/10



Substrates: Code key, draw proportionate habitat abundance.

- ☐ Snags
- ☐ Roots/undercut banks
- ☐ Leaf Packs (or mats)
- ☐ Aquatic Macrophytes
- ☒ stumps/logs with algae
- ☒ ground w/ some thin 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

- bottom of run filled with snags/branches, etc, w/ algae.
- ground of run is mostly sand + mud
- water tannic color
- Spring boil very prominent

← ~50 ft across →

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

- not much algae on ground of run, mostly found on snags/logs/branches, etc

Revision Date: September 10, 2008

- underwater photos taken

6/22/10

Nichols Spring

15 ft across
(3 ft from shore)
on Lsd.

$$\frac{12}{20} = 0.6 \text{ ft}$$

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	0.00	0	0.00					0.000	0.00	0.00
					0.00						
						0.00					
1.00	0.6	0.00	0.9	0.00			0.16		0.000	0.00	0.00
					0.00						
						0.00					
1.00	1.2	0.00	1.6	0.00			0.28		0.000	0.00	0.00
					0.00						
						0.00					
1.00	1.8	0.00	1.7	0.00			0.64		0.000	0.00	0.00
					0.00						
						0.00					
1.00	2.4	0.00	2.56	0.00					0.000	0.00	0.00
					0.00		0.55				
						0.00	0.13				
1.00	3.0	0.00	2.40	0.00			0.56		0.000	0.00	0.00
					0.00						
						0.00					
1.00	3.6	0.00	3.10	0.00					0.000	0.00	0.00
					0.00		0.56				
			3.15			0.00	0.27				
1.00	4.2	0.00	3.10 ^u	0.00			0.45		0.000	0.00	0.00
					0.00		0.18				
						0.00					
1.00	4.8	0.00	3.20	0.00					0.000	0.00	0.00
					0.00		0.49				
						0.00	0.14				
1.00	5.4	0.00	3.30	0.00					0.000	0.00	0.00
					0.00		0.51				
						0.00	0.39				
1.00	6.0	0.00	3.40	0.00					0.000	0.00	0.00
					0.00		0.56				
						0.00	0.22				
1.00	6.6	0.00	3.50	0.00					0.000	0.00	0.00
					0.00		0.54				
						0.00	0.25				
1.00	7.2	0.00	3.20	0.00					0.000	0.00	0.00
					0.00		0.55				
						0.00	0.49				
1.00	7.8	0.00	3.20	0.00					0.000	0.00	0.00
					0.00		0.50				
			2.45			0.00	0.03				
1.00	8.4	0.00	2.50 ^u	0.00			0.56		0.000	0.00	0.000
					0.00						
			4			0.00					
1.00	9.0	0.00	2.19	0.00			0.56		0.000	0.00	0.000
					0.00						
						0.00					
1.00	9.6	0.00	1.53	0.00			0.61		0.000	0.00	0.000
					0.00						
						0.00					
1.00	10.2	0.00	0.81	0.00			0.30		0.000	0.00	0.000
					0.00						
						0.00					
1.00	10.8	0.00	0.23	0.00			0.08		0.000	0.00	0.00

