

Appendix H

Streamflow Calculations

Site Name: T010 Mad River
Date: 7/27/2010
Time: 9:45 AM

Channel Width: 50 feet

Reference Point: Right Bank

Looking: Downstream

Notes: Add 0.03 fps to velocity readings

Calculated Total Flow:

86.5 cfs

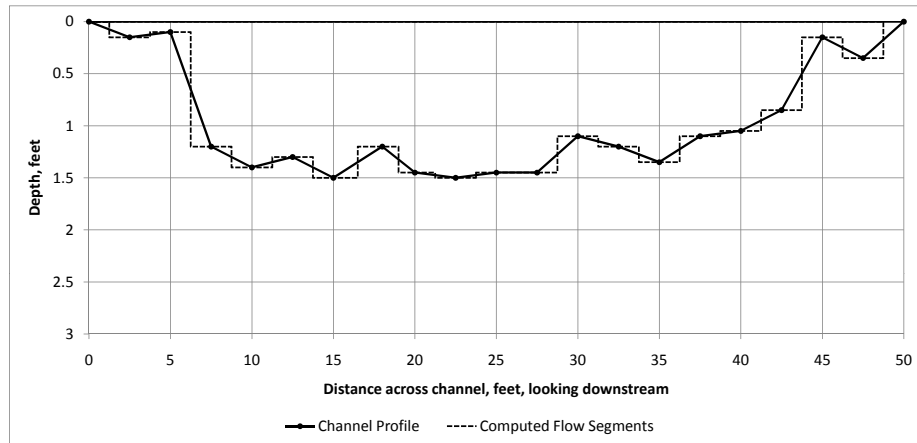
Field Data:

0.03

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
1.5	18	0	0	0	0			0
4	48	2.5	0.15	1.8	0.07			0.1
6.5	78	5	0.1	1.2	0.27			0.3
9	108	7.5	1.2	14.4	0.83			0.86
11.5	138	10	1.4	16.8	0.74			0.77
14	168	12.5	1.3	15.6	1.39			1.42
16.5	198	15	1.5	18	1.41			1.44
19.5	234	18	1.2	14.4	1.6			1.63
21.5	258	20	1.45	17.4	1.74			1.77
24	288	22.5	1.5	18	1.71			1.74
26.5	318	25	1.45	17.4	2.17			2.2
29	348	27.5	1.45	17.4	2.05			2.08
31.5	378	30	1.1	13.2	2.51			2.54
34	408	32.5	1.2	14.4	2.38			2.41
36.5	438	35	1.35	16.2	2.32			2.35
39	468	37.5	1.1	13.2	2.23			2.26
41.5	498	40	1.05	12.6	1.97			2
44	528	42.5	0.85	10.2	1.61			1.64
46.5	558	45	0.15	1.8	0.98			1.01
49	588	47.5	0.35	4.2	0.4			0.43
51.5	618	50	0	0	0			0.03
	0	-1.5		0				
	0	-1.5		0				
	0	-1.5		0				
	0	-1.5		0				
	0	-1.5		0				
	0	-1.5		0				
	0	-1.5		0				
	0	-1.5		0				
	0	-1.5		0				
	0	-1.5		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
2.5	0.15	0.1	1.25	0.375	0.0375
5	0.1	0.3	3.75	0.25	0.075
7.5	1.2	0.86	6.25	3	2.58
10	1.4	0.77	8.75	3.5	2.695
12.5	1.3	1.42	11.25	3.25	4.615
15	1.5	1.44	13.75	4.125	5.94
18	1.2	1.63	16.5	3	4.89
20	1.45	1.77	19	3.2625	5.774625
22.5	1.5	1.74	21.25	3.75	6.525
25	1.45	2.2	23.75	3.625	7.975
27.5	1.45	2.08	26.25	3.625	7.54
30	1.1	2.54	28.75	2.75	6.985
32.5	1.2	2.41	31.25	3	7.23
35	1.35	2.35	33.75	3.375	7.93125
37.5	1.1	2.26	36.25	2.75	6.215
40	1.05	2	38.75	2.625	5.25
42.5	0.85	1.64	41.25	2.125	3.485
45	0.15	1.01	43.75	0.375	0.37875
47.5	0.35	0.43	46.25	0.875	0.37625
50	0	0.03	48.75	0	0
-1.5	0	0	24.25	0	0
-1.5	0	0	-1.5	0	0
-1.5	0	0	-1.5	0	0
-1.5	0	0	-1.5	0	0
-1.5	0	0	-1.5	0	0
-1.5	0	0	-1.5	0	0
-1.5	0	0	-1.5	0	0
-1.5	0	0	-1.5	0	0
-1.5	0	0	-1.5	0	0
-1.5	0	0	-1.5	0	0



[illegible]

Calculations:						
Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow	
feet	feet	fps	feet	sq ft	cfs	
0	0	0	0	0	0	
1.75	0.55	1.58	0.875	0.9625	1.52075	
3.5	0.85	1.71	2.625	1.4875	2.543625	
5.25	1.1	1.76	4.375	1.925	3.388	
7	1.2	1.92	6.125	2.1	4.032	
8.75	1.4	1.89	7.875	2.45	4.630505	
10.5	1.8	1.73	9.625	3.15	5.4495	
12.25	0.8	1.67	11.375	1.4	2.338	
14	1.87	0.62	13.125	3.2725	5.02895	
15.75	1.7	1.11	14.875	2.975	3.30225	
17.5	2.1	1.36	16.625	3.675	4.998	
19.25	1.95	1.32	18.375	3.4125	4.5045	
21	1.9	1.66	20.125	3.325	5.5195	
22.75	1.93	1.21	21.875	3.3775	4.086775	
24.5	1.7	0.83	23.625	2.975	2.46925	
26.25	1.9	0.78	25.375	3.325	2.5935	
28	1.95	0.73	27.125	3.4125	2.491125	
29.75	1.85	0.77	28.875	3.2375	2.492875	
31.5	2.33	0.485	30.625	4.0775	1.9775875	
33.25	2.2	0.405	32.375	3.85	1.55925	
35	1.5	0.49	34.125	2.4375	1.194375	
36.5	0.9	0.36	35.75	0.72	0.2592	
36.6	0	0.03	36.55	0	0	
0	0	0	18.3	0	0	
0	0	0	0	0	0	
0	0	0	0			



Site Name: T021 Newfound River
Date: 7/27/2010
Time: 1:00 PM
Channel Width: 40.5 feet
Reference Point: Right Bank
Looking: Downstream
Notes: Add 0.03 fps to velocity readings

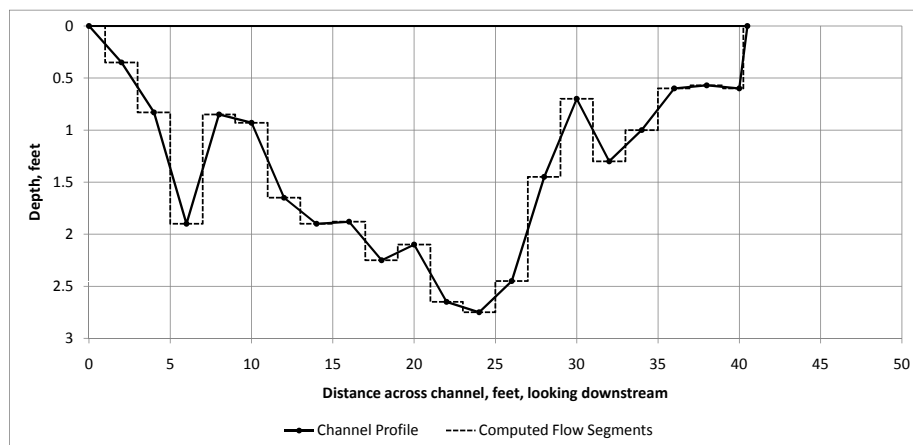
Calculated Total Flow:
66.4 cfs

Field Data: 0.03

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
6.5	78	0	0	0	0			0
8.5	102	2	0.35	4.2	1			1.03
10.5	126	4	0.83	9.96	1.38			1.41
12.5	150	6	1.9	22.8	1.11			1.14
14.5	174	8	0.85	10.2	1.72			1.75
16.5	198	10	0.93	11.16	1.78			1.81
18.5	222	12	1.65	19.8	1.7			1.73
20.5	246	14	1.9	22.8	1.18			1.21
22.5	270	16	1.88	22.56	1.35			1.38
24.5	294	18	2.25	27		1.64	1.17	1.435
26.5	318	20	2.1	25.2		1.43	1.4	1.445
28.5	342	22	2.65	31.8		1.4	0.94	1.2
30.5	366	24	2.75	33		1.22	0.86	1.07
32.5	390	26	2.45	29.4		1.01	0.42	0.745
34.5	414	28	1.45	17.4	0.81			0.84
36.5	438	30	0.7	8.4	1.11			1.14
38.5	462	32	1.3	15.6	1.11			1.14
40.5	486	34	1	12	0.11			0.14
42.5	510	36	0.6	7.2	0.57			0.6
44.5	534	38	0.57	6.84	0.59			0.62
46.5	558	40	0.6	7.2	0.04			0.07
47	564	40.5	0	0				
	0	-6.5		0				
	0	-6.5		0				
	0	-6.5		0				
	0	-6.5		0				
	0	-6.5		0				
	0	-6.5		0				
	0	-6.5		0				
	0	-6.5		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
2	0.35	1.03	1	0.7	0.721
4	0.83	1.41	3	1.66	2.3406
6	1.9	1.14	5	3.8	4.332
8	0.85	1.75	7	1.7	2.975
10	0.93	1.81	9	1.86	3.3666
12	1.65	1.73	11	3.3	5.709
14	1.9	1.21	13	3.8	4.598
16	1.88	1.38	15	3.76	5.1888
18	2.25	1.435	17	4.5	6.4575
20	2.1	1.445	19	4.2	6.069
22	2.65	1.2	21	5.3	6.36
24	2.75	1.07	23	5.5	5.885
26	2.45	0.745	25	4.9	3.6505
28	1.45	0.84	27	2.9	2.436
30	0.7	1.14	29	1.4	1.596
32	1.3	1.14	31	2.6	2.964
34	1	0.14	33	2	0.28
36	0.6	0.6	35	1.2	0.72
38	0.57	0.62	37	1.14	0.7068
40	0.6	0.07	39	0.75	0.0525
40.5	0	0	40.25	0	0
-6.5	0	0	17	0	0
-6.5	0	0	-6.5	0	0
-6.5	0	0	-6.5	0	0
-6.5	0	0	-6.5	0	0
-6.5	0	0	-6.5	0	0
-6.5	0	0	-6.5	0	0
-6.5	0	0	-6.5	0	0
-6.5	0	0	-6.5	0	0
-6.5	0	0	-6.5	0	0



Site Name: T027 Chase Pond Brook
Date: 7/27/2010
Time: 10:18 AM
Channel Width: 18
Reference Point: Right Bank
Looking: Downstream
Notes: none

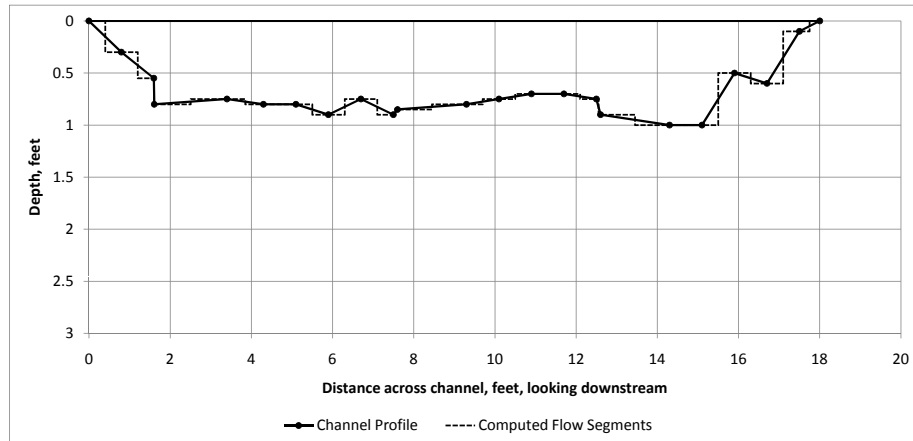
Calculated Total Flow:
1.8 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
3.5	42	0	0	0	0			0
4.3	51.6	0.8	0.3	3.6	0			0
5.1	61.2	1.6	0.55	6.6	0			0
5.11	61.32	1.61	0.8	9.6	0			0
6.9	82.8	3.4	0.75	9	0.06			0.06
7.8	93.6	4.3	0.8	9.6	0.16			0.16
8.6	103.2	5.1	0.8	9.6	0.21			0.21
9.4	112.8	5.9	0.9	10.8	0.21			0.21
10.2	122.4	6.7	0.75	9	0.31			0.31
11	132	7.5	0.9	10.8	0.26			0.26
11.1	133.2	7.6	0.85	10.2	0.25			0.25
12.8	153.6	9.3	0.8	9.6	0.31			0.31
13.6	163.2	10.1	0.75	9	0.2			0.2
14.4	172.8	10.9	0.7	8.4	0.18			0.18
15.2	182.4	11.7	0.7	8.4	0.1			0.1
16	192	12.5	0.75	9	0.14			0.14
16.1	193.2	12.6	0.9	10.8	0.13			0.13
17.8	213.6	14.3	1	12	0.06			0.06
18.6	223.2	15.1	1	12	0.05			0.05
19.4	232.8	15.9	0.5	6	0			0
20.2	242.4	16.7	0.6	7.2	0			0
21	252	17.5	0.1	1.2	0			0
21.5	258	18	0	0	0			0
	0	-3.5		0				
	0	-3.5		0				
	0	-3.5		0				
	0	-3.5		0				
	0	-3.5		0				
	0	-3.5		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
0.8	0.3	0	0.4	0.24	0
1.6	0.55	0	1.2	0.22275	0
1.61	0.8	0	1.605	0.72	0
3.4	0.75	0.06	2.505	1.00875	0.060525
4.3	0.8	0.16	3.85	0.68	0.1088
5.1	0.8	0.21	4.7	0.64	0.1344
5.9	0.9	0.21	5.5	0.72	0.1512
6.7	0.75	0.31	6.3	0.6	0.186
7.5	0.9	0.26	7.1	0.405	0.1053
7.6	0.85	0.25	7.55	0.765	0.19125
9.3	0.8	0.31	8.45	1	0.31
10.1	0.75	0.2	9.7	0.6	0.12
10.9	0.7	0.18	10.5	0.56	0.1008
11.7	0.7	0.1	11.3	0.56	0.056
12.5	0.75	0.14	12.1	0.3375	0.04725
12.6	0.9	0.13	12.55	0.81	0.1053
14.3	1	0.06	13.45	1.25	0.075
15.1	1	0.05	14.7	0.8	0.04
15.9	0.5	0	15.5	0.4	0
16.7	0.6	0	16.3		0.48
17.5	0.1	0	17.1	0.065	0
18	0	0	17.75	0	0
-3.5	0	0	7.25	0	0
-3.5	0	0	-3.5	0	0
-3.5	0	0	-3.5	0	0
-3.5	0	0	-3.5	0	0
-3.5	0	0	-3.5	0	0
-3.5	0	0	-3.5	0	0
-3.5	0	0	-3.5	0	0



Site Name: T046 Suncook River
Date: 7/27/2010
Time: 12:20 PM
Channel Width: 41 feet
Reference Point: Right Bank
Looking: Downstream
Notes: none

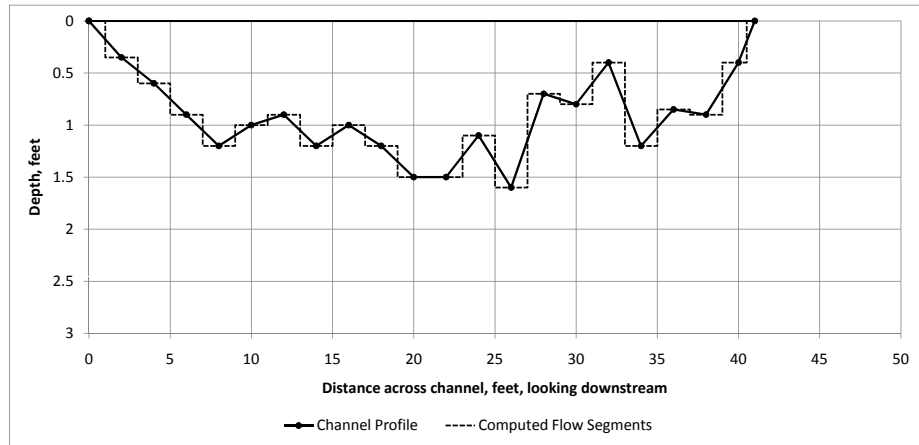
Calculated Total Flow:
25.6 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
2	24	2	0.35	4.2	0			0
4	48	4	0.6	7.2	0.72			0.72
6	72	6	0.9	10.8	1.23			1.23
8	96	8	1.2	14.4	0.15			0.15
10	120	10	1	12	0.16			0.16
12	144	12	0.9	10.8	0.28			0.28
14	168	14	1.2	14.4	1.2			1.2
16	192	16	1	12	0			0
18	216	18	1.2	14.4	0.03			0.03
20	240	20	1.5	18	1.3			1.3
22	264	22	1.5	18	0.81			0.81
24	288	24	1.1	13.2	0.02			0.02
26	312	26	1.6	19.2	0			0
28	336	28	0.7	8.4	0			0
30	360	30	0.8	9.6	0.59			0.59
32	384	32	0.4	4.8	1.62			1.62
34	408	34	1.2	14.4	2.94			2.94
36	432	36	0.85	10.2	1.04			1.04
38	456	38	0.9	10.8	0.51			0.51
40	480	40	0.4	4.8	0			0
41	492	41	0	0	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
2	0.35	0	1	0.7	0
4	0.6	0.72	3	1.2	0.864
6	0.9	1.23	5	1.8	2.214
8	1.2	0.15	7	2.4	0.36
10	1	0.16	9	2	0.32
12	0.9	0.28	11	1.8	0.504
14	1.2	1.2	13	2.4	2.88
16	1	0	15	2	0
18	1.2	0.03	17	2.4	0.072
20	1.5	1.3	19	3	3.9
22	1.5	0.81	21	3	2.43
24	1.1	0.02	23	2.2	0.044
26	1.6	0	25	3.2	0
28	0.7	0	27	1.4	0
30	0.8	0.59	29	1.6	0.944
32	0.4	1.62	31	0.8	1.296
34	1.2	2.94	33	2.4	7.056
36	0.85	1.04	35	1.7	1.768
38	0.9	0.51	37	1.8	0.918
40	0.4	0	39	0.6	0
41	0	0	40.5	0	0
0	0	0	20.5	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0



[illegible][illegible]

Site Name: T068 Nashua River
Date: 7/27/2010
Time: 11:45 AM
Channel Width: 123.5
Reference Point: Right Bank
Looking: Downstream
Notes:

Calculated Total Flow:

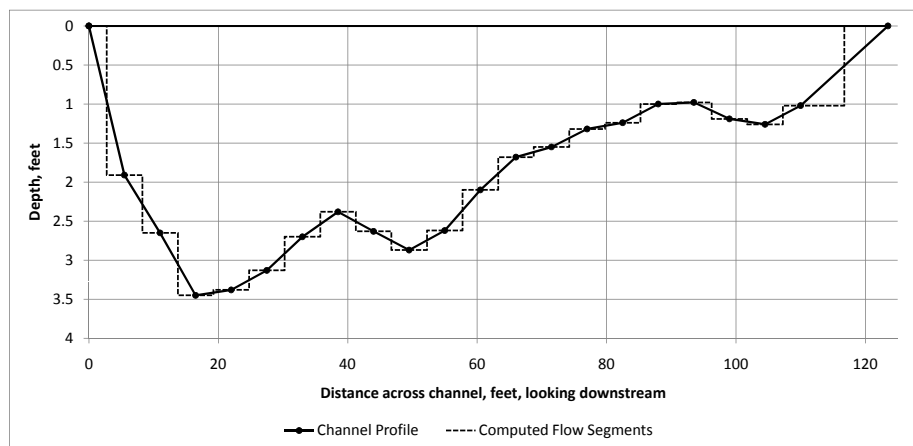
220.0 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
5.5	66	5.5	1.91	22.92	0.64			0.64
11	132	11	2.65	31.8		1.02	0.76	0.89
16.5	198	16.5	3.45	41.4		1.22	0.88	1.05
22	264	22	3.38	40.56		1.36	0.89	1.125
27.5	330	27.5	3.13	37.56		1.38	0.87	1.125
33	396	33	2.7	32.4		1.09	0.79	0.94
38.5	462	38.5	2.38	28.56		1.33	0.77	1.05
44	528	44	2.63	31.56		1.27	0.62	0.945
49.5	594	49.5	2.87	34.44		1.3	0.75	1.025
55	660	55	2.62	31.44		1.14	0.83	0.985
60.5	726	60.5	2.1	25.2		0.91	0.72	0.815
66	792	66	1.68	20.16	0.89			0.89
71.5	858	71.5	1.55	18.6	0.62			0.62
77	924	77	1.32	15.84	2.63			2.63
82.5	990	82.5	1.24	14.88	0.65			0.65
88	1056	88	1	12	0.615			0.615
93.5	1122	93.5	0.98	11.76	0.54			0.54
99	1188	99	1.19	14.28	0.52			0.52
104.5	1254	104.5	1.26	15.12	0.74			0.74
110	1320	110	1.02	12.24	0.73			0.73
123.5	1482	123.5	0	0	0.73			0.73
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
5.5	1.91	0.64	2.75	10.505	6.7232
11	2.65	0.89	8.25	14.575	12.97175
16.5	3.45	1.05	13.75	18.975	19.92375
22	3.38	1.125	19.25	18.59	20.91375
27.5	3.13	1.125	24.75	17.215	19.366875
33	2.7	0.94	30.25	14.85	13.959
38.5	2.38	1.05	35.75	13.09	13.7445
44	2.63	0.945	41.25	14.465	13.669425
49.5	2.87	1.025	46.75	15.785	16.179625
55	2.62	0.985	52.25	14.41	14.19385
60.5	2.1	0.815	57.75	11.55	9.41325
66	1.68	0.89	63.25	9.24	8.2236
71.5	1.55	0.62	68.75	8.525	5.2855
77	1.32	2.63	74.25	7.26	19.0938
82.5	1.24	0.65	79.75	6.82	4.433
88	1	0.615	85.25	5.5	3.3825
93.5	0.98	0.54	90.75	5.39	2.9106
99	1.19	0.52	96.25	6.545	3.4034
104.5	1.26	0.74	101.75	6.93	5.1282
110	1.02	0.73	107.25	9.69	7.0737
123.5	0	0.73	116.75	0	0
0	0	0	61.75	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0



Site Name: T069 Salmon Brook
Date: 7/27/2010
Time: 1:50 PM
Channel Width: 21.5 feet
Reference Point: Right Bank
Looking: Downstream
Notes:

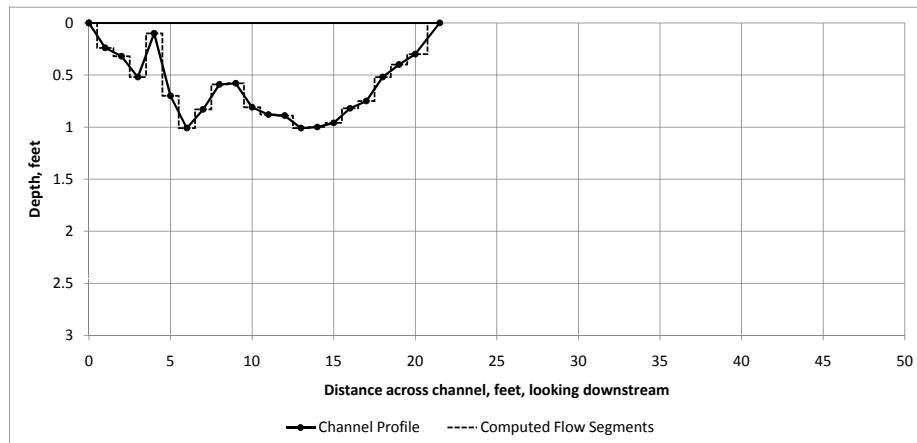
Calculated Total Flow:
11.8 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
1	12	1	0.24	2.88	0			0
2	24	2	0.32	3.84	0			0
3	36	3	0.52	6.24	0.25			0.25
4	48	4	0.1	1.2	0.15			0.15
5	60	5	0.7	8.4	0.34			0.34
6	72	6	1.01	12.12	0.43			0.43
7	84	7	0.83	9.96	0.57			0.57
8	96	8	0.59	7.08	0.68			0.68
9	108	9	0.58	6.96	0.7			0.7
10	120	10	0.81	9.72	0.69			0.69
11	132	11	0.88	10.56	0.95			0.95
12	144	12	0.89	10.68	0.84			0.84
13	156	13	1.01	12.12	1.58			1.58
14	168	14	1	12	1.48			1.48
15	180	15	0.96	11.52	1.44			1.44
16	192	16	0.82	9.84	1.465			1.465
17	204	17	0.75	9	1.21			1.21
18	216	18	0.52	6.24	0.96			0.96
19	228	19	0.4	4.8	0.74			0.74
20	240	20	0.3	3.6	0.43			0.43
21.5	258	21.5	0	0	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
1	0.24	0	0.5	0.24	0
2	0.32	0	1.5	0.32	0
3	0.52	0.25	2.5	0.52	0.13
4	0.1	0.15	3.5	0.1	0.015
5	0.7	0.34	4.5	0.7	0.238
6	1.01	0.43	5.5	1.01	0.4343
7	0.83	0.57	6.5	0.83	0.4731
8	0.59	0.68	7.5	0.59	0.4012
9	0.58	0.7	8.5	0.58	0.406
10	0.81	0.69	9.5	0.81	0.5589
11	0.88	0.95	10.5	0.88	0.836
12	0.89	0.84	11.5	0.89	0.7476
13	1.01	1.58	12.5	1.01	1.5958
14	1	1.48	13.5	1	1.48
15	0.96	1.44	14.5	0.96	1.3824
16	0.82	1.465	15.5	0.82	1.2013
17	0.75	1.21	16.5	0.75	0.9075
18	0.52	0.96	17.5	0.52	0.4992
19	0.4	0.74	18.5	0.4	0.296
20	0.3	0.43	19.5	0.375	0.16125
21.5	0	0	20.75	0	0
0	0	0	10.75	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0



Site Name: T010 Mad River
Date: 9/21/2010
Time: 9:29 AM
Channel Width: 41.2 feet
Reference Point: Left Bank
Looking: Downstream
Notes:

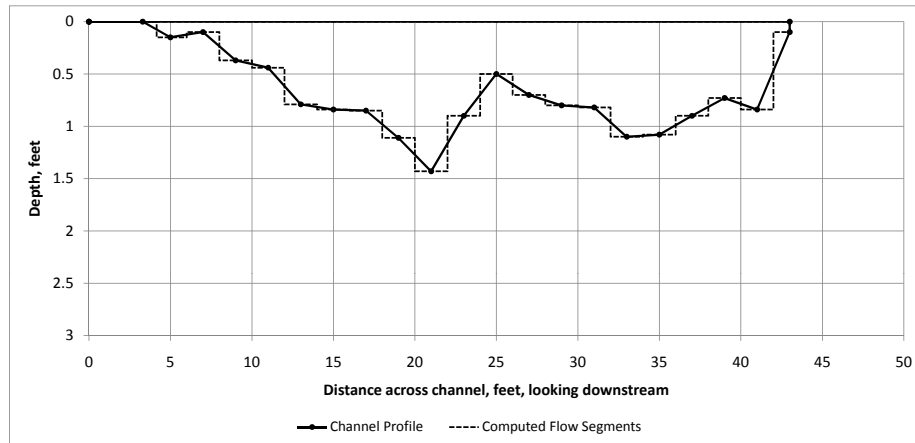
Calculated Total Flow:
23.9 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
3.3	39.6	3.3	0	0	0			0
5	60	5	0.15	1.8	0.02			0.02
7	84	7	0.1	1.2	0.14			0.14
9	108	9	0.37	4.44	0.22			0.22
11	132	11	0.44	5.28	0.65			0.65
13	156	13	0.79	9.48	0.53			0.53
15	180	15	0.84	10.08	0.25			0.25
17	204	17	0.85	10.2	1.04			1.04
19	228	19	1.11	13.32	0.98			0.98
21	252	21	1.43	17.16	1.14			1.14
23	276	23	0.9	10.8	1.08			1.08
25	300	25	0.5	6	1.23			1.23
27	324	27	0.7	8.4	0.55			0.55
29	348	29	0.8	9.6	1.2			1.2
31	372	31	0.82	9.84	1.31			1.31
33	396	33	1.1	13.2	1.09			1.09
35	420	35	1.08	12.96	1.07			1.07
37	444	37	0.9	10.8	0.04			0.04
39	468	39	0.73	8.76	0.92			0.92
41	492	41	0.84	10.08	0.34			0.34
43	516	43	0.1	1.2	0.02			0.02
43	516	43	0	0	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
3.3	0	0	1.65	0	0
5	0.15	0.02	4.15	0.2775	0.00555
7	0.1	0.14	6	0.2	0.028
9	0.37	0.22	8	0.74	0.1628
11	0.44	0.65	10	0.88	0.572
13	0.79	0.53	12	1.58	0.8374
15	0.84	0.25	14	1.68	0.42
17	0.85	1.04	16	1.7	1.768
19	1.11	0.98	18	2.22	2.1756
21	1.43	1.14	20	2.86	3.2604
23	0.9	1.08	22	1.8	1.944
25	0.5	1.23	24	1	1.23
27	0.7	0.55	26	1.4	0.77
29	0.8	1.2	28	1.6	1.92
31	0.82	1.31	30	1.64	2.1484
33	1.1	1.09	32	2.2	2.398
35	1.08	1.07	34	2.16	2.3112
37	0.9	0.04	36	1.8	0.072
39	0.73	0.92	38	1.46	1.3432
41	0.84	0.34	40	1.68	0.5712
43	0.1	0.02	42	0.1	0.002
43	0	0	43	0	0
	0	0	21.5	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0



Field Data:								0
Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
2	24	2	1.15	13.8	0.27			0.27
3.8	45.6	3.8	1.73	20.76	0.37			0.37
5.6	67.2	5.6	2.15	25.8		0.48	0.14	0.31
7.4	88.8	7.4	2.13	25.56		0.47	0.01	0.24
9.2	110.4	9.2	2.2	26.4		0.3	0.3	0.3
11	132	11	2.13	25.56		0.48	0.39	0.435
12.8	153.6	12.8	1.66	19.92	0.62			0.62
14.6	175.2	14.6	1.7	20.4	0.82			0.82
16.4	196.8	16.4	1.82	21.84	1.09			1.09
18.2	218.4	18.2	1.85	22.2	1.06			1.06
20	240	20	1.95	23.4	1.12			1.12
21.8	261.6	21.8	2.2	26.4		1.86	1.18	1.52
23.6	283.2	23.6	1.98	23.76	0.97			0.97
25.4	304.8	25.4	1.65	19.8	0.52			0.52
27.2	326.4	27.2	1.58	18.96	1.62			1.62
29	348	29	1.44	17.28	1.78			1.78
30.8	369.6	30.8	1.2	14.4	1.71			1.71
32.6	391.2	32.6	1.2	14.4	1.64			1.64
34.4	412.8	34.4	1.05	12.6	1.38			1.38
36.2	434.4	36.2	0.7	8.4	1.42			1.42
38	456	38	0.25	3	0.89			0.89
39	468	39	0	0	0			0
0	0	0	0	0	0			0

[illegible]

Site Name: T021 Newfound River
Date: 9/21/2010
Time: 11:22 AM
Channel Width: 41.75 feet
Reference Point: Left Bank
Looking: Downstream
Notes:

Calculated Total Flow:

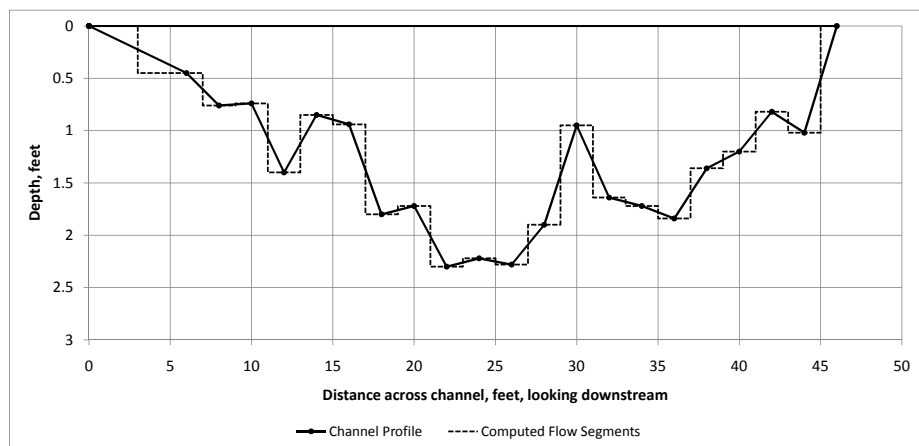
37.9 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
6	72	6	0.45	5.4	0.03			0.03
8	96	8	0.76	9.12	0			0
10	120	10	0.74	8.88	0.35			0.35
12	144	12	1.4	16.8	0.16			0.16
14	168	14	0.85	10.2	0.06			0.06
16	192	16	0.94	11.28	0.2			0.2
18	216	18	1.8	21.6	0.38			0.38
20	240	20	1.72	20.64	0.96			0.96
22	264	22	2.3	27.6		1.06	0.57	0.815
24	288	24	2.22	26.64		1.15	0.88	1.015
26	312	26	2.28	27.36		1.41	0.81	1.11
28	336	28	1.9	22.8	1.25			1.25
30	360	30	0.95	11.4	0.72			0.72
32	384	32	1.64	19.68	1.17			1.17
34	408	34	1.72	20.64	0.34			0.34
36	432	36	1.84	22.08	0.39			0.39
38	456	38	1.36	16.32	1.29			1.29
40	480	40	1.2	14.4	0.59			0.59
42	504	42	0.82	9.84	0.04			0.04
44	528	44	1.02	12.24	0.42			0.42
46	552	46	0	0	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
6	0.45	0.03	3	1.8	0.054
8	0.76	0	7	1.52	0
10	0.74	0.35	9	1.48	0.518
12	1.4	0.16	11	2.8	0.448
14	0.85	0.06	13	1.7	0.102
16	0.94	0.2	15	1.88	0.376
18	1.8	0.38	17	3.6	1.368
20	1.72	0.96	19	3.44	3.3024
22	2.3	0.815	21	4.6	3.749
24	2.22	1.015	23	4.44	4.5066
26	2.28	1.11	25	4.56	5.0616
28	1.9	1.25	27	3.8	4.75
30	0.95	0.72	29	1.9	1.368
32	1.64	1.17	31	3.28	3.8376
34	1.72	0.34	33	3.44	1.1696
36	1.84	0.39	35	3.68	1.4352
38	1.36	1.29	37	2.72	3.5088
40	1.2	0.59	39	2.4	1.416
42	0.82	0.04	41	1.64	0.0656
44	1.02	0.42	43	2.04	0.8568
46	0	0	45	0	0
0	0	0	23	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0



Site Name: T027 Chance Pond Brook
Date: 9/21/2010
Time: 9:56 AM
Channel Width: 17.25
Reference Point: Right Bank
Looking: Downstream
Notes: none

Calculated Total Flow:
0.5 cfs

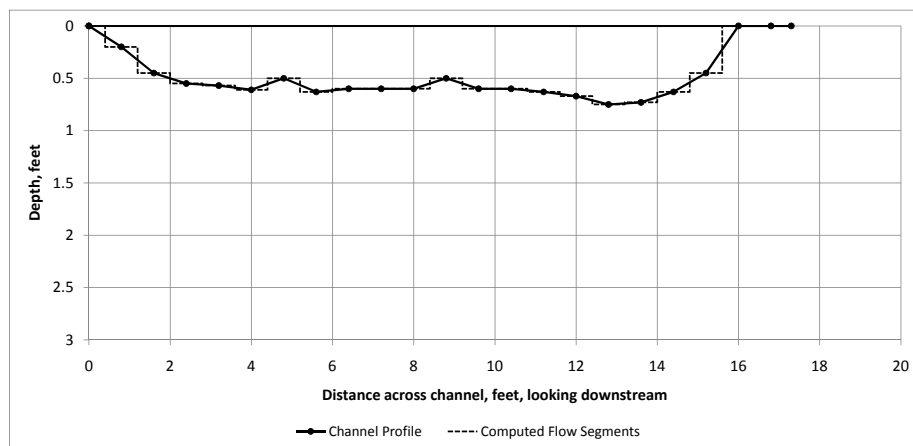
Field Data:

0

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
0.8	9.6	0.8	0.2	2.4	0			0
1.6	19.2	1.6	0.45	5.4	0.05			0.05
2.4	28.8	2.4	0.55	6.6	0.15			0.15
3.2	38.4	3.2	0.57	6.84	0.07			0.07
4	48	4	0.61	7.32	0.1			0.1
4.8	57.6	4.8	0.5	6	0.09			0.09
5.6	67.2	5.6	0.63	7.56	0.08			0.08
6.4	76.8	6.4	0.6	7.2	0.09			0.09
7.2	86.4	7.2	0.6	7.2	0.03			0.03
8	96	8	0.6	7.2	0.055			0.055
8.8	105.6	8.8	0.5	6	0.05			0.05
9.6	115.2	9.6	0.6	7.2	0.04			0.04
10.4	124.8	10.4	0.6	7.2	0.03			0.03
11.2	134.4	11.2	0.63	7.56	0.04			0.04
12	144	12	0.67	8.04	0.05			0.05
12.8	153.6	12.8	0.75	9	0.03			0.03
13.6	163.2	13.6	0.73	8.76	0.02			0.02
14.4	172.8	14.4	0.63	7.56	0.03			0.03
15.2	182.4	15.2	0.45	5.4	0.02			0.02
16	192	16	0	0	0			0
16.8	201.6	16.8	0	0	0			0
17.3	207.6	17.3	0	0	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
0.8	0.2	0	0.4	0.16	0
1.6	0.45	0.05	1.2	0.36	0.018
2.4	0.55	0.15	2	0.44	0.066
3.2	0.57	0.07	2.8	0.456	0.03192
4	0.61	0.1	3.6	0.488	0.0488
4.8	0.5	0.09	4.4	0.4	0.036
5.6	0.63	0.08	5.2	0.504	0.04032
6.4	0.6	0.09	6	0.48	0.0432
7.2	0.6	0.03	6.8	0.48	0.0144
8	0.6	0.055	7.6	0.48	0.0264
8.8	0.5	0.05	8.4	0.4	0.02
9.6	0.6	0.04	9.2	0.48	0.0192
10.4	0.6	0.03	10	0.48	0.0144
11.2	0.63	0.04	10.8	0.504	0.02016
12	0.67	0.05	11.6	0.536	0.0268
12.8	0.75	0.03	12.4	0.6	0.018
13.6	0.73	0.02	13.2	0.584	0.01168
14.4	0.63	0.03	14	0.504	0.01512
15.2	0.45	0.02	14.8	0.36	0.0072
16	0	0	15.6	0	0
16.8	0	0	16.4	0	0
17.3	0	0	17.05	0	0
	0	0	8.65	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0



Site Name: T046 Suncook River
Date: 9/21/2010
Time: 11:21 AM
Channel Width: 41 feet
Reference Point: Right Bank
Looking: Downstream
Notes: none

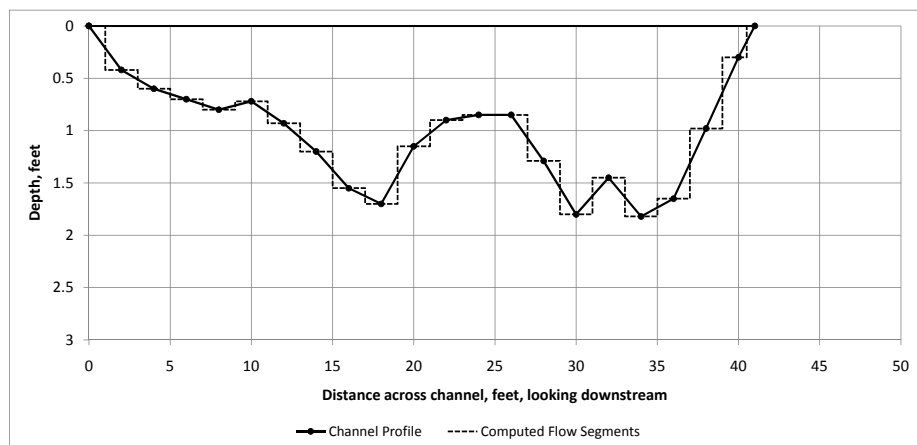
Calculated Total Flow:
2.4 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
2	24	2	0.42	5.04	0			0
4	48	4	0.6	7.2	0.01			0.01
6	72	6	0.7	8.4	0.02			0.02
8	96	8	0.8	9.6	0.07			0.07
10	120	10	0.72	8.64	0.08			0.08
12	144	12	0.93	11.16	0.15			0.15
14	168	14	1.2	14.4	0.07			0.07
16	192	16	1.55	18.6	0.12			0.12
18	216	18	1.7	20.4	0.1			0.1
20	240	20	1.15	13.8	0.05			0.05
22	264	22	0.9	10.8	0.075			0.075
24	288	24	0.85	10.2	0.04			0.04
26	312	26	0.85	10.2	0.05			0.05
28	336	28	1.29	15.48	0.05			0.05
30	360	30	1.8	21.6	0.05			0.05
32	384	32	1.45	17.4	0.03			0.03
34	408	34	1.82	21.84	0.01			0.01
36	432	36	1.65	19.8	0.03			0.03
38	456	38	0.98	11.76	0.02			0.02
40	480	40	0.3	3.6	0.01			0.01
41	492	41	0	0	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
2	0.42	0	1	0.84	0
4	0.6	0.01	3	1.2	0.012
6	0.7	0.02	5	1.4	0.028
8	0.8	0.07	7	1.6	0.112
10	0.72	0.08	9	1.44	0.1152
12	0.93	0.15	11	1.86	0.279
14	1.2	0.07	13	2.4	0.168
16	1.55	0.12	15	3.1	0.372
18	1.7	0.1	17	3.4	0.34
20	1.15	0.05	19	2.3	0.115
22	0.9	0.075	21	1.8	0.135
24	0.85	0.04	23	1.7	0.068
26	0.85	0.05	25	1.7	0.085
28	1.29	0.05	27	2.58	0.129
30	1.8	0.05	29	3.6	0.18
32	1.45	0.03	31	2.9	0.087
34	1.82	0.01	33	3.64	0.0364
36	1.65	0.03	35	3.3	0.099
38	0.98	0.02	37	1.96	0.0392
40	0.3	0.01	39	0.45	0.0045
41	0	0	40.5	0	0
0	0	0	20.5	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0



Site Name: T059 Cohas Brook
Date: 9/21/2010
Time: 12:00PM
Channel Width: 20 feet
Reference Point: Left Bank
Looking: Downstream
Notes:

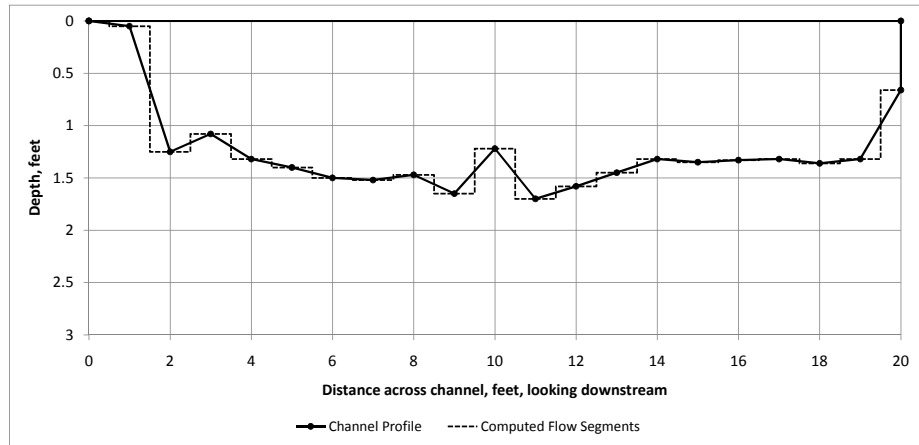
Calculated Total Flow:
4.5 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
1	12	1	0.05	0.6	0			0
2	24	2	1.25	15	0.01			0.01
3	36	3	1.08	12.96	0			0
4	48	4	1.32	15.84	0			0
5	60	5	1.4	16.8	0			0
6	72	6	1.5	18	0			0
7	84	7	1.52	18.24	0			0
8	96	8	1.47	17.64	0			0
9	108	9	1.65	19.8	0.19	0.75		0.47
10	120	10	1.22	14.64	0.78			0.78
11	132	11	1.7	20.4	0.78			0.78
12	144	12	1.58	18.96	0.58			0.58
13	156	13	1.45	17.4	0.29			0.29
14	168	14	1.32	15.84	0.08			0.08
15	180	15	1.35	16.2	0			0
16	192	16	1.33	15.96	0			0
17	204	17	1.32	15.84	0			0
18	216	18	1.36	16.32	0			0
19	228	19	1.32	15.84	0			0
20	240	20	0.66	7.92	0			0
20	240	20	0	0	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
1	0.05	0	0.5	0.05	0
2	1.25	0.01	1.5	1.25	0.0125
3	1.08	0	2.5	1.08	0
4	1.32	0	3.5	1.32	0
5	1.4	0	4.5	1.4	0
6	1.5	0	5.5	1.5	0
7	1.52	0	6.5	1.52	0
8	1.47	0	7.5	1.47	0
9	1.65	0.47	8.5	1.65	0.7755
10	1.22	0.78	9.5	1.22	0.9516
11	1.7	0.78	10.5	1.7	1.326
12	1.58	0.58	11.5	1.58	0.9164
13	1.45	0.29	12.5	1.45	0.4205
14	1.32	0.08	13.5	1.32	0.1056
15	1.35	0	14.5	1.35	0
16	1.33	0	15.5	1.33	0
17	1.32	0	16.5	1.32	0
18	1.36	0	17.5	1.36	0
19	1.32	0	18.5	1.32	0
20	0.66	0	19.5	0.33	0
20	0	0	20	0	0
0	0	0	10	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0



Field Data:

Calculations:

Figure 10 is a line graph showing the channel profile and computed flow segments for the 100-foot channel. The y-axis is labeled "Depth, feet" and ranges from 0 to 4. The x-axis is labeled "Distance across channel, feet, looking downstream" and ranges from 0 to 120. The graph displays two data series: "Channel Profile" (solid line with circular markers) and "Computed Flow Segments" (dashed line). The channel profile starts at (0,0), reaches a minimum depth of approximately 2.2 feet at a distance of 30 feet, and ends at (100,0). The computed flow segments are shown as dashed lines, indicating the flow path segments used in the analysis.

Field Data:

Calculations:

Distance across channel (feet)	Channel Profile Depth (feet)	Computed Flow Segments Depth (feet)
0	0.8	0.8
2	1.9	2.0
5	2.1	1.0
7	1.3	1.0
10	1.0	1.0
12	0.8	0.8
15	0.7	0.7
18	0.7	0.7
20	0.6	0.6
22	0.5	0.5
25	0.2	0.2
28	0.4	0.4
30	0.6	0.6
32	0.9	0.9
35	1.1	1.1
38	1.1	1.1
40	1.1	1.1

[illegible][illegible]

Site Name: T069 Salmon Brook
Date: 5/17/2012

Time: 11:50 AM

Channel Width: 37.5 feet

Reference Point: Left Bank

Looking: Downstream

Notes: some logs obstructing flow

Calculated Total Flow:

33.7 cfs

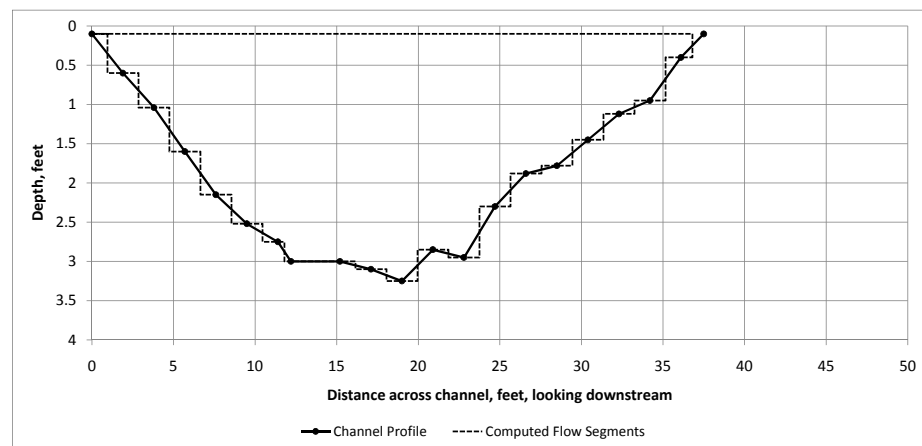
Field Data:

0

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0.1	1.2	0			0
1.9	22.8	1.9	0.6	7.2	0.09			0.09
3.8	45.6	3.8	1.04	12.48	0.14			0.14
5.7	68.4	5.7	1.6	19.2	0.38			0.38
7.6	91.2	7.6	2.15	25.8		0.32	0.2	0.26
9.5	114	9.5	2.52	30.24		0.3	0.27	0.285
11.4	136.8	11.4	2.75	33		0.42	0.56	0.49
12.2	146.4	12.2	3	36		0.85	0.59	0.72
15.2	182.4	15.2	3	36		0.63	0.52	0.575
17.1	205.2	17.1	3.1	37.2		0.6	0.28	0.44
19	228	19	3.25	39		0.82	0.29	0.555
20.9	250.8	20.9	2.85	34.2		0.73	0.27	0.5
22.8	273.6	22.8	2.95	35.4		0.48	0.21	0.345
24.7	296.4	24.7	2.3	27.6		0.68	0.44	0.56
26.6	319.2	26.6	1.88	22.56	0.85			0.85
28.5	342	28.5	1.78	21.36	0.53			0.53
30.4	364.8	30.4	1.45	17.4	0.16			0.16
32.3	387.6	32.3	1.12	13.44	0.34			0.34
34.2	410.4	34.2	0.95	11.4	0.26			0.26
36.1	433.2	36.1	0.4	4.8	0.06			0.06
37.5	450	37.5	0.1	1.2	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0.1	0	0	0	0
1.9	0.6	0.09	0.95	1.14	0.1026
3.8	1.04	0.14	2.85	1.976	0.27664
5.7	1.6	0.38	4.75	3.04	1.1552
7.6	2.15	0.26	6.65	4.085	1.0621
9.5	2.52	0.285	8.55	4.788	1.36458
11.4	2.75	0.49	10.45	3.7125	1.819125
12.2	3	0.72	11.8	5.7	4.104
15.2	3	0.575	13.7	7.35	4.22625
17.1	3.1	0.44	16.15	5.89	2.5916
19	3.25	0.555	18.05	6.175	3.427125
20.9	2.85	0.5	19.95	5.415	2.7075
22.8	2.95	0.345	21.85	5.605	1.933725
24.7	2.3	0.56	23.75	4.37	2.4472
26.6	1.88	0.85	25.65	3.572	3.0362
28.5	1.78	0.53	27.55	3.382	1.79246
30.4	1.45	0.16	29.45	2.755	0.4408
32.3	1.12	0.34	31.35	2.128	0.72352
34.2	0.95	0.26	33.25	1.805	0.4693
36.1	0.4	0.06	35.15	0.66	0.0396
37.5	0.1	0	36.8	-3.68	0



Site Name: T069 Salmon Brook
Date: 9/21/2010
Time: 10:40 AM
Channel Width: 24 feet
Reference Point: Right Bank
Looking: Downstream
Notes:

Calculated Total Flow:
1.8 cfs

Field Data:

Distance from Reference Point		Distance	Depth		Velocity (fps)			
feet	inches	feet	feet	inches	Measured 60%	Measured 20%	Measured 80%	Adjusted
0	0	0	0	0	0			0
1.2	14.4	1.2	0.65	7.8	0.07			0.07
2.4	28.8	2.4	0.68	8.16	0			0
3.6	43.2	3.6	0.98	11.76	0.01			0.01
4.8	57.6	4.8	1.03	12.36	0.02			0.02
6	72	6	1.32	15.84	0			0
7.2	86.4	7.2	1.52	18.24	0.04			0.04
8.4	100.8	8.4	1.58	18.96	0.1			0.1
9.6	115.2	9.6	1.48	17.76	0.04			0.04
10.8	129.6	10.8	1.72	20.64	0.12			0.12
12	144	12	1.65	19.8	0.1			0.1
13.2	158.4	13.2	1.65	19.8	0.12			0.12
14.4	172.8	14.4	1.68	20.16	0.16			0.16
15.6	187.2	15.6	1.45	17.4	0.13			0.13
16.8	201.6	16.8	1.22	14.64	0.04			0.04
18	216	18	1.05	12.6	0.06			0.06
19.2	230.4	19.2	0.85	10.2	0.01			0.01
20.4	244.8	20.4	0.72	8.64	0.01			0.01
21.6	259.2	21.6	0.55	6.6	0			0
22.8	273.6	22.8	0.35	4.2	0			0
24	288	24	0	0	0			0
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				
	0	0		0				

Calculations:

Distance	Depth	Flow	1/2 Distance	Segment Area	Segment Flow
feet	feet	fps	feet	sq ft	cfs
0	0	0	0	0	0
1.2	0.65	0.07	0.6	0.78	0.0546
2.4	0.68	0	1.8	0.816	0
3.6	0.98	0.01	3	1.176	0.01176
4.8	1.03	0.02	4.2	1.236	0.02472
6	1.32	0	5.4	1.584	0
7.2	1.52	0.04	6.6	1.824	0.07296
8.4	1.58	0.1	7.8	1.896	0.1896
9.6	1.48	0.04	9	1.776	0.07104
10.8	1.72	0.12	10.2	2.064	0.24768
12	1.65	0.1	11.4	1.98	0.198
13.2	1.65	0.12	12.6	1.98	0.2376
14.4	1.68	0.16	13.8	2.016	0.32256
15.6	1.45	0.13	15	1.74	0.2262
16.8	1.22	0.04	16.2	1.464	0.05856
18	1.05	0.06	17.4	1.26	0.0756
19.2	0.85	0.01	18.6	1.02	0.0102
20.4	0.72	0.01	19.8	0.864	0.00864
21.6	0.55	0	21	0.66	0
22.8	0.35	0	22.2	0.42	0
24	0	0	23.4	0	0
0	0	0	12	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0
0	0	0	0	0	0

