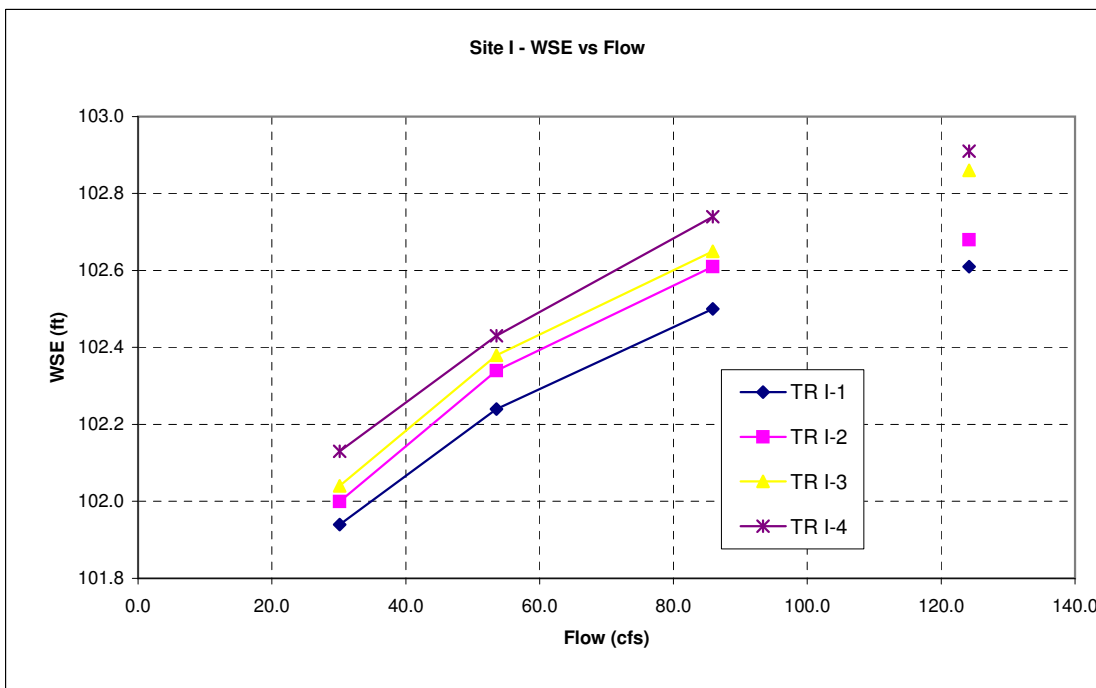
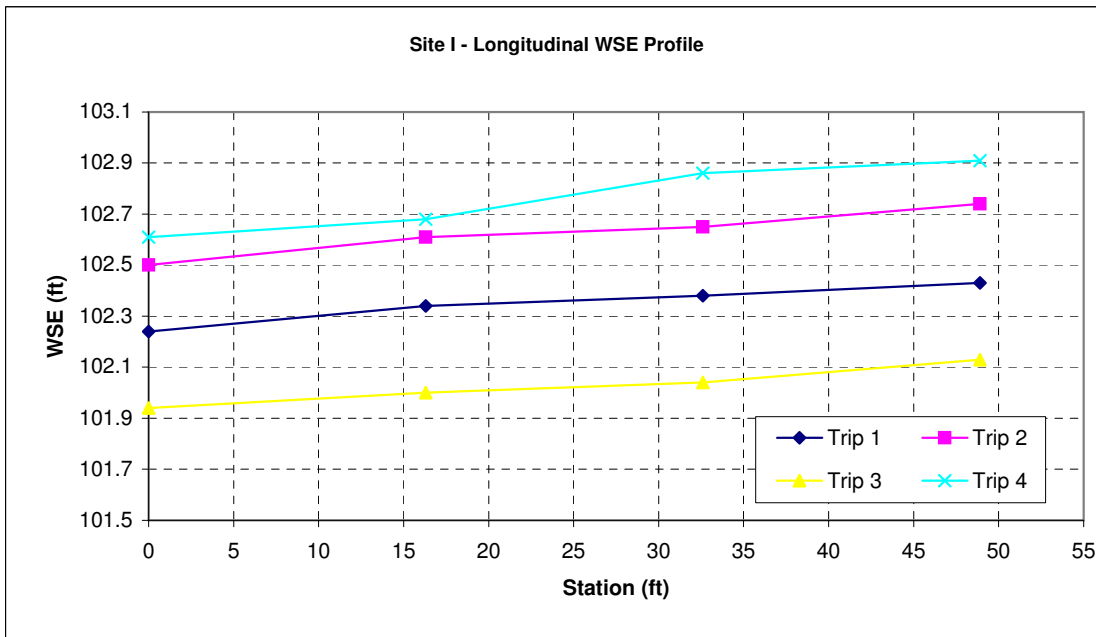


Reach: Alluvial Reach
 Stream: Cooper Creek
 Site: Site I
 Habitat Type: Pool

only 3 WSEs entered in the model

		Q(cfs)					Vel-Depth Survey					
		30.1	53.5	85.9	89.2	124.2						
		Q (cfs) / WSE (ft)										
TR	length	Sta	Trip 3	Trip 1	Trip 2	Trip 4	Trip 5	Trip 3	Trip 1	Trip 2	Trip 4	Trip 5
TR I-1	-	0.0	101.94	102.24	102.50		102.61		Y			
TR I-2	16.3	16.3	102.00	102.34	102.61		102.68		Y			
TR I-3	16.3	32.6	102.04	102.38	102.65		102.86		Y			
TR I-4	16.3	48.9	102.13	102.43	102.74		102.91		Y			
Average WSE slope			0.39%	0.39%	0.49%		0.61%					

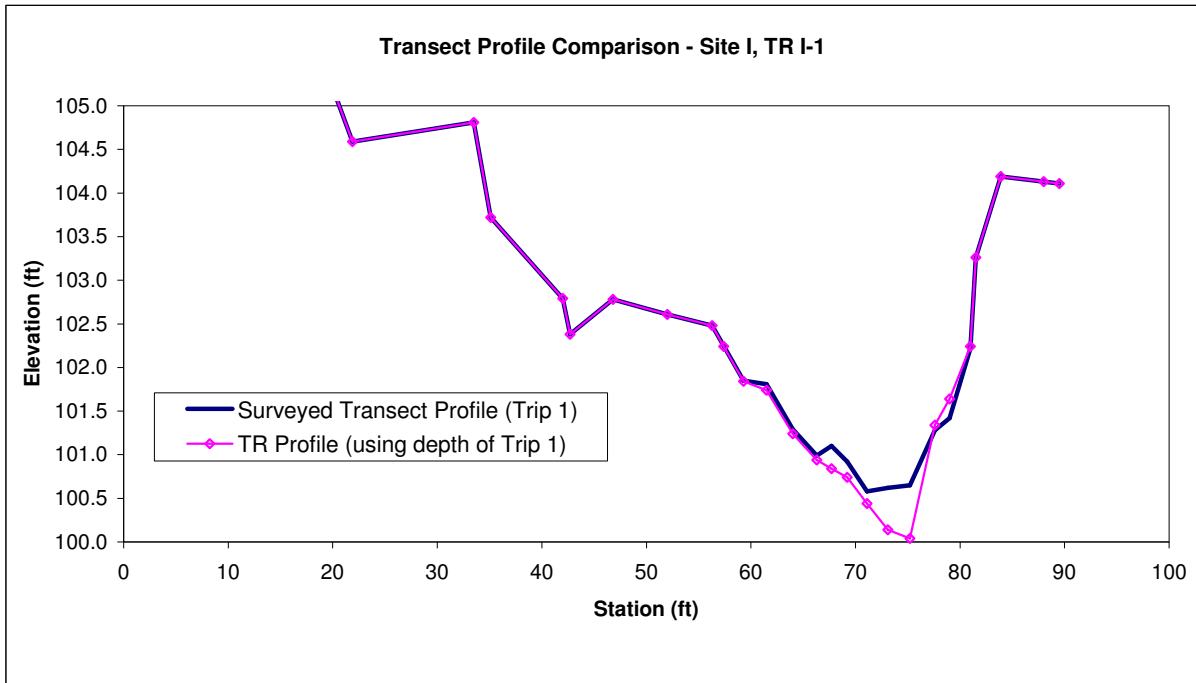


Transect Profile Comparison - Site I, TR I-1

Trip 1								Trip 5				subs	code
Sta (ft)	HI (ft)	FS (ft)	Elev (ft)	Depth (ft)	Velocity (ft/s)	q (cfs)	Bed Elev (ft)	Depth (ft)	Velocity (ft/s)	q (cfs)	Bed Elev (ft)		
10.1	108.31	1.56	106.75				106.75					org	0
17	108.31	2.13	106.18				106.18					org	0
21.9	108.31	3.72	104.59				104.59					org	0
33.5	108.31	3.50	104.81				104.81					org	0
35.1	108.31	4.59	103.72				103.72					org	0
42	108.31	5.52	102.79				102.79					org	0
42.7	108.31	5.93	102.38				102.38					11	3
46.8	108.31	5.53	102.78				102.78					32	3
52	108.31	5.70	102.61				102.61					23	3
56.3	108.31	5.83	102.48				102.48					32	3
57.4	108.31	6.06	102.25	0.00	0.00	0.00	102.24					64	4
59.3	108.31	6.46	101.85	0.40	0.90	0.74	101.84					64	4
61.5	108.31	6.50	101.81	0.50	1.20	1.41	101.74					64	4
64	108.31	7.02	101.29	1.00	1.70	4.08	101.24					512	7
66.3	108.31	7.32	100.99	1.30	1.90	4.57	100.94					64	4
67.7	108.31	7.21	101.1	1.40	2.00	4.06	100.84					16	3
69.2	108.31	7.39	100.92	1.50	2.80	7.14	100.74					11	3
71.1	108.31	7.73	100.58	1.80	2.70	9.48	100.44					64	4
73.1	108.31	7.69	100.62	2.10	2.50	10.76	100.14					45	4
75.2	108.31	7.66	100.65	2.20	2.60	12.87	100.04					256	6
77.6	108.31	7.03	101.28	0.90	1.70	2.91	101.34					256	6
79	108.31	6.89	101.42	0.60	0.90	0.92	101.64					64	4
81	108.31	6.09	102.22	0.00	0.00	0.00	102.24					silt	1
81.5	108.31	5.05	103.26				103.26					org	0
83.9	108.31	4.12	104.19				104.19					org	0
88	108.31	4.18	104.13				104.13					org	0
89.5	108.31	4.20	104.11				104.11					org	0

No flow (vel-depth) measurement during Trip 5

TR Q (cfs) = **58.9**

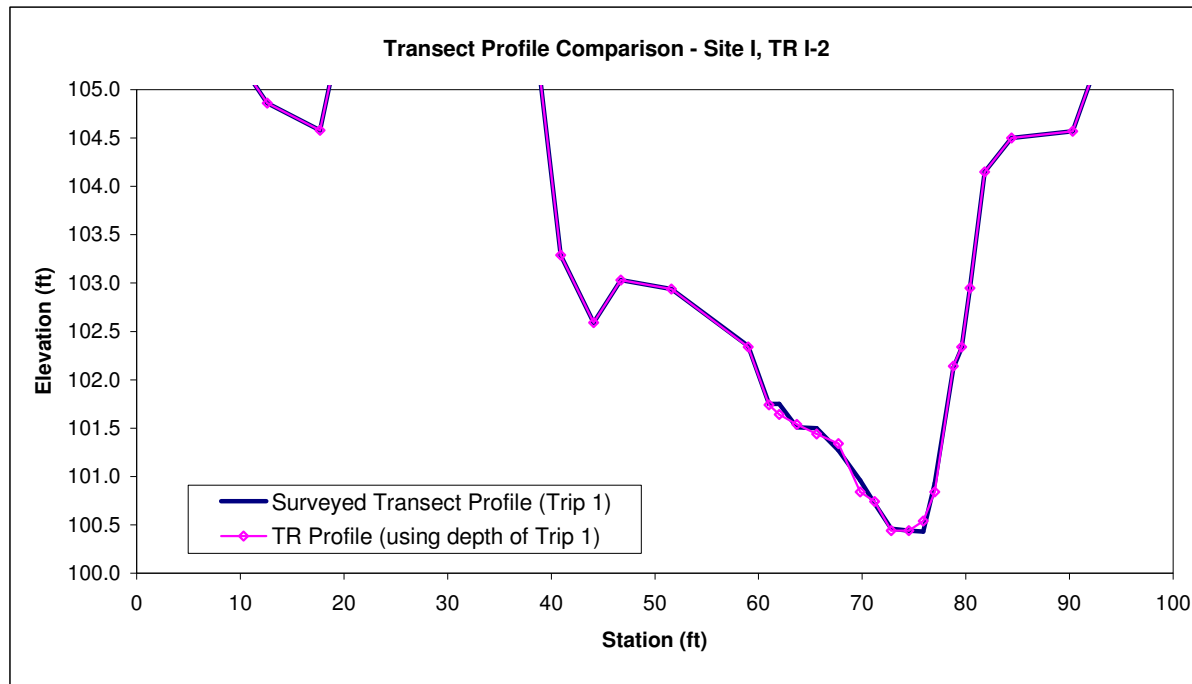


Transect Profile Comparison - Site I, TR I-2

Trip 1				Trip 5				subs	code				
Sta (ft)	HI (ft)	FS (ft)	Elev (ft)	Depth (ft)	Velocity (ft/s)	q (cfs)	Bed Elev (ft)			Depth (ft)	Velocity (ft/s)	q (cfs)	Bed Elev (ft)
1.2	108.31	1.64	106.67				106.67					org	0
12.6	108.31	3.45	104.86				104.86					org	0
17.7	108.31	3.73	104.58				104.58					org	0
23	108.31	1.03	107.28				107.28					org	0
32.5	108.31	1.88	106.43				106.43					org	0
38.8	108.31	3.08	105.23				105.23					org	0
40.9	108.31	5.02	103.29				103.29					org	0
44.1	108.31	5.72	102.59				102.59					sand	1
46.7	108.31	5.28	103.03				103.03					23	3
51.6	108.31	5.37	102.94				102.94					23	3
59	108.31	5.96	102.35	0.00	0.00	0.00	102.34					45	4
61	108.31	6.56	101.75	0.60	0.60	0.54	101.74					6	2
62	108.31	6.56	101.75	0.70	1.60	1.51	101.64					32	3
63.7	108.31	6.80	101.51	0.80	1.70	2.45	101.54					23	3
65.6	108.31	6.81	101.5	0.90	1.90	3.42	101.44					23	3
67.7	108.31	7.04	101.27	1.00	2.00	4.20	101.34					16	3
69.8	108.31	7.35	100.96	1.50	2.00	5.25	100.84					23	3
71.2	108.31	7.59	100.72	1.60	2.60	6.24	100.74					23	3
72.8	108.31	7.85	100.46	1.90	3.20	10.03	100.44					32	3
74.5	108.31	7.87	100.44	1.90	2.70	7.95	100.44					90	5
75.9	108.31	7.88	100.43	1.80	2.60	5.85	100.54					180	6
77	108.31	7.38	100.93	1.50	1.30	2.83	100.84					256	6
78.8	108.31	6.19	102.12	0.20	0.60	0.16	102.14					silt	1
79.6	108.31	5.98	102.33	0.00	0.00	0.00	102.34					org	0
80.4	108.31	5.36	102.95				102.95					org	0
81.8	108.31	4.16	104.15				104.15					org	0
84.4	108.31	3.81	104.5				104.50					org	0
90.3	108.31	3.74	104.57				104.57					org	0
97.6	108.31	1.54	106.77				106.77					org	0

No flow (vel-depth) measurement during Trip 5

TR Q (cfs) = **50.4**

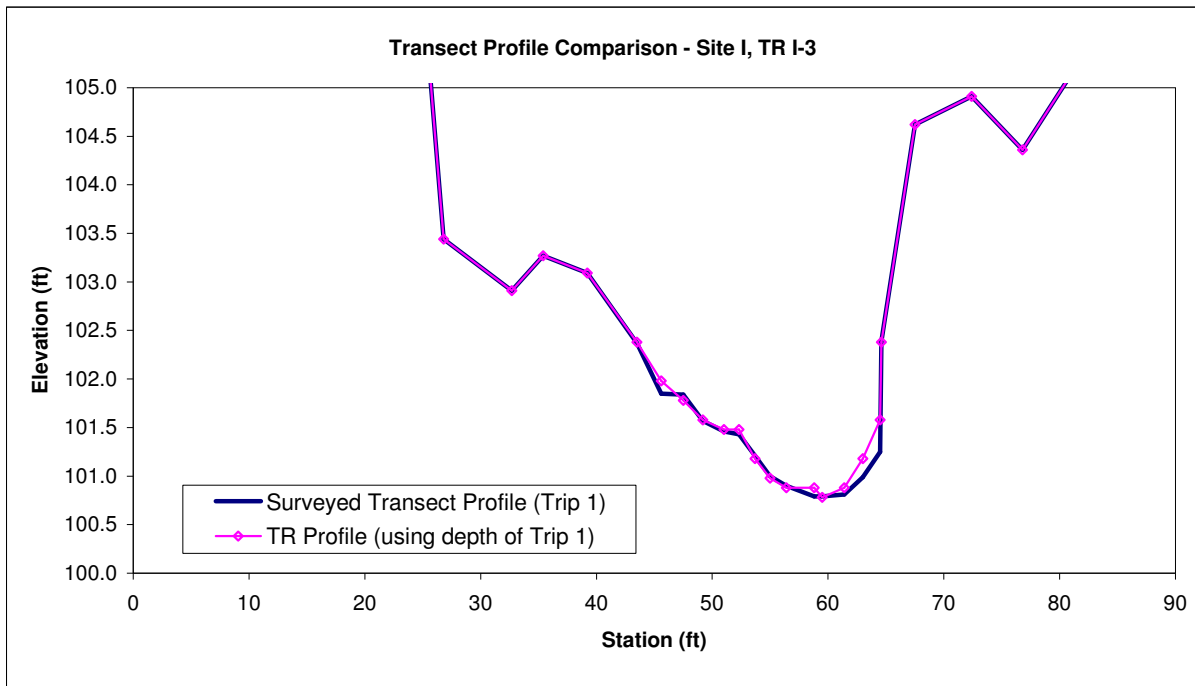


Transect Profile Comparison - Site I, TR I-3

Trip 1								Trip 5				subs	code
Sta (ft)	HI (ft)	FS (ft)	Elev (ft)	Depth (ft)	Velocity (ft/s)	q (cfs)	Bed Elev (ft)	Depth (ft)	Velocity (ft/s)	q (cfs)	Bed Elev (ft)		
1.1	108.57	0.52	108.05				108.05					org	0
5.4	108.57	1.31	107.26				107.26					org	0
12	108.57	1.34	107.23				107.23					org	0
20	108.57	2.59	105.98				105.98					org	0
25.5	108.57	3.25	105.32				105.32					org	0
26.8	108.57	5.13	103.44				103.44					org	0
32.7	108.57	5.66	102.91				102.91					org	0
35.4	108.57	5.30	103.27				103.27					11	3
39.2	108.57	5.48	103.09				103.09					8	2
43.5	108.57	6.20	102.37	0.00	0.00	0.00	102.38					23	3
45.6	108.57	6.72	101.85	0.40	0.10	0.08	101.98					6	2
47.5	108.57	6.73	101.84	0.60	2.20	2.38	101.78					6	2
49.2	108.57	7.00	101.57	0.80	2.20	3.08	101.58					16	3
51	108.57	7.11	101.46	0.90	1.80	2.51	101.48					23	3
52.3	108.57	7.14	101.43	0.90	1.90	2.31	101.48					16	3
53.7	108.57	7.36	101.21	1.20	2.00	3.24	101.18					8	2
55	108.57	7.57	101	1.40	2.50	4.72	100.98					23	3
56.4	108.57	7.67	100.9	1.50	2.70	7.69	100.88					45	4
58.8	108.57	7.78	100.79	1.50	2.70	6.28	100.88					45	4
59.5	108.57	7.78	100.79	1.60	2.60	5.41	100.78					32	3
61.4	108.57	7.76	100.81	1.50	2.40	6.30	100.88					32	3
63	108.57	7.58	100.99	1.20	2.80	5.21	101.18					64	4
64.5	108.57	7.32	101.25	0.80	-0.20	-0.13	101.58					90	5
64.6	108.57	6.18	102.39	0.00	0.00	0.00	102.38					org	0
67.5	108.57	3.95	104.62				104.62					org	0
72.4	108.57	3.66	104.91				104.91					org	0
76.8	108.57	4.21	104.36				104.36					org	0
81	108.57	3.43	105.14				105.14					org	0
88.8	108.57	0.33	108.24				108.24					org	0

No flow (vel-depth) measurement during Trip 5

TR Q (cfs) = **49.1**

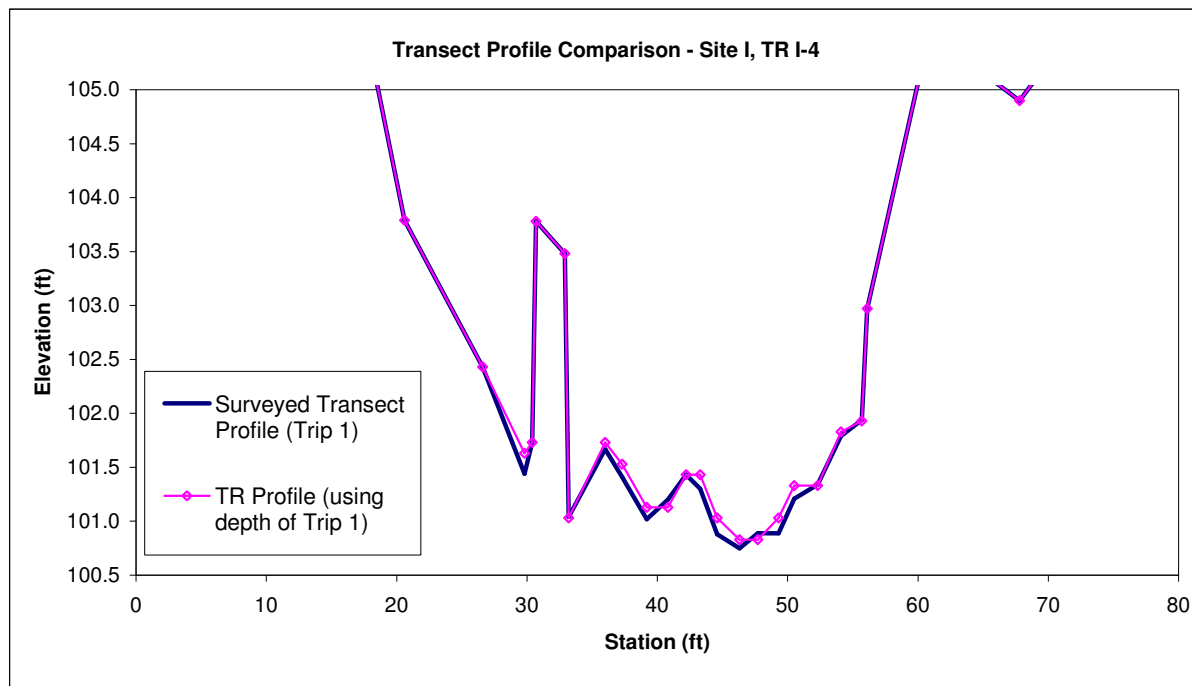


Transect Profile Comparison - Site I, TR I-4

Trip 1								Trip 5				subs	code
Sta (ft)	HI (ft)	FS (ft)	Elev (ft)	Depth (ft)	Velocity (ft/s)	q (cfs)	Bed Elev (ft)	Depth (ft)	Velocity (ft/s)	q (cfs)	Bed Elev (ft)		
1.2	108.57	0.27	108.3				108.30					org	0
17.4	108.57	2.87	105.7				105.70					org	0
20.6	108.57	4.78	103.79				103.79					org	0
26.6	108.57	6.14	102.43	0.00	0.00	0.00	102.43					silt	1
29.8	108.57	7.13	101.44	0.80	0.00	0.00	101.63					6	2
30.4	108.57	6.84	101.73	0.70	0.00	0.00	101.73					3	2
30.7	108.57	4.79	103.78				103.78					3	2
32.9	108.57	5.09	103.48				103.48					1024	7
33.2	108.57	7.53	101.04	1.40	0.00	0.00	101.03					8	2
36	108.57	6.90	101.67	0.70	0.60	0.86	101.73					16	3
37.3	108.57	7.16	101.41	0.90	1.10	1.58	101.53					16	3
39.2	108.57	7.55	101.02	1.30	3.00	6.83	101.13					23	3
40.8	108.57	7.37	101.2	1.30	1.00	1.95	101.13					16	3
42.2	108.57	7.14	101.43	1.00	-0.30	-0.38	101.43					6	2
43.3	108.57	7.27	101.3	1.00	-0.10	-0.12	101.43					16	3
44.6	108.57	7.69	100.88	1.40	0.50	1.05	101.03					32	3
46.3	108.57	7.82	100.75	1.60	3.40	8.43	100.83					64	4
47.7	108.57	7.68	100.89	1.60	3.90	9.36	100.83					90	5
49.3	108.57	7.68	100.89	1.40	3.90	7.64	101.03					45	4
50.5	108.57	7.36	101.21	1.10	3.70	6.11	101.33					64	4
52.3	108.57	7.23	101.34	1.10	2.10	4.16	101.33					45	4
54.1	108.57	6.78	101.79	0.60	2.50	2.55	101.83					16	3
55.7	108.57	6.63	101.94	0.50	0.40	0.16	101.93					23	3
56.1	108.57	5.60	102.97				102.97					org	0
60.4	108.57	3.29	105.28				105.28					org	0
65.5	108.57	3.46	105.11				105.11					org	0
67.8	108.57	3.67	104.9				104.90					org	0
71.4	108.57	3.09	105.48				105.48					org	0
79.6	108.57	0.00	108.57				108.57					org	0

No flow (vel-depth) measurement during Trip 5

TR Q (cfs)= 50.2



Reach: Alluvial Reach
Stream: Cooper Creek
Site: Site I
Habitat Type: Pool

(1) Field Data

- (a) Field data were collected in four of the five trips between 5/2003 and 5/2004. There was no (flow or WSE) data collected in Trip 4.
- (b) Flow data were collected in Trip 1 on 5/4/2003 and in Trip 5 on 5/13/2004.
- (c) WSE data were collected in the four trips.
- (d) Because no flows were measured in Trip 2, Trip 3, and Trip 5, flows of these three trips were estimated. The estimated flows and the measured WSEs and flows are plotted in worksheet "Measured hydraulics".

(2) WSE Calibration

WSE: Average WSE is used as the representative transect WSE.

Discharge: Site I and Site J are close so the flows measured at both sites are used together for average flow calculation. Trip 1 Q = Average discharge of TR I-1, TR I-2, TR I-3, TR J-1, and TR J-2. TR I-4 was considered as outliers. Trip 5 Q = No flow was measured for Site I. Site J flow was used for Site I.

Slope: Use Trip 5's average WSE slope (from TR I-1 to TR I-4) = 0.61%

SZF:

TR	channel Invert (ft)		SZF (ft)
	Trip 1	Trip 5	
TR I-1	100.04	-	100.04
TR I-2	100.44	-	100.44
TR I-3	100.78	-	100.78
TR I-4	100.83	-	100.83

Note: Invert is the lowest elevation of the transect.
 SZF of upstream transect must be equal or greater than the SZF of downstream transect.

Level Loop and Headpins:

Date	Trip	BM-A	BM-B
5/13/03	1	101.93	100.00
6/24/2003	2	101.93	100.00
9/17/2003	3	101.93	100.00
10/8/2003	4	101.92	100.00
5/4/2004	5	101.93	100.00

- (a) Relative elevation changes between control pins were within acceptable range. Control pins are considered stable

Calibration Flow:

This site has four sets of measured WSEs and only one set of velocity-depth surveys.

Flows for Trip 2 to Trip 3 were estimated and plotted along with all measured flows and WSEs in worksheet "Measured Hydraulics"

Although the graph "Site G - WSE vs Flow" show consistent flow-WSE relationship, due to uncertainty of the accuracy of the estimated flows it was decided to only use the flow taken in Trip 1 for calibration.

Estimated flows and measured WSEs of Trip 2 and Trip 3 will not be used for calibration, but will be included for comparison.

WSE Calibration Method:

(1) MANSQ was used to calibrate WSE for TR I-1.

(2) WSP was selected to calibrate WSEs for TR I-2 to TR I-4. MANSQ results of TR I-1 was used as the boundary condition for WSP.

WSE Calibration Result:

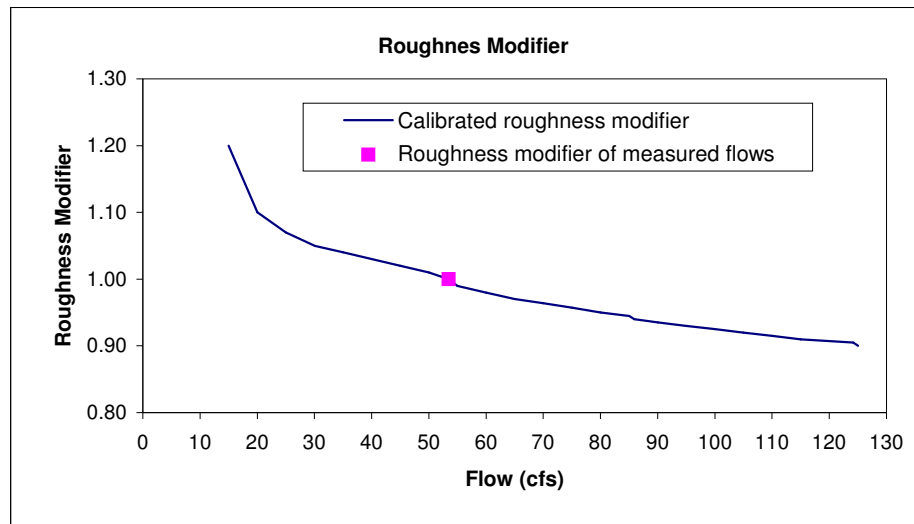
Trip	Survey Date	Q (cfs)	Modeling WSE(ft)				Calibrated WSE(ft)				ΔWSE (ft, measured-calib.)			
			TR-1	TR-2	TR-3	TR-4	TR-1	TR-2	TR-3	TR-4	TR-1	TR-2	TR-3	TR-4
1	5/13/03	53.5	102.24	102.34	102.38	102.43	102.24	102.28	102.35	102.43	0.00	0.06	0.03	0.00
2	6/24/2003	85.9	102.50	102.61	102.65	102.74	102.40	102.46	102.57	102.69				
3	9/17/2003	30.1	101.94	102.00	102.04	102.13	102.06	102.09	102.13	102.18				
4	10/8/2003	89.2												
5	5/4/2004	124.2	102.61	102.68	102.86	102.91	102.66	102.72	102.85	102.97	-0.05	-0.04	0.01	-0.06

Note: (a) Calibration errors for all transects appear to be reasonable and within acceptable range.

WSP Roughness Modifier

Flow	RAF
15	1.20
20	1.10
25	1.07
30.1	1.05
35	1.04
40	1.03
45	1.02
50.0	1.01
53.5	1.00
55	0.99
60	0.98
65	0.97
70	0.96
75	0.96
80	0.95
85.0	0.94
85.9	0.94
90	0.94
95	0.93
100	0.93
105	0.92

(*) The table on the left lists the roughness modifier used in the WSE calibration.



110	0.92
115	0.91
124.2	0.90
125	0.90

(2) Calibrated Hydraulics

- (a) For MANSQ WSE calibration, $\beta_{TR1}=0.60$ and Trip 1 flow (53.5cfs) was used as the calibration flow.
- (b) For velocity calibration, Trip 1's velocity profiles were used as templates for calibration.
- (c) Hydraulic calibration results are summarized in worksheets cTR I-y, where y=1, 2, 3, and 4.
- (d) WSE Calibration errors for all transects appear to be acceptable and within reasonable range.
- (e) TR I-1, TR I-2, TR I-3, and TR I-4: WSE, Froude number (Fr), cross-sectional Manning's n, transect average velocity (V), wetted perimeter, and Velocity Adjustment Factor (VAF) all are acceptable and within reasonable ranges.
- (f) Comparison of modeling and calibrated WSEs are shown in worksheet "SimWSE".
- (g) PHABSIM model did not calculate wetted perimeter and Manning's, both of which were calculated outside the model.

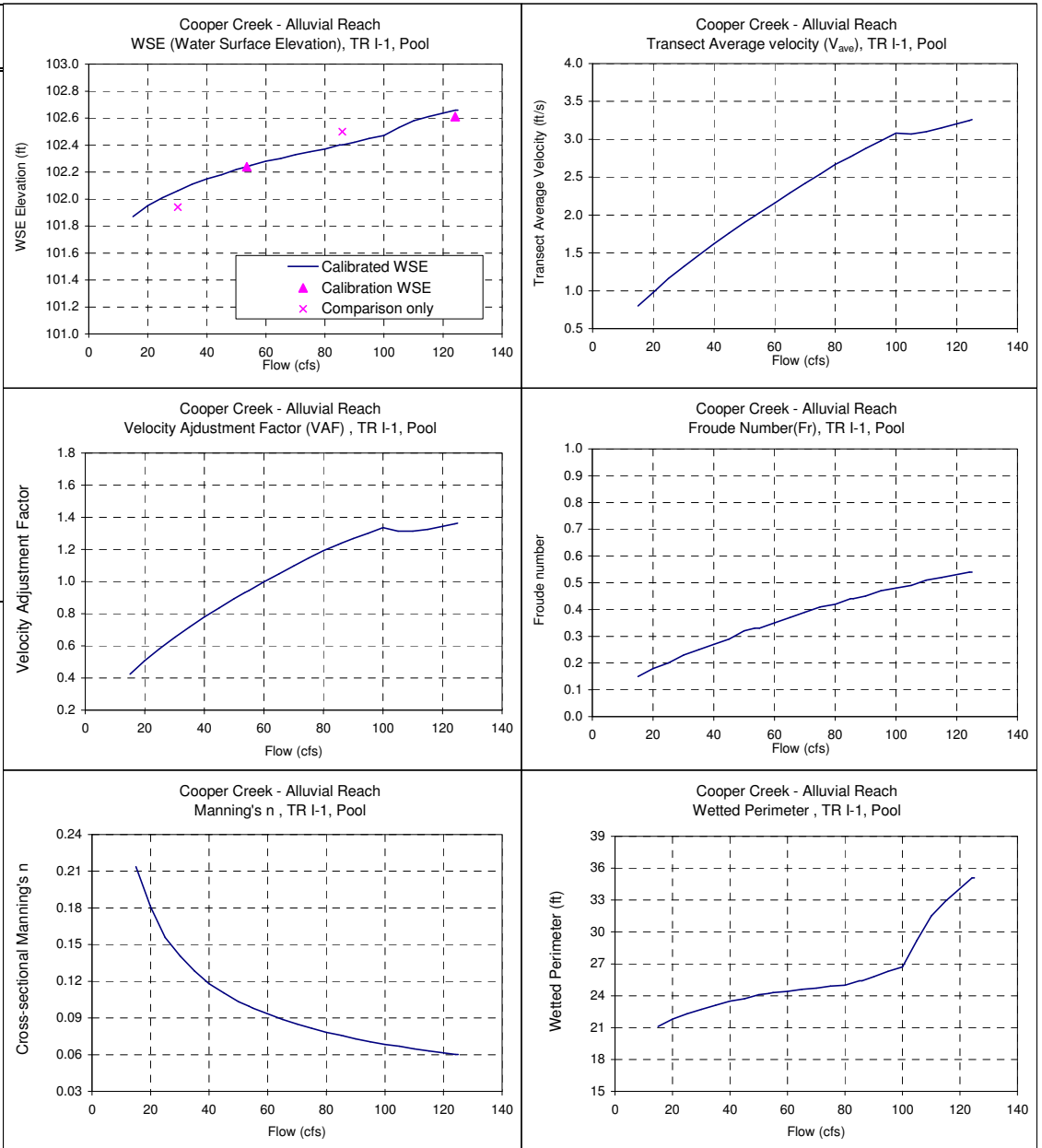
(3) Velocity calibration

- TR I-1: Trip 1's flow velocity profile was used as velocity template for calibration.
Predicted velocity profile was reasonable, and no changes to the Manning's n calculated by PHABSIM were made.
- TR I-2: Trip 1's flow velocity profile was used as velocity template for calibration.
Predicted velocity profile was reasonable, and no changes to the Manning's n calculated by PHABSIM were made.
- TR I-3: Trip 1's flow velocity profile was used as velocity template for calibration.
Predicted velocity profile was reasonable, and no changes to the Manning's n calculated by PHABSIM were made.
- TR I-4: Trip 1's flow velocity profile was used as velocity template for calibration.
Slightly adjusted Manning's n values calculated by PHABSIM to make the simulated velocity near the water edge more reasonable.

The comparison of simulated and measured velocity profiles are included in worksheet "VelComp", which shows the simulated profiles resemble the measured ones.

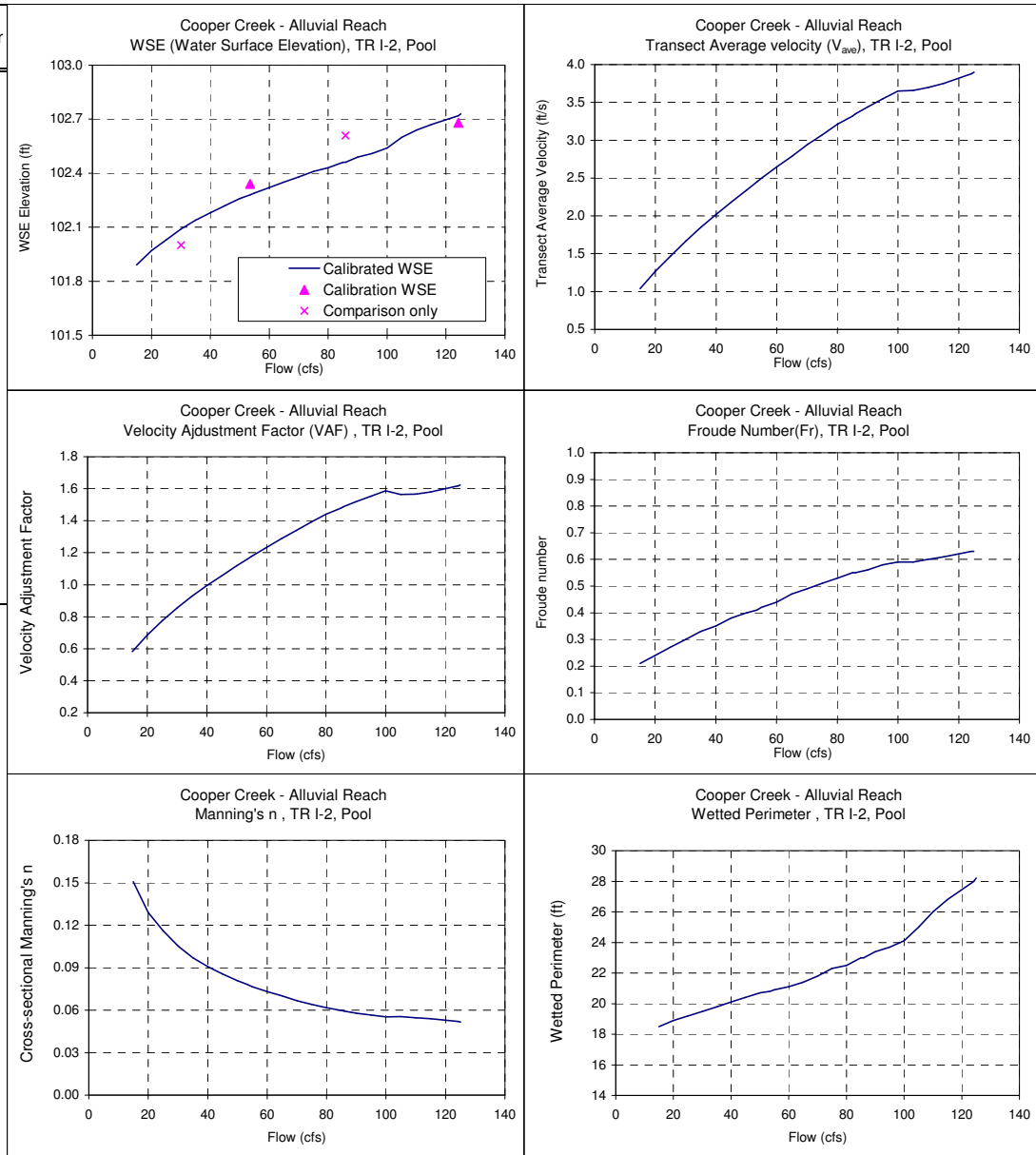
Reach **Alluvial Reach**
Stream: **Cooper Creek**
Transect : **I-1**
Habitat: **Pool**

Modeling		Simul. Q (cfs)	Cal'd				Velocity (ft/s)	wettered	
Q (cfs)	WSE (ft)		WSE (ft)	VAF	Froude Number	Manning's n		perimeter (ft)	
53.5	102.24	15	101.87	0.42	0.15	0.80	0.214	21.1	
85.9	102.50	20	101.95	0.51	0.18	0.98	0.181	21.8	
30.1	101.94	25	102.01	0.58	0.20	1.16	0.156	22.3	
89.2	0.00	30.1	102.06	0.65	0.23	1.32	0.141	22.7	
124.2	102.61	35	102.11	0.72	0.25	1.47	0.128	23.1	
		40	102.15	0.78	0.27	1.62	0.118	23.5	
		45	102.18	0.84	0.29	1.76	0.111	23.7	
		50	102.22	0.89	0.32	1.90	0.103	24.1	
53.5		55	102.24	0.93	0.33	1.99	0.100	24.2	
55		55	102.25	0.95	0.33	2.03	0.098	24.3	
60		60	102.28	1.00	0.35	2.16	0.093	24.4	
65		65	102.30	1.05	0.37	2.29	0.089	24.6	
70		70	102.33	1.10	0.39	2.42	0.085	24.7	
75		75	102.35	1.15	0.41	2.54	0.082	24.9	
80		80	102.37	1.19	0.42	2.67	0.078	25	
85		85	102.40	1.23	0.44	2.77	0.076	25.4	
85.9		85.9	102.40	1.24	0.44	2.79	0.075	25.4	
90		90	102.42	1.27	0.45	2.88	0.073	25.8	
95		95	102.45	1.30	0.47	2.98	0.071	26.3	
100		100	102.47	1.34	0.48	3.08	0.068	26.7	
105		105	102.53	1.31	0.49	3.07	0.067	29.2	
110		110	102.58	1.31	0.51	3.10	0.065	31.5	
115		115	102.61	1.33	0.52	3.15	0.063	32.9	
124.2		124.2	102.66	1.36	0.54	3.25	0.060	35.1	
125		125	102.66	1.36	0.54	3.26	0.060	35.1	



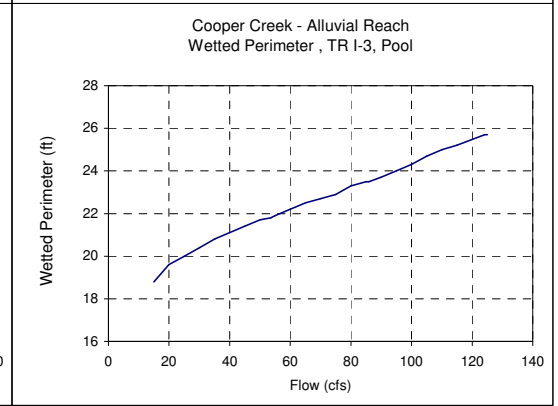
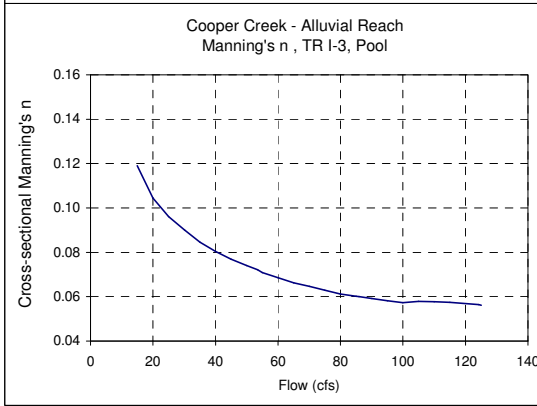
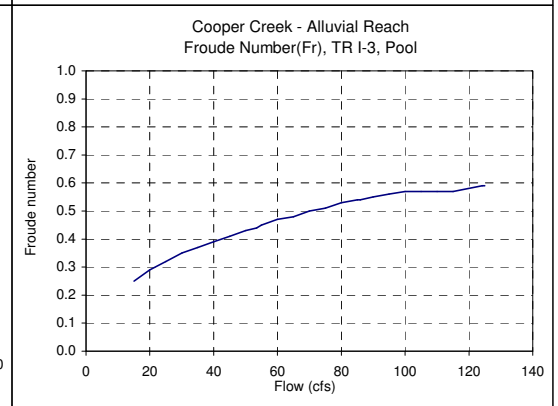
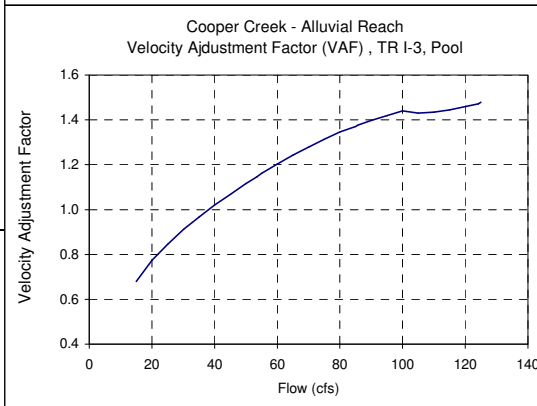
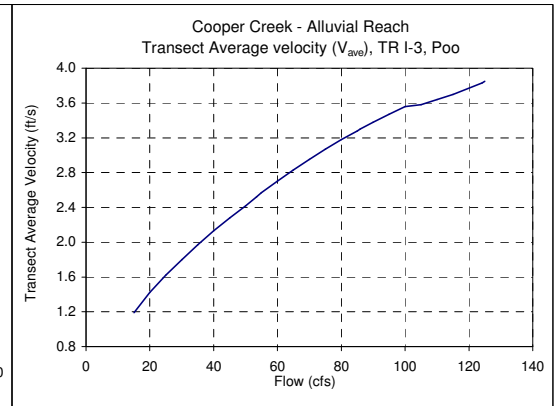
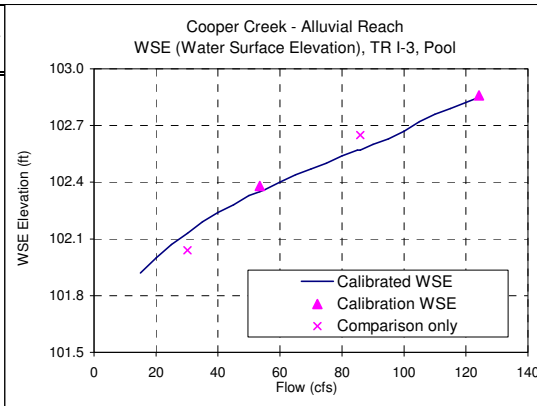
Reach: Alluvial Reach
 Stream: Cooper Creek
 Transect: I-2
 Habitat: Pool

Modeling		Simul. Q (cfs)	Cal'd WSE (ft)	VAF	Froude Number	Velocity (ft/s)	Manning's n	wettered perimeter (ft)
Q (cfs)	WSE (ft)							
53.5	102.34	15	101.89	0.58	0.21	1.04	0.151	18.5
85.9	102.61	20	101.97	0.69	0.24	1.27	0.129	18.9
30.1	102.00	25	102.03	0.77	0.27	1.47	0.116	19.2
89.2	0.00	30.1	102.09	0.86	0.30	1.67	0.105	19.5
124.2	102.68	35	102.14	0.93	0.33	1.85	0.097	19.8
		40	102.18	1.00	0.35	2.02	0.091	20.1
		45	102.22	1.06	0.38	2.18	0.086	20.4
		50	102.26	1.12	0.40	2.34	0.081	20.7
		53.5	102.28	1.16	0.41	2.45	0.078	20.8
		55	102.29	1.18	0.42	2.50	0.077	20.9
		60	102.32	1.23	0.44	2.65	0.073	21.1
		65	102.35	1.29	0.47	2.79	0.070	21.4
		70	102.38	1.34	0.49	2.94	0.067	21.8
		75	102.41	1.39	0.51	3.07	0.064	22.3
		80	102.43	1.44	0.53	3.21	0.062	22.5
		85	102.46	1.48	0.55	3.32	0.060	23
		85.9	102.46	1.49	0.55	3.35	0.059	23
		90	102.49	1.52	0.56	3.44	0.058	23.4
		95	102.51	1.55	0.58	3.55	0.057	23.7
		100	102.54	1.59	0.59	3.65	0.055	24.1
		105	102.60	1.56	0.59	3.66	0.055	25
		110	102.64	1.57	0.60	3.70	0.055	26
		115	102.67	1.58	0.61	3.75	0.054	26.8
		124.2	102.72	1.62	0.63	3.88	0.052	28
		125	102.73	1.62	0.63	3.90	0.052	28.2



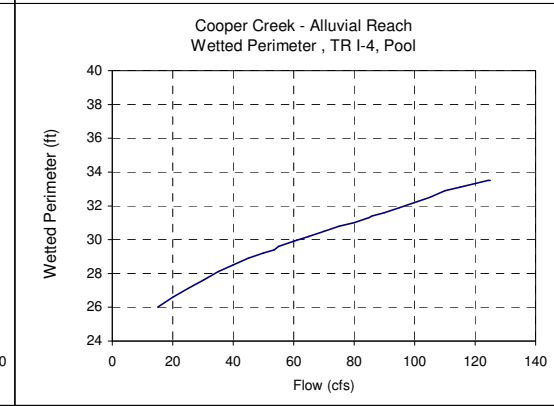
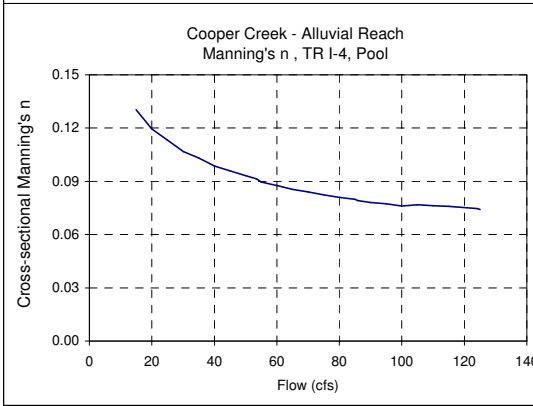
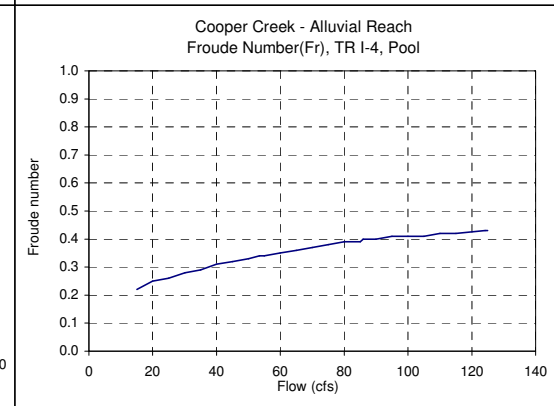
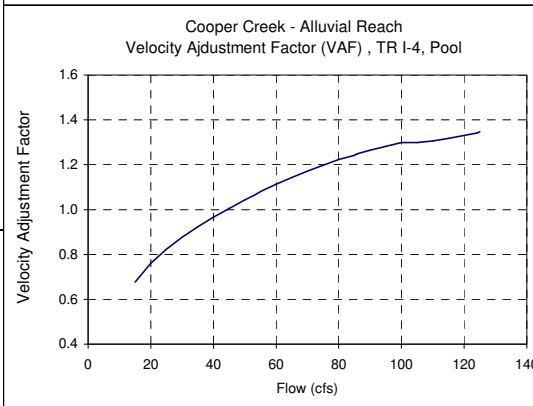
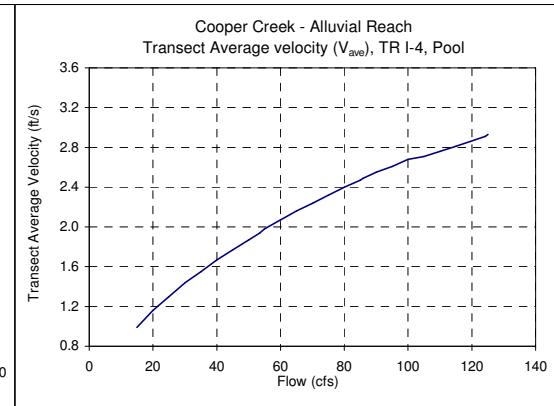
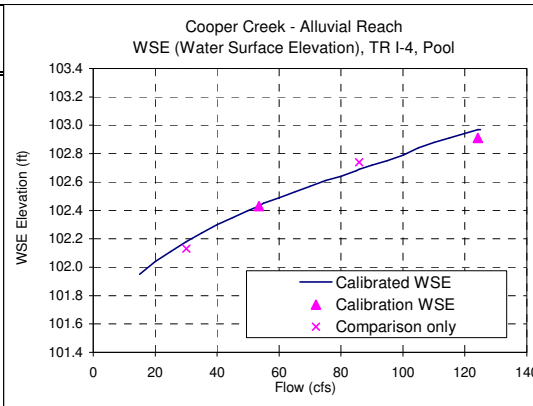
Reach: Alluvial Reach
 Stream: Cooper Creek
 Transect: I-3
 Habitat: Pool

Modeling		Simul.	Cal'd					wetted
Q	WSE	Q	WSE	VAF	Froude	Velocity	Manning's	perimeter
(cfs)	(ft)	(cfs)	(ft)		Number	(ft/s)	n	(ft)
53.5	102.38	15	101.92	0.68	0.25	1.19	0.119	18.8
85.9	102.65	20	102.00	0.77	0.29	1.42	0.105	19.6
30.1	102.04	25	102.07	0.85	0.32	1.62	0.096	20.0
89.2	0.00	30.1	102.13	0.91	0.35	1.80	0.090	20.4
124.2	102.86	35	102.19	0.97	0.37	1.97	0.085	20.8
		40	102.24	1.02	0.39	2.13	0.080	21.1
		45	102.28	1.07	0.41	2.28	0.077	21.4
		50	102.33	1.12	0.43	2.42	0.074	21.7
		53.5	102.35	1.15	0.44	2.52	0.072	21.8
		55	102.36	1.16	0.45	2.57	0.071	21.9
		60	102.40	1.20	0.47	2.70	0.069	22.2
		65	102.44	1.24	0.48	2.83	0.066	22.5
		70	102.47	1.28	0.50	2.95	0.065	22.7
		75	102.50	1.31	0.51	3.07	0.063	22.9
		80	102.54	1.35	0.53	3.18	0.061	23.3
		85	102.57	1.37	0.54	3.28	0.060	23.5
		85.9	102.57	1.38	0.54	3.30	0.060	23.5
		90	102.60	1.40	0.55	3.38	0.059	23.7
		95	102.63	1.42	0.56	3.47	0.058	24.0
		100	102.67	1.44	0.57	3.56	0.057	24.3
		105	102.72	1.43	0.57	3.58	0.058	24.7
		110	102.76	1.43	0.57	3.64	0.058	25.0
		115	102.79	1.44	0.57	3.70	0.058	25.2
		124.2	102.85	1.47	0.59	3.83	0.056	25.7
		125	102.85	1.48	0.59	3.85	0.056	25.7

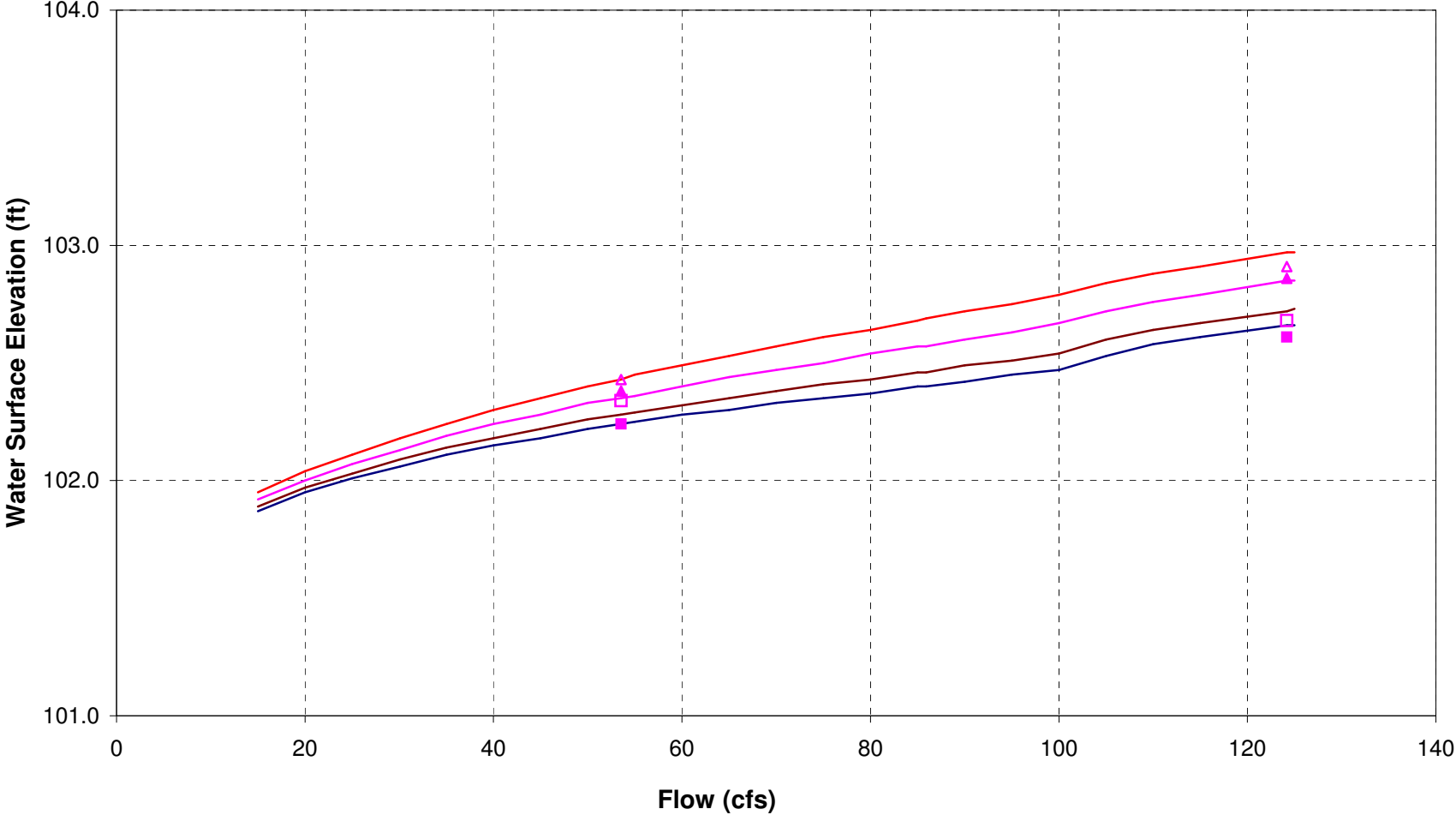


Reach: Alluvial Reach
 Stream: Cooper Creek
 Transect: I-4
 Habitat: Pool

Modeling		Simul. Q (cfs)	Cal'd WSE (ft)	VAF	Froude Number	Velocity (ft/s)	Manning's n	wetted perimeter (ft)
Q (cfs)	WSE (ft)							
53.5	102.43	15	101.95	0.68	0.22	0.99	0.130	26
85.9	102.74	20	102.04	0.76	0.25	1.16	0.119	26.6
30.1	102.13	25	102.11	0.82	0.26	1.30	0.113	27.1
89.2	0.00	30.1	102.18	0.88	0.28	1.44	0.107	27.6
124.2	102.91	35	102.24	0.92	0.29	1.55	0.103	28.1
		40	102.30	0.97	0.31	1.67	0.099	28.5
		45	102.35	1.00	0.32	1.77	0.096	28.9
		50	102.40	1.04	0.33	1.87	0.093	29.2
		53.5	102.43	1.07	0.34	1.94	0.091	29.4
		55	102.45	1.08	0.34	1.98	0.090	29.6
		60	102.49	1.11	0.35	2.07	0.088	29.9
		65	102.53	1.14	0.36	2.16	0.085	30.2
		70	102.57	1.17	0.37	2.24	0.084	30.5
		75	102.61	1.20	0.38	2.32	0.082	30.8
		80	102.64	1.22	0.39	2.40	0.081	31
		85	102.68	1.24	0.39	2.47	0.080	31.3
		85.9	102.69	1.25	0.40	2.49	0.079	31.4
		90	102.72	1.26	0.40	2.55	0.078	31.6
		95	102.75	1.28	0.41	2.61	0.077	31.9
		100	102.79	1.30	0.41	2.68	0.076	32.2
		105	102.84	1.30	0.41	2.71	0.077	32.5
		110	102.88	1.31	0.42	2.76	0.076	32.9
		115	102.91	1.32	0.42	2.81	0.076	33.1
		124.2	102.97	1.34	0.43	2.91	0.075	33.5
		125	102.97	1.35	0.43	2.93	0.074	33.5

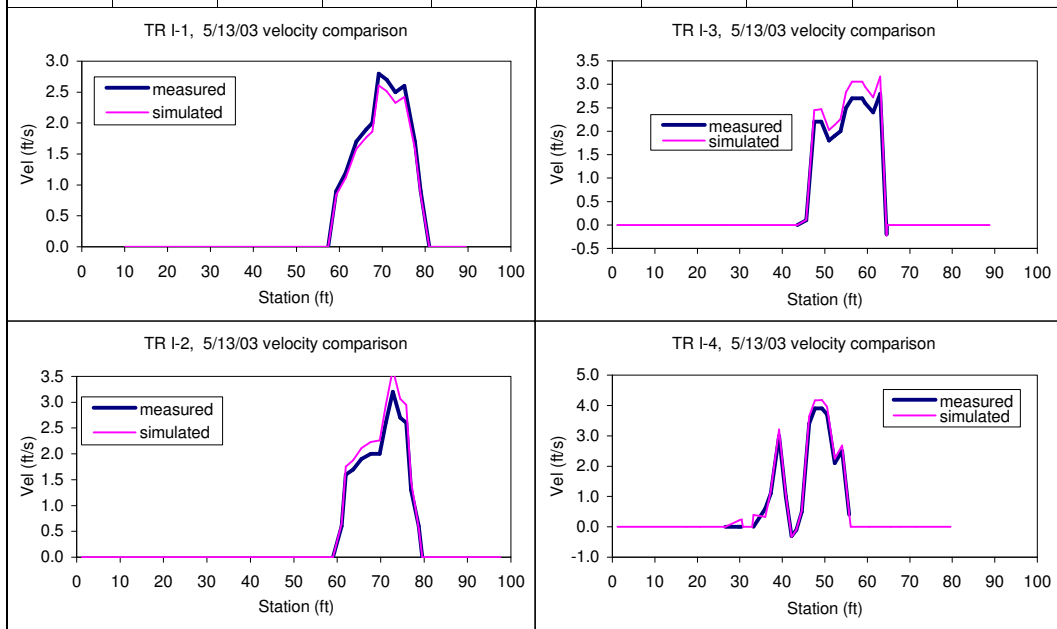


Cooper Creek - Alluvial Reach, Site K Comparison of Modeling and Simulated WSEs



Reach: Alluvial Reach
Stream: Cooper Creek
Habitat: Pool
CalibrationFlow: 5/13/2003 (Q=53.5cfs)

Comparison of Measured and Simulated Velocity Profile



TR I-1			TR I-2			TR I-3			TR I-4		
Sta	meas.	simul.	Sta	meas.	simul.	Sta	meas.	simul.	Sta	meas.	simul.
10.1		0.00	1.2		0.00	1.1		0.00	1.2		0.00
17.0		0.00	12.6		0.00	5.4		0.00	17.4		0.00
21.9		0.00	17.7		0.00	12.0		0.00	20.6		0.00
33.5		0.00	23.0		0.00	20.0		0.00	26.6	0.00	0.01
35.1		0.00	32.5		0.00	25.5		0.00	29.8	0.00	0.21
42.0		0.00	38.8		0.00	26.8		0.00	30.4	0.00	0.24
42.7		0.00	40.9		0.00	32.7		0.00	30.7		0.00
46.8		0.00	44.1		0.00	35.4		0.00	32.9		0.00
52.0		0.00	46.7		0.00	39.2		0.00	33.2	0.00	0.39
56.3		0.00	51.6		0.00	43.5	0.00	0.00	36.0	0.60	0.33
57.4	0.00	0.00	59.0	0.00	0.00	45.6	0.10	0.11	37.3	1.10	1.18
59.3	0.90	0.84	61.0	0.60	0.65	47.5	2.20	2.45	39.2	3.00	3.21
61.5	1.20	1.12	62.0	1.60	1.75	49.2	2.20	2.47	40.8	1.00	1.07
64.0	1.70	1.58	63.7	1.70	1.88	51.0	1.80	2.02	42.2	-0.30	-0.32
66.3	1.90	1.77	65.6	1.90	2.11	52.3	1.90	2.14	43.3	-0.10	-0.11
67.7	2.00	1.86	67.7	2.00	2.23	53.7	2.00	2.26	44.6	0.50	0.53
69.2	2.80	2.61	69.8	2.00	2.26	55.0	2.50	2.83	46.3	3.40	3.64
71.1	2.70	2.51	71.2	2.60	2.94	56.4	2.70	3.06	47.7	3.90	4.17
73.1	2.50	2.33	72.8	3.20	3.63	58.8	2.70	3.06	49.3	3.90	4.17
75.2	2.60	2.42	74.5	2.70	3.07	59.5	2.60	2.95	50.5	3.70	3.96
77.6	1.70	1.58	75.9	2.60	2.95	61.4	2.40	2.72	52.3	2.10	2.25
79.0	0.90	0.84	77.0	1.30	1.47	63.0	2.80	3.16	54.1	2.50	2.68
81.0	0.00	0.00	78.8	0.60	0.56	64.5	-0.20	-0.22	55.7	0.40	0.43
81.5		0.00	79.6	0.00	0.00	64.6	0.00	0.00	56.1		0.00
83.9		0.00	80.4		0.00	67.5		0.00	60.4		0.00
88.0		0.00	81.8		0.00	72.4		0.00	65.5		0.00
89.5		0.00	84.4		0.00	76.8		0.00	67.8		0.00
			90.3		0.00	81.0		0.00	71.4		0.00
			97.6		0.00	88.8		0.00	79.6		0.00