12-8-2009

Ex. 279-US-449

Unknown

Stream: Sycan River
Site: SY-10 (Coyote Creek)
Date: 5/16/93
Habitat: Run **Flow:** High

(1) Level Loop Survey (BM & HP)

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	6.29	106.29		
HP1			4.93	101.36
HP2			4.91	101.38
HP3			4.78	101.51
TP				
HP3	4.75	106.26		
HP2			4.89	101.37
HP1			4.91	101.35
BM			6.26	100.00

Comment:

(2) Water Surface Elevation (WSE) Survey

	L/R WSE	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWE	0	106.26	5.72	0.00	100.54	100.54	
	RWE			5.73	0.00	100.53		
TR2	LWE	7.25	106.26	5.72	0.00	100.54	100.55	
	RWE			5.70	0.00	100.56		
TR3	LWE	27.1	106.26	5.65	0.00	100.61	100.61	9.1
	RWE			5.65	0.00	100.61		
							Ave Q=	9.1

Note:
WSE slope= 0.28%

Date: 6/27/93
Habitat: Run **Flow:** Mid

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	6.55	106.55		
HP1			5.22	101.33
HP2			5.20	101.35
HP3			5.06	101.49
TP				
HP3	5.10	106.59		
HP2			5.14	101.45
HP1			5.26	101.33
BM			6.59	100.00

Comment:

(2) Water Surface Elevation (WSE) Survey

	L/R WSE	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWE	0	106.59	7.40	0.00	99.19	99.18	1.6
	RWE			7.42	0.00	99.17		
TR2	LWE	7.25	106.59	7.36	0.00	99.23	99.23	1.6
	RWE			7.36	0.00	99.23		
TR3	LWE	27.1	106.59	7.35	0.00	99.24	99.25	1.7
	RWE			7.34	0.00	99.25		
							Ave Q=	1.62

Note:
WSE slope= 0.24%

Date: 9/19/93
Habitat: Run **Flow:** Low

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	5.41	105.41		
HP1			4.06	101.35
HP2			4.11	101.30
HP3			3.90	101.51
TP				
HP3	3.76	105.27		
HP2			3.96	101.31
HP1			3.92	101.35
BM			5.26	100.01

Comment:

(2) Water Surface Elevation (WSE) Survey

	L/R WSE	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWE	0	105.27	6.15	0.00	99.12	99.12	0.9
	RWE			6.15	0.00	99.12		
TR2	LWE	7.25	105.27	6.13	0.00	99.14	99.15	0.8
	RWE			6.12	0.00	99.15		
TR3	LWE	27.1	105.27	6.11	0.00	99.16	99.17	0.6
	RWE			6.10	0.00	99.17		
							Ave Q=	0.78

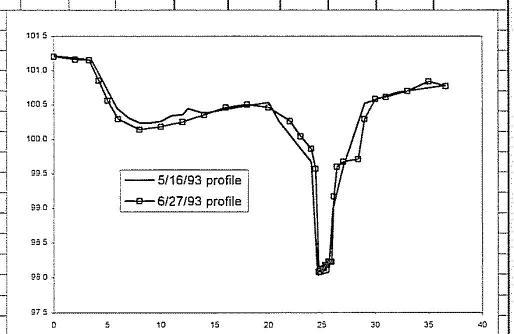
Note:
WSE slope= 0.17%

Stream:	Sycan River	
Site:	SY-10	
Transect:	1	
Habitat:	Run	
Survey Date	HI (ft)	Q (cfs)
5/16/93	106.26	
6/27/93	106.59	1.57
9/19/93	105.27	0.90

16-May-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	$V_{0.8}$	Ave	q (cfs)	substrate
RWP	0.0	5.05	101.21						
	3.5	5.11	101.15						
RWE	5.9	5.82	100.44						
	7.0		100.31	0.23					
	8.0		100.24	0.30					
	9.0		100.24	0.30					
	10.0		100.26	0.28					
	11.0		100.34	0.20					
	12.0		100.36	0.18					
LWE	12.5	5.82	100.44						
	14.0	5.89	100.37						
	17.0	5.80	100.46						
RWE	20.0	5.73	100.53						
	21.0		100.26	0.28					
	24.0		99.67	0.87					
	24.6		98.04	2.50					
	25.6		98.08	2.46					
	26.0		98.98	1.56					
	27.0		99.61	0.93					
LWE	29.0	5.74	100.52						
	32.0	5.58	100.68						
LWP	36.5	5.48	100.78						

This is bed profile surveyed on 5/16/93. Q measurement was conducted at a separate transect about 70ft upstream of TR-3. (see TR-3)



27-Jun-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	$V_{0.8}$	Ave	q (cfs)	substrate
RWP	0.0	5.39	101.20						1.1
	2.0	5.43	101.16						1.1
	3.3	5.44	101.15						1.1
	4.2	5.74	100.85						1.1
	5.0	6.03	100.56						1.1
	6.0	6.30	100.29						1.1
	8.0	6.45	100.14						1.1
	10.0	6.41	100.18						1.1
	12.0	6.34	100.25						1.1
	14.0	6.24	100.35						1.1
	16.0	6.13	100.46						1.1
	18.0	6.09	100.50						1.1
	20.0	6.13	100.46						1.1
	22.0	6.33	100.26						1.1
	23.0	6.55	100.04						1.1
	24.0	6.73	99.86						1.1
	24.4	7.02	99.57						1.1
RWE	24.7		98.08	1.10	1.35		1.35	0.07	9.9
	24.8		98.08	1.10	1.31		1.31	0.14	9.9
	24.9		98.08	1.10	1.58		1.58	0.17	9.9
	25.0		98.13	1.05	1.64		1.64	0.17	9.9
	25.1		98.13	1.05	1.51		1.51	0.16	9.9
	25.2		98.13	1.05	1.48		1.48	0.16	9.5
	25.3		98.18	1.00	1.38		1.38	0.14	9.5
	25.4		98.18	1.00	1.28		1.28	0.13	9.5
	25.5		98.18	1.00	1.22		1.22	0.12	9.5
	25.6		98.23	0.95	1.12		1.12	0.11	9.5
	25.7		98.23	0.95	1.05		1.05	0.10	9.9
	25.8		98.23	0.95	0.79		0.79	0.07	9.9
LWE	25.9		98.23	0.95	0.56		0.56	0.03	9.9
	26.1	7.42	99.17						1.1
	26.4	6.99	99.60						1.1
	27.0	6.92	99.67						1.1
	28.4	6.88	99.71						1.1
	29.0	6.30	100.29						1.1
	30.0	6.01	100.58						1.1
	31.0	5.98	100.61						1.1
	33.0	5.89	100.70						1.1
	35.0	5.75	100.84						1.1
LWP	36.6	5.82	100.77						1.1

meters/sec was used in the field notes.

19-Sep-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	$V_{0.8}$	Ave	q (cfs)	substrate
	0.0	4.05	101.22						1.1
	2.0	4.11	101.16						1.1
	3.3	4.09	101.18						1.1
	4.2	4.29	100.98						1.1
	5.0	4.61	100.66						1.1
	6.0	4.89	100.38						1.1
	8.0	5.10	100.17						1.1
	10.0	5.07	100.20						1.1
	12.0	5.04	100.23						1.1
	14.0	4.90	100.37						1.1
	16.0	4.79	100.48						1.1
	18.0	4.73	100.54						1.1
	20.0	4.83	100.44						1.1
	22.0	5.07	100.20						1.1
	23.0	5.21	100.06						1.1
	24.0	5.40	99.87						1.1
	24.4	5.58	99.69						1.1
RWE	24.9	6.15	99.12	0.00	0.00		0.00	0.00	9.9
	25.0		98.12	1.00	0.61		0.61	0.06	9.9
	25.1		98.12	1.00	1.14		1.14	0.11	9.9
	25.2		98.12	1.00	1.25		1.25	0.13	9.5
	25.3		98.12	1.00	1.25		1.25	0.13	9.5
	25.4		98.12	1.00	1.31		1.31	0.13	9.5
	25.5		98.12	1.00	1.18		1.18	0.12	9.5
	25.6		98.12	1.00	0.92		0.92	0.09	9.5
	25.7		98.17	0.95	0.76		0.76	0.07	9.9
	25.8		98.17	0.95	0.70		0.70	0.07	9.9
LWE	25.9	6.15	99.12	0.00	0.00		0.00	0.00	9.9
	26.1	5.92	99.35						1.1
	26.4	5.62	99.65						1.1
	27.0	5.55	99.72						1.1
	28.4	5.56	99.71						1.1
	29.0	5.20	100.07						1.1
	30.0	4.75	100.52						1.1
	31.0	4.68	100.59						1.1
	33.0	4.58	100.69						1.1
	35.0	4.44	100.83						1.1
	36.6	4.49	100.78						1.1

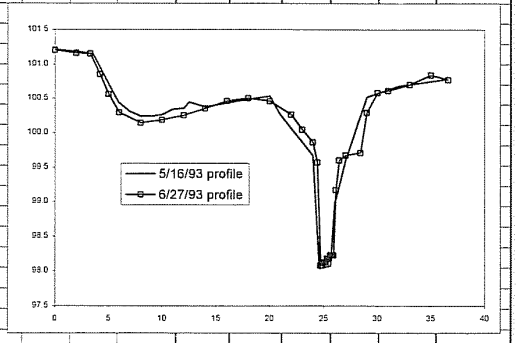
Stream: Sycan River
Site: SY-10
Transect: 1
Habitat: Run

Survey Date	HI (ft)	Q (cfs)
5/16/93	106.26	
6/27/93	106.59	1.57
9/19/93	105.27	0.90

16-May-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) Ave	q (cfs)	substrate
RWP	0.0	5.05	101.21						
	3.5	5.11	101.15						
RWE	5.9	5.82	100.44						
	7.0		100.31	0.23					
	8.0		100.24	0.30					
	9.0		100.24	0.30					
	10.0		100.26	0.28					
	11.0		100.34	0.20					
	12.0		100.36	0.18					
LWE	12.5	5.82	100.44						
	14.0	5.89	100.37						
	17.0	5.80	100.46						
RWE	20.0	5.73	100.53						
	21.0		100.26	0.28					
	24.0		99.67	0.87					
	24.6		98.04	2.50					
	25.6		98.08	2.46					
	26.0		98.98	1.56					
	27.0		99.61	0.93					
LWE	29.0	5.74	100.52						
	32.0	5.58	100.68						
LWP	36.5	5.48	100.78						

This is bed profile surveyed on 5/16/93. Q measurement was conducted at a separate transect about 70ft upstream of TR-3. (see TR-3)



27-Jun-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) Ave	q (cfs)	substrate
RWP	0.0	5.39	101.20						1.1
	2.0	5.43	101.16						1.1
	3.3	5.44	101.15						1.1
	4.2	5.74	100.85						1.1
	5.0	6.03	100.56						1.1
	6.0	6.30	100.29						1.1
	8.0	6.45	100.14						1.1
	10.0	6.41	100.18						1.1
	12.0	6.34	100.25						1.1
	14.0	6.24	100.35						1.1
	16.0	6.13	100.46						1.1
	18.0	6.09	100.50						1.1
	20.0	6.13	100.46						1.1
	22.0	6.33	100.26						1.1
	23.0	6.55	100.04						1.1
	24.0	6.73	99.86						1.1
	24.4	7.02	99.57						1.1
RWE	24.7		98.08	1.10	1.35		1.35	0.07	9.9
	24.8		98.08	1.10	1.31		1.31	0.14	9.9
	24.9		98.08	1.10	1.58		1.58	0.17	9.9
	25.0		98.13	1.05	1.64		1.64	0.17	9.9
	25.1		98.13	1.05	1.51		1.51	0.16	9.9
	25.2		98.13	1.05	1.48		1.48	0.16	9.5
	25.3		98.18	1.00	1.38		1.38	0.14	9.5
	25.4		98.18	1.00	1.28		1.28	0.13	9.5
	25.5		98.18	1.00	1.22		1.22	0.12	9.5
	25.6		98.23	0.95	1.12		1.12	0.11	9.5
	25.7		98.23	0.95	1.05		1.05	0.10	9.9
	25.8		98.23	0.95	0.79		0.79	0.07	9.9
LWE	25.9		98.23	0.95	0.56		0.56	0.03	9.9
	26.1	7.42	99.17						1.1
	26.4	6.99	99.60						1.1
	27.0	6.92	99.67						1.1
	28.4	6.88	99.71						1.1
	29.0	6.30	100.29						1.1
	30.0	6.01	100.58						1.1
	31.0	5.98	100.61						1.1
	33.0	5.89	100.70						1.1
	35.0	5.75	100.84						1.1
LWP	36.6	5.82	100.77						1.1

meters/sec was used in the field notes.

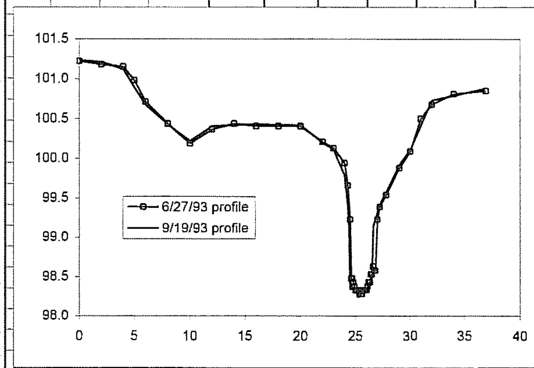
19-Sep-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) Ave	q (cfs)	substrate
	0.0	4.05	101.22						1.1
	2.0	4.11	101.16						1.1
	3.3	4.09	101.18						1.1
	4.2	4.29	100.98						1.1
	5.0	4.61	100.66						1.1
	6.0	4.89	100.38						1.1
	8.0	5.10	100.17						1.1
	10.0	5.07	100.20						1.1
	12.0	5.04	100.23						1.1
	14.0	4.90	100.37						1.1
	16.0	4.79	100.48						1.1
	18.0	4.73	100.54						1.1
	20.0	4.83	100.44						1.1
	22.0	5.07	100.20						1.1
	23.0	5.21	100.06						1.1
	24.0	5.40	99.87						1.1
	24.4	5.58	99.69						1.1
RWE	24.9	6.15	99.12	0.00	0.00		0.00	0.00	9.9
	25.0		98.12	1.00	0.61		0.61	0.06	9.9
	25.1		98.12	1.00	1.14		1.14	0.11	9.9
	25.2		98.12	1.00	1.25		1.25	0.13	9.5
	25.3		98.12	1.00	1.25		1.25	0.13	9.5
	25.4		98.12	1.00	1.31		1.31	0.13	9.5
	25.5		98.12	1.00	1.18		1.18	0.12	9.5
	25.6		98.12	1.00	0.92		0.92	0.09	9.5
	25.7		98.17	0.95	0.76		0.76	0.07	9.9
	25.8		98.17	0.95	0.70		0.70	0.07	9.9
LWE	25.9	6.15	99.12	0.00	0.00		0.00	0.00	9.9
	26.1	5.92	99.35						1.1
	26.4	5.62	99.65						1.1
	27.0	5.55	99.72						1.1
	28.4	5.56	99.71						1.1
	29.0	5.20	100.07						1.1
	30.0	4.75	100.52						1.1
	31.0	4.68	100.59						1.1
	33.0	4.58	100.69						1.1
	35.0	4.44	100.83						1.1
	36.6	4.49	100.78						1.1

Stream:	Sycan River	
Site:	SY-10	
Transect:	2	
Habitat:	Run	
Survey Date	HI (ft)	Q (cfs)
5/16/93	106.26	
6/27/93	106.59	1.62
9/19/93	105.27	0.82

16-May-93

Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	$V_{0.8}$	Ave	q (cfs)	substrate



27-Jun-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	$V_{0.8}$	Ave	q (cfs)	substrate
RWP	0.0	5.37	101.22						1.1
	2.0	5.41	101.18						1.1
	4.0	5.44	101.15						1.1
	5.0	5.61	100.98						1.1
	6.0	5.88	100.71						1.1
	8.0	6.15	100.44						1.1
	10.0	6.40	100.19						1.1
	12.0	6.22	100.37						1.1
	14.0	6.15	100.44						1.1
	16.0	6.18	100.41						1.1
	18.0	6.18	100.41						1.1
	20.0	6.18	100.41						1.1
	22.0	6.38	100.21						1.1
	23.0	6.46	100.13						1.1
	24.0	6.65	99.94						1.1
	24.3	6.93	99.66						1.1
RWE	24.5		99.23	0.00	0.00		0.00	0.00	9.9
	24.6		98.48	0.75	0.03		0.03	0.00	9.9
	24.7		98.48	0.75	0.03		0.03	0.00	9.9
	24.8		98.43	0.80	0.13		0.13	0.01	9.9
	24.9		98.38	0.85	0.62		0.62	0.05	9.9
	25.0		98.33	0.90	0.92		0.92	0.08	9.9
	25.1		98.33	0.90	0.99		0.99	0.09	9.9
	25.2		98.33	0.90	1.05		1.05	0.09	9.9
	25.3		98.33	0.90	1.25		1.25	0.11	9.9
	25.4		98.33	0.90	1.61		1.61	0.14	9.9
	25.5		98.28	0.95	1.54		1.54	0.15	9.9
	25.6		98.28	0.95	1.67		1.67	0.16	9.9
	25.7		98.33	0.90	1.81		1.81	0.16	9.9
	25.8		98.33	0.90	1.61		1.61	0.14	9.9
	25.9		98.33	0.90	1.58		1.58	0.14	9.9
	26.0		98.33	0.90	0.99		0.99	0.09	9.9
	26.1		98.38	0.85	0.99		0.99	0.08	9.9
	26.2		98.43	0.80	0.53		0.53	0.04	9.9
	26.3		98.43	0.80	0.26		0.26	0.02	9.9
	26.4		98.53	0.70	0.16		0.16	0.01	9.9
	26.5		98.53	0.70	0.20		0.20	0.01	9.9
	26.6		98.63	0.60	0.07		0.07	0.00	9.9
LWS	26.7		98.58	0.65	0.07		0.07	0.00	9.9
	26.8		98.58	0.65	0.03		0.03	0.00	9.9
LWE	27.0		99.23	0.00	0.00		0.00	0.00	9.9
	27.2	7.20	99.39						1.1
	27.8	7.05	99.54						1.1
	29.0	6.71	99.88						1.1
	30.0	6.50	100.09						1.1
	31.0	6.09	100.50						1.1
	32.0	5.91	100.68						1.1
	34.0	5.78	100.81						1.1
LWP	36.9	5.74	100.85						1.1

meters/sec was used in the field notes.

19-Sep-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	$V_{0.8}$	Ave	q (cfs)	substrate
	0.0	4.04	101.23						1.1
	2.0	4.06	101.21						1.1
	4.0	4.15	101.12						1.1
	6.0	4.60	100.67						1.1
	8.0	4.84	100.43						1.1
	10.0	5.05	100.22						1.1
	12.0	4.86	100.41						1.1
	14.0	4.85	100.42						1.1
	16.0	4.84	100.43						1.1
	18.0	4.85	100.42						1.1
	20.0	4.85	100.42						1.1
	22.0	5.07	100.20						1.1
	23.0	5.16	100.11						1.1
	24.0	5.48	99.79						1.1
	24.3	5.85	99.42						1.1
RWE	24.4	6.12	99.15	0.00	0.00		0.00	0.00	9.9
	24.5		98.35	0.80	0.09		0.09	0.01	9.9
	24.6		98.35	0.80	0.20		0.20	0.02	9.9
	24.7		98.35	0.80	0.47		0.47	0.04	9.9
	24.8		98.35	0.80	0.31		0.31	0.02	9.9
	24.9		98.30	0.85	0.41		0.41	0.03	9.9
	25.0		98.30	0.85	0.53		0.53	0.05	9.9
	25.1		98.30	0.85	0.78		0.78	0.07	9.9
	25.2		98.25	0.90	1.14		1.14	0.10	9.9
	25.3		98.25	0.90	1.16		1.16	0.10	9.9
	25.4		98.25	0.90	1.20		1.20	0.11	9.9
	25.5		98.30	0.85	1.18		1.18	0.10	9.9
	25.6		98.30	0.85	0.65		0.65	0.06	9.9
	25.7		98.30	0.85	0.70		0.70	0.06	9.9
	25.8		98.30	0.85	0.20		0.20	0.02	9.9
	25.9		98.30	0.85	0.12		0.12	0.01	9.9
	26.0		98.35	0.80	0.06		0.06	0.00	9.9
	26.1		98.35	0.80	0.05		0.05	0.00	9.9
	26.2		98.40	0.75	0.06		0.06	0.00	9.9
	26.3		98.40	0.75	0.07		0.07	0.01	9.9
	26.4		98.45	0.70	0.07		0.07	0.00	9.9
	26.5		98.45	0.70	0.05		0.05	0.00	9.9
LWE	26.6	6.13	99.14	0.00	0.00		0.00	0.00	9.9
	27.2	5.85	99.42						1.1
	27.8	5.69	99.58						1.1
	29.0	5.35	99.92						1.1
	30.0	5.16	100.11						1.1
	32.0	4.54	100.73						1.1
	34.0	4.48	100.79						1.1
	36.8	4.39	100.88						1.1

Stream:	Sycan River
Site:	SY-10
Transect:	3
Habitat:	Run

Survey Date	HI (ft)	Q (cfs)
5/16/93	106.26	9.1
6/27/93	106.59	1.66
9/19/93	105.27	0.63

16-May-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) Ave	q (cfs)	substrate
RWE	2.4		100.61	0.00	0.00		0.00	0.00	
	3.0		100.51	0.10	0.00		0.00	0.00	
	4.0		100.36	0.25	0.00		0.00	0.00	
	4.5		100.26	0.35	0.34		0.34	0.06	
	5.0		100.21	0.40	0.27		0.27	0.05	
	5.5		100.01	0.60	0.34		0.34	0.07	
	5.7		98.31	2.30	0.84		0.84	0.48	
	6.0		98.21	2.40	1.06		1.06	1.02	
	6.5		98.11	2.50	0.64	1.04	0.84	1.05	
	7.0		97.91	2.70	0.62	2.27	1.45	1.95	
	7.5		98.01	2.60	0.58	2.61	1.60	2.07	
	8.0		99.51	1.10	1.03		1.03	0.57	
	8.5		99.71	0.90	0.75		0.75	0.34	
	9.0		99.86	0.75	0.70		0.70	0.26	
	9.5		99.91	0.70	0.99		0.99	0.35	
	10.0		100.01	0.60	1.12		1.12	0.34	
	10.5		100.06	0.55	1.00		1.00	0.28	
	11.0		100.16	0.45	0.67		0.67	0.15	
	11.5		100.31	0.30	0.54		0.54	0.10	
LWE	12.2		100.61	0.00	0.00		0.00	0.00	

Note: This is the discharge measured at Q-transect located at about 70ft upstream of TR-3.

27-Jun-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) Ave	q (cfs)	substrate
RWP	12.0	5.39	101.20						1.1
	14.0	5.40	101.19						1.1
	15.0	5.46	101.13						1.1
	16.0	5.47	101.12						1.1
	16.2	5.78	100.81						1.1
	18.0	5.94	100.65						1.1
	20.0	6.08	100.51						1.1
	22.0	6.19	100.40						1.1
	24.0	6.22	100.37						1.1
	26.0	6.02	100.57						1.1
	28.0	5.98	100.61						1.1
	30.0	6.23	100.36						1.1
	32.0	6.14	100.45						1.1
	34.0	6.35	100.24						1.1
	35.0	6.61	99.98						1.1
	36.0	6.85	99.74						1.1
	37.0	6.95	99.64						1.1
	37.4	7.15	99.44	0.00	0.00		0.00	0.00	1.1
RWE	37.6		98.45	0.80	0.03		0.03	0.00	9.9
	37.7		98.45	0.80	0.07		0.07	0.01	9.5
	37.8		98.45	0.80	0.72		0.72	0.06	9.5
	37.9		98.45	0.80	1.25		1.25	0.10	5.5
	38.0		98.40	0.85	1.25		1.25	0.11	5.5
	38.1		98.40	0.85	1.58		1.58	0.13	5.5
	38.2		98.35	0.90	1.67		1.67	0.15	5.5
	38.3		98.35	0.90	1.71		1.71	0.15	5.5
	38.4		98.35	0.90	1.64		1.64	0.15	5.5
	38.5		98.35	0.90	1.71		1.71	0.15	5.5
	38.6		98.35	0.90	1.54		1.54	0.14	5.5
	38.7		98.35	0.90	1.41		1.41	0.13	5.5
	38.8		98.40	0.85	1.31		1.31	0.11	5.5
	38.9		98.45	0.80	1.15		1.15	0.09	5.5
	39.0		98.45	0.80	0.69		0.69	0.06	5.9
	39.1		98.50	0.75	0.59		0.59	0.04	5.9
	39.2		98.50	0.75	0.59		0.59	0.04	5.9
	39.3		98.50	0.75	0.49		0.49	0.04	1.1
LWE	39.4		99.25	0.00	0.00		0.00	0.00	1.1
	39.5	6.88	99.71						1.1
	40.0	6.71	99.88						1.1
	41.0	6.63	99.96						1.1
	42.0	6.33	100.26						1.1
	43.6	6.02	100.57						1.1
LWP	45.2	5.89	100.70						1.1

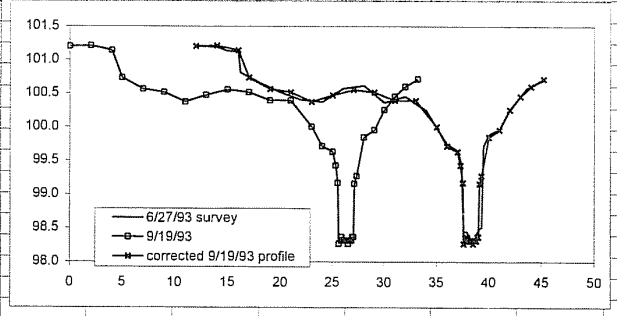
meters/sec was used in the field notes.

19-Sep-93

	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s) $V_{0.2/0.6}$	Vel (ft/s) $V_{0.8}$	Vel (ft/s) Ave	q (cfs)	substrate
	0.0	4.07	101.20						1.1
	2.0	4.06	101.21						1.1
	4.0	4.13	101.14						1.1
	5.0	4.54	100.73						1.1
	7.0	4.71	100.56						1.1
	9.0	4.76	100.51						1.1
	11.0	4.90	100.37						1.1
	13.0	4.80	100.47						1.1
	15.0	4.72	100.55						1.1
	17.0	4.76	100.51						1.1
	19.0	4.88	100.39						1.1
	21.0	4.88	100.39						1.1
	23.0	5.27	100.00						1.1
	24.0	5.56	99.71						1.1
	25.0	5.64	99.63						1.1
	25.3	5.84	99.43						1.1
RWE	25.5	6.10	99.17	0.00	0.00		0.00	0.00	9.9
	25.6		98.27	0.90	0.02		0.02	0.00	9.5
	25.8		98.37	0.80	0.02		0.02	0.00	9.5
	25.9		98.37	0.80	0.04		0.04	0.00	5.5
	26.0		98.32	0.85	0.06		0.06	0.01	5.5
	26.1		98.32	0.85	0.06		0.06	0.01	5.5
	26.2		98.32	0.85	0.10		0.10	0.01	5.5
	26.3		98.32	0.85	0.25		0.25	0.02	5.5
	26.4		98.32	0.85	0.85		0.85	0.07	5.5
	26.5		98.27	0.90	1.14		1.14	0.10	5.5
	26.6		98.32	0.85	1.45		1.45	0.12	5.5
	26.7		98.32	0.85	1.40		1.40	0.12	5.5
	26.8		98.32	0.85	0.99		0.99	0.08	5.5
	26.9		98.37	0.80	0.80		0.80	0.06	5.5
	27.0		98.37	0.80	0.20		0.20	0.02	5.9
LWE	27.1	6.11	99.16	0.00	0.00		0.00	0.00	5.9
	27.3	6.00	99.27						1.1
	28.0	5.43	99.84						1.1
	29.0	5.32	99.95						1.1
	30.0	5.02	100.25						1.1
	31.0	4.82	100.45						1.1
	32.0	4.67	100.60						1.1
	33.2	4.56	100.71						1.1

corrected 9/19/93

sta -12	Ground (ft)
12.0	101.20
14.0	101.21
16.0	101.14
17.0	100.73
19.0	100.56
21.0	100.51
23.0	100.37
25.0	100.47
27.0	100.55
29.0	100.51
31.0	100.39
33.0	100.39
35.0	100.00
36.0	99.71
37.0	99.63
37.3	99.43
37.5	99.17
37.6	98.27
37.8	98.37
37.9	98.37
38.0	98.32
38.1	98.32
38.2	98.32
38.3	98.32
38.4	98.32
38.5	98.27
38.6	98.32
38.7	98.32
38.8	98.32
38.9	98.37
39.0	98.37
39.1	99.16
39.3	99.27
40.0	99.84
41.0	99.95
42.0	100.25
43.0	100.45
44.0	100.60
45.2	100.71



Note: shift 9/19/93 profile 12ft to the right
to match the profiles of 9/19/93 and 6/27/93

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        Sycane  River SY10 06/27/93
RUN                         MID                                     TRANSECT 1
IOC       1101100100001000101000
QARD   0.4
QARD   0.5
QARD   0.6
QARD   0.7
QARD   0.8
QARD   0.9
QARD   1.0
QARD   1.2
QARD   1.4
QARD   1.6
QARD   2.0
QARD   2.5
QARD   3.0
QARD   3.5
QARD   4.0
QARD   4.5
QARD   5.0
QARD   5.5
QARD   6.0
QARD   6.5
QARD   7.0
QARD   7.5
QARD   8.0
QARD   8.5
QARD   9.1
QARD   9.5
QARD  10.0
QARD  11.0
QARD  12.0
QARD  14.0
XSEC1000.0      0.00 1.0     98.08   0.0024
    1000.0  0.0101.2  2.0101.2  3.3101.2  4.2100.9  5.0100.6  6.0100.3
    1000.0  8.0100.1 10.0100.2 12.0100.3 14.0100.4 16.0100.5 18.0100.5
    1000.0 20.0100.5 22.0100.3 23.0100.0 24.0 99.9 24.4 99.6 24.7 98.1
    1000.0 24.8 98.1 24.9 98.1 25.0 98.1 25.1 98.1 25.2 98.1 25.3 98.2
    1000.0 25.4 98.2 25.5 98.2 25.6 98.2 25.7 98.2 25.8 98.2 25.9 98.2
    1000.0 26.1 99.2 26.4 99.6 27.0 99.7 28.4 99.7 29.0100.3 30.0100.6
    1000.0 31.0100.6 33.0100.7 35.0100.8 36.6100.8
NS  1000.0       1.1       1.1       1.1       1.1       1.1       1.1
NS  1000.0       1.1       1.1 0.09  1.1       1.1       1.1       1.1
NS  1000.0       1.1       1.1       1.1       1.1 .05   1.1 .045  9.9
NS  1000.0       9.9 .052  9.9 .050  9.9 .053  9.9       9.5       9.5
NS  1000.0       9.5       9.5       9.5       9.9 0.07  9.9 0.08  9.9
NS  1000.0       1.1       1.1       1.1       1.1 0.05  1.1       1.1
NS  1000.0       1.1       1.1       1.1       1.1
WSL 1000.0     99.03     99.04     99.08     99.11     99.12     99.13
WSL 1000.0     99.15     99.16     99.17     99.18     99.32     99.50
WSL 1000.0     99.66     99.79     99.91    100.00    100.10    100.18
WSL 1000.0    100.25    100.30    100.36    100.40    100.45    100.49
WSL 1000.0    100.53    100.55    100.57    100.62    100.66    100.74
CAL11000.0     99.18       1.6
VEL11000.0
VEL11000.0                           1.35 1.31 1.58 1.64 1.51 1.48 1.38
VEL11000.0 1.28 1.22 1.12 1.05 0.79 0.56
VEL11000.0
CAL21000.0     99.12       0.8
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0    100.54       9.1
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ
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        Sycane  River SY10 06/27/93
RUN                          MID                                    TRANSECT 2
IOC       1101100100001000101000
QARD    0.4
QARD    0.5
QARD    0.6
QARD    0.7
QARD    0.8
QARD    0.9
QARD    1.0
QARD    1.2
QARD    1.4
QARD    1.6
QARD    2.0
QARD    2.5
QARD    3.0
QARD    3.5
QARD    4.0
QARD    4.5
QARD    5.0
QARD    5.5
QARD    6.0
QARD    6.5
QARD    7.0
QARD    7.5
QARD    8.0
QARD    8.5
QARD    9.1
QARD    9.5
QARD   10.0
QARD   11.0
QARD   12.0
QARD   14.0
XSEC1000.0      0.00 1.0     98.28    0.0024
    1000.0  0.0101.2  2.0101.2  4.0101.2  5.0101.0  6.0100.7  8.0100.4
    1000.0 10.0100.2 12.0100.4 14.0100.4 16.0100.4 18.0100.4 20.0100.4
    1000.0 22.0100.2 23.0100.1 24.0 99.9 24.3 99.7 24.5 99.2 24.6 98.5
    1000.0 24.7 98.5 24.8 98.4 24.9 98.4 25.0 98.3 25.1 98.3 25.2 98.3
    1000.0 25.3 98.3 25.4 98.3 25.5 98.3 25.6 98.3 25.7 98.3 25.8 98.3
    1000.0 25.9 98.3 26.0 98.3 26.1 98.4 26.2 98.4 26.3 98.4 26.4 98.5
    1000.0 26.5 98.5 26.6 98.6 26.7 98.6 26.8 98.6 27.0 99.2 27.2 99.4
    1000.0 27.8 99.5 29.0 99.9 30.0100.1 31.0100.5 32.0100.7 34.0100.8
    1000.0 36.9100.9
NS  1000.0       1.1       1.1       1.1       1.1       1.1       1.1
NS  1000.0       1.1       1.1       1.1       1.1       1.1       1.1
NS  1000.0       1.1       1.1       1.1       1.1       9.9 0.15  9.9
NS  1000.0 0.15  9.9 .12   9.9       9.9       9.9       9.9       9.9
NS  1000.0       9.9       9.9       9.9       9.9 .042  9.9       9.9
NS  1000.0       9.9       9.9       9.9 0.12  9.9 0.12  9.9 0.12  9.9
NS  1000.0 0.12  9.9 0.12  9.9 0.15  9.9 0.15  9.9 0.15  9.9       1.1
NS  1000.0       1.1       1.1       1.1       1.1       1.1       1.1
NS  1000.0       1.1
WSL 1000.0     99.05     99.05     99.09     99.12     99.14     99.15
WSL 1000.0     99.17     99.18     99.20     99.21     99.35     99.54
WSL 1000.0     99.70     99.83     99.95    100.04    100.13    100.22
WSL 1000.0    100.28    100.33    100.39    100.44    100.48    100.52
WSL 1000.0    100.56    100.58    100.60    100.65    100.69    100.77
CAL11000.0     99.23       1.6
VEL11000.0
VEL11000.0                      0.00 0.03 0.03 0.13 0.62 0.92 0.99 1.05
VEL11000.0 1.25 1.61 1.54 1.67 1.81 1.61 1.58 0.99 0.99 0.53 0.26 0.16
VEL11000.0 0.20 0.07 0.07 0.03 0.00
VEL11000.0
CAL21000.0     99.15       0.8
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0    100.55       9.1
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ
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        Sycane  River SY10 06/27/93
RUN                          MID                                    TRANSECT 3
IOC       11011001000010001010000
QARD   0.4
QARD   0.5
QARD   0.6
QARD   0.7
QARD   0.8
QARD   0.9
QARD   1.0
QARD   1.2
QARD   1.4
QARD   1.6
QARD   2.0
QARD   2.5
QARD   3.0
QARD   3.5
QARD   4.0
QARD   4.5
QARD   5.0
QARD   5.5
QARD   6.0
QARD   6.5
QARD   7.0
QARD   7.5
QARD   8.0
QARD   8.5
QARD   9.1
QARD   9.5
QARD  10.0
QARD  11.0
QARD  12.0
QARD  14.0
XSEC1000.0      0.00 1.0     98.35   0.0024
    1000.0 12.0101.2 14.0101.2 15.0101.1 16.0101.1 16.2100.8 18.0100.7
    1000.0 20.0100.5 22.0100.4 24.0100.4 26.0100.6 28.0100.6 30.0100.4
    1000.0 32.0100.5 34.0100.2 35.0100.0 36.0 99.7 37.0 99.6 37.4 99.4
    1000.0 37.6 98.4 37.7 98.4 37.8 98.4 37.9 98.4 38.0 98.4 38.1 98.4
    1000.0 38.2 98.3 38.3 98.3 38.4 98.3 38.5 98.3 38.6 98.3 38.7 98.3
    1000.0 38.8 98.4 38.9 98.4 39.0 98.4 39.1 98.5 39.2 98.5 39.3 98.5
    1000.0 39.4 99.2 39.5 99.7 40.0 99.9 41.0100.0 42.0100.3 43.6100.6
    1000.0 45.2100.7
NS  1000.0       1.1       1.1       1.1       1.1       1.1       1.1
NS  1000.0       1.1       1.1       1.1       1.1       1.1       1.1
NS  1000.0       1.1       1.1       1.1 0.15  1.1 0.08  1.1       1.1
NS  1000.0 0.05  9.9 0.05  9.5 .05   9.5       5.5       5.5       5.5
NS  1000.0       5.5       5.5       5.5       5.5       5.5       5.5
NS  1000.0       5.5       5.5       5.9 .045  5.9 .05   5.9 .06   1.1
NS  1000.0       1.1       1.1       1.1       1.1       1.1       1.1
NS  1000.0       1.1
WSL 1000.0     99.09     99.09     99.13     99.16     99.18     99.19
WSL 1000.0     99.21     99.22     99.24     99.25     99.40     99.58
WSL 1000.0     99.74     99.86     99.98    100.08    100.17    100.25
WSL 1000.0    100.32    100.37    100.43    100.48    100.52    100.57
WSL 1000.0    100.61    100.63    100.65    100.69    100.74    100.82
CAL11000.0     99.25       1.6
VEL11000.0
VEL11000.0                          0.00 0.03 0.07 0.72 1.25 1.25 1.58
VEL11000.0 1.67 1.71 1.64 1.71 1.54 1.41 1.31 1.15 0.69 0.59 0.59 0.49
VEL11000.0 0.00
CAL21000.0     99.17       0.8
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0    100.61       9.1
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ
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        Sycane  River SY10 06/27/93
RUN                          MID
PARD    30      1.00      0         1.000
QARD   0.4     0.0017                2.60       2.60
QARD   0.5     0.0017                2.10       2.10
QARD   0.6     0.0017                1.88       1.88
QARD   0.7     0.0017                1.70       1.70
QARD   0.8     0.0017                1.53       1.53
QARD   0.9     0.0018                1.42       1.42
QARD   1.0     0.0019                1.35       1.35
QARD   1.2     0.0020                1.18       1.18
QARD   1.4     0.0022                1.08       1.08
QARD   1.6     0.0024                1.00       1.00
QARD   2.0     0.0025                1.02       1.02
QARD   2.5     0.0025                1.05       1.05
QARD   3.0     0.0025                1.07       1.07
QARD   3.5     0.0026                1.10       1.10
QARD   4.0     0.0026                1.13       1.13
QARD   4.5     0.0026                1.15       1.15
QARD   5.0     0.0026                1.18       1.18
QARD   5.5     0.0026                1.21       1.21
QARD   6.0     0.0026                1.23       1.23
QARD   6.5     0.0027                1.26       1.26
QARD   7.0     0.0027                1.29       1.29
QARD   7.5     0.0027                1.31       1.31
QARD   8.0     0.0027                1.34       1.34
QARD   8.5     0.0027                1.37       1.37
QARD   9.1     0.0028                1.40       1.40
QARD   9.5     0.0028                1.40       1.40
QARD  10.0     0.0029                1.40       1.40
QARD  11.0     0.0029                1.40       1.40
QARD  12.0     0.0029                1.40       1.40
QARD  14.0     0.0029                1.40       1.40
FFFFTFFFF                                                                **
       0.0  0.0101.2  2.0101.2  3.3101.2  4.2100.9  5.0100.6  6.0100.3
       0.0  8.0100.1 10.0100.2 12.0100.3 14.0100.4 16.0100.5 18.0100.5
       0.0 20.0100.5 22.0100.3 23.0100.0 24.0 99.9 24.4 99.6 24.7 98.1
       0.0 24.8 98.1 24.9 98.1 25.0 98.1 25.1 98.1 25.2 98.1 25.3 98.2
       0.0 25.4 98.2 25.5 98.2 25.6 98.2 25.7 98.2 25.8 98.2 25.9 98.2
       0.0 26.1 99.2 26.4 99.6 27.0 99.7 28.4 99.7 29.0100.3 30.0100.6
       0.0 31.0100.6 33.0100.7 35.0100.8 36.6100.8
       0.0 .058  2.0      .058  3.3      .058  4.2      .058  5.0            *
       0.0 .058  6.0      .058  8.0      .058 10.0      .058 12.0            *
       0.0 .058 14.0      .058 16.0      .058 18.0      .058 20.0            *
       0.0 .058 22.0      .058 23.0      .058 24.0      .058 24.4            *
       0.0 .058 24.7      .058 24.8      .058 24.9      .058 25.0            *
       0.0 .058 25.1      .058 25.2      .058 25.3     -.058 25.4            *
       0.0 .058 25.5      .058 25.6      .058 25.7      .058 25.8            *
       0.0 .058 25.9      .058 26.1      .058 26.4      .058 27.0            *
       0.0 .058 28.4      .058 29.0      .058 30.0      .058 31.0            *
       0.0 .058 33.0      .058 35.0      .058 36.6      .058                 *
       7.3  0.0101.2  2.0101.2  4.0101.2  5.0101.0  6.0100.7  8.0100.4
       7.3 10.0100.2 12.0100.4 14.0100.4 16.0100.4 18.0100.4 20.0100.4
       7.3 22.0100.2 23.0100.1 24.0 99.9 24.3 99.7 24.5 99.2 24.6 98.5
       7.3 24.7 98.5 24.8 98.4 24.9 98.4 25.0 98.3 25.1 98.3 25.2 98.3
       7.3 25.3 98.3 25.4 98.3 25.5 98.3 25.6 98.3 25.7 98.3 25.8 98.3
       7.3 25.9 98.3 26.0 98.3 26.1 98.4 26.2 98.4 26.3 98.4 26.4 98.5
       7.3 26.5 98.5 26.6 98.6 26.7 98.6 26.8 98.6 27.0 99.2 27.2 99.4
       7.3 27.8 99.5 29.0 99.9 30.0100.1 31.0100.5 32.0100.7 34.0100.8
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        7.3 36.9100.9
        7.3 .070  2.0     .070   4.0     .070   5.0      .070  6.0             *
        7.3 .070  8.0     .070  10.0     .070  12.0      .070 14.0             *
        7.3 .070 16.0     .070  18.0     .070  20.0      .070 22.0             *
        7.3 .070 23.0     .070  24.0     .070  24.3      .070 24.5             *
        7.3 .070 24.6     .070  24.7     .070  24.8      .070 24.9             *
        7.3 .070 25.0     .070  25.1     .070  25.2      .070 25.3             *
        7.3 .070 25.4     .070  25.5     .070  25.6     -.070 25.7             *
        7.3 .070 25.8     .070  25.9     .070  26.0      .070 26.1             *
        7.3 .070 26.2     .070  26.3     .070  26.4      .070 26.5             *
        7.3 .070 26.6     .070  26.7     .070  26.8      .070 27.0             *
        7.3 .070 27.2     .070  27.8     .070  29.0      .070 30.0             *
        7.3 .070 31.0     .070  32.0     .070  34.0      .070 36.9             *
       27.1 12.0101.2 14.0101.2 15.0101.1 16.0101.1 16.2100.8 18.0100.7
       27.1 20.0100.5 22.0100.4 24.0100.4 26.0100.6 28.0100.6 30.0100.4
       27.1 32.0100.5 34.0100.2 35.0100.0 36.0 99.7 37.0 99.6 37.4 99.4
       27.1 37.6 98.4 37.7 98.4 37.8 98.4 37.9 98.4 38.0 98.4 38.1 98.4
       27.1 38.2 98.3 38.3 98.3 38.4 98.3 38.5 98.3 38.6 98.3 38.7 98.3
       27.1 38.8 98.4 38.9 98.4 39.0 98.4 39.1 98.5 39.2 98.5 39.3 98.5
       27.1 39.4 99.2 39.5 99.7 40.0 99.9 41.0100.0 42.0100.3 43.6100.6
       27.1 45.2100.7
       27.1 0.06 14.0     0.06  15.0     0.06  16.0      0.06  16.2            *
       27.1 0.06 18.0     0.06  20.0     0.06  22.0      0.06  24.0            *
       27.1 0.06 26.0     0.06  28.0     0.06  30.0      0.06  32.0            *
       27.1 0.06 34.0     0.06  35.0     0.06  36.0      0.06  37.0            *
       27.1 0.06 37.4     0.06  37.6     0.06  37.7      0.06  37.8            *
       27.1 0.06 37.9     0.06  38.0     0.06  38.1      0.06  38.2            *
       27.1 0.06 38.3     0.06  38.4     0.06  38.5      -.06  38.6            *
       27.1 0.06 38.7     0.06  38.8     0.06  38.9      0.06  39.0            *
       27.1 0.06 39.1     0.06  39.2     0.06  39.3      0.06  39.4            *
       27.1 0.06 39.5     0.06  40.0     0.06  41.0      0.06  42.0            *
       27.1 0.06 43.6     0.06  45.2                                           *
ENDJ
ENDR
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