

5-17-1993

Ex. 279-US-422

Unknown

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**Stream:** Sycan River  
**Site:** SY-1 (Sycan River above Snake Creek)  
**Date:** 5/17/1993  
**Habitat:** Run **Flow:** High

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	5.2	105.2		
TR1			6.71	98.49
TR2			6.24	98.96
TR3			7.64	97.56
TP				
TR3	7.92	105.48		
TR2			6.51	98.97
TR1			6.99	98.49

Comment: didn't shoot back to BM to close the loop.  
 But the partial loop still appeared sufficient to QA/QC the accuracy of the pins.

**Date:** #####  
**Habitat:** Run **Flow:** Mid

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	5.41	105.41		
TR1			6.94	98.47
TR2			6.47	98.94
TR3			7.85	97.56
TP				
TR3	7.86	105.42		
TR2			6.46	98.96
TR1			6.95	98.47
BM			5.43	99.99

Comment:

**Date:** 9/13/1993  
**Habitat:** Run **Flow:** Low

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	5.57	105.57		
TR1			7.1	98.47
TR2			6.62	98.95
TR3			8.02	97.55
TP				
TR3	6.56	104.11		
TR2			5.18	98.93
TR1			5.63	98.48
BM			4.11	100.00

Comment:

(1) Level Loop Survey (BM & HP)

(2) Water Surface Elevation (WSE) Survey

	L/R WSE (ft)	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWE	585	105.20	10.09	0.00	95.11	95.08	
	RWE			10.15	0.00	95.05		
TR2	LWE	821.6	105.20	10.06	0.00	95.14	95.15	
	RWE			10.04	0.00	95.16		
TR3	LWE	942.6	105.20	10.02	0.00	95.18	95.18	555.0
	RWE			10.02	0.00	95.18		
								Ave Q= 555.0

Note: WSE slope= 0.028%

(2) Water Surface Elevation (WSE) Survey

	L/R WSE (ft)	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWE	585	105.42	13.85	0.00	91.57	91.55	58.0
	RWE			13.9	0.00	91.52		
TR2	LWE	821.6	105.42					
	RWE							
TR3	LWE	942.6	105.42	13.78	0.00	91.64	91.63	58.9
	RWE			13.8	0.00	91.62		
								Ave Q= 58.4

Note: no TR-2 WSE or Transect profile  
 WSE slope= 0.024%

(2) Water Surface Elevation (WSE) Survey

	L/R WSE (ft)	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWE	585	104.11	13.41	0.00	90.70	90.71	7.1
	RWE			13.4	0.00	90.71		
TR2	LWE	821.6	104.11	13.29	0.00	90.82	90.82	7.9
	RWE			13.29	0.00	90.82		
TR3	LWE	942.6	104.11	13.3	0.00	90.81	90.83	
	RWE			13.27	0.00	90.84		
								Ave Q= 7.5

Note: WSE slope= 0.034%







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RUN                                MID                                TRANSECT 1
IOC                                1101100100001000101000
QARD 7.5
QARD 10.0
QARD 20.0
QARD 30.0
QARD 40.0
QARD 50.0
QARD 58.4
QARD 70.0
QARD 80.0
QARD 90.0
QARD 100.0
QARD 120.0
QARD 140.0
QARD 160.0
QARD 180.0
QARD 200.0
QARD 220.0
QARD 240.0
QARD 270.0
QARD 300.0
QARD 350.0
QARD 400.0
QARD 450.0
QARD 500.0
QARD 555.0
QARD 600.0
QARD 650.0
QARD 700.0
QARD 770.0
QARD 856.0
XSEC1000.0      0.00 1.0      90.38  0.00024
1000.0  0.0 97.8  3.0 98.0  6.0 97.6  9.0 97.3 11.0 97.4 13.0 98.0
1000.0 15.0 98.3 17.0 97.7 19.0 97.0 21.0 96.3 23.0 95.6 26.0 94.5
1000.0 29.0 93.3 32.0 92.8 35.0 92.8 38.0 92.6 41.0 92.7 44.0 92.6
1000.0 47.0 92.6 50.0 92.6 53.0 92.7 56.0 92.5 59.0 92.4 62.0 92.2
1000.0 64.5 92.0 67.1 91.5 67.5 91.5 68.0 91.4 69.5 91.1 71.0 90.9
1000.0 72.5 90.6 74.0 90.2 75.5 89.7 77.0 89.4 78.5 89.3 80.0 89.4
1000.0 81.5 89.4 83.0 89.3 84.5 89.3 86.0 89.3 87.5 89.3 89.0 89.4
1000.0 90.5 89.4 92.0 89.3 93.5 89.3 95.0 89.4 96.5 89.6 98.0 89.6
1000.0 99.5 90.2101.0 90.5102.0 91.0103.1 91.5103.3 91.6104.8 92.5
1000.0105.8 93.5107.0 94.2108.1 94.8109.2 98.9110.3100.1111.5100.2
1000.0113.5100.2114.9100.3124.9100.8
NS 1000.0      3.1      3.1      3.1      3.3      3.3      3.3
NS 1000.0      3.3      3.3      3.3      3.3      3.3      3.3
NS 1000.0      3.3      3.3      3.3      3.3      3.3      3.3
NS 1000.0      3.3      3.3      3.3      3.3      3.3      3.3
NS 1000.0 .050 3.3 .045 3.3 3.3 3.3 3.3 3.3 3.3
NS 1000.0      3.5      3.5      3.5      3.5      3.5      3.5
NS 1000.0      3.5      3.5      3.5      3.5      3.5      3.5
NS 1000.0      3.5      3.5      3.5      3.5      3.5      3.5
NS 1000.0      3.5      3.5      3.5      3.1      3.1      3.1
NS 1000.0      3.1      3.1      3.1      3.1      3.1      3.1
NS 1000.0      3.1      3.1      3.1      3.1      3.1      3.1
WSL 1000.0     90.71     90.77     90.98     91.16     91.31     91.44
WSL 1000.0     91.55     91.75     91.91     92.06     92.38     92.58
WSL 1000.0     93.04     93.19     93.32     93.45     93.57     93.68
WSL 1000.0     93.84     94.00     94.24     94.46     94.68     94.88
WSL 1000.0     95.09     95.25     95.42     95.59     95.82     96.08
CAL11000.0     91.55     58.4
VEL11000.0
VEL11000.0
VEL11000.0      0.00 0.18 0.46 0.57 0.53 0.69 0.63 0.82 1.09 1.11
VEL11000.0 0.92 1.21 1.29 0.98 1.24 1.52 1.32 1.27 0.77 1.27 1.08 0.40
VEL11000.0 0.42 0.20 0.11 0.00
VEL11000.0
CAL21000.0     90.71     7.5
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0     95.08     555.0
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ

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RUN                LOW                TRANSECT 2
IOC                1101100100001000101000
QARD 7.5
QARD 10.0
QARD 20.0
QARD 30.0
QARD 40.0
QARD 50.0
QARD 58.4
QARD 70.0
QARD 80.0
QARD 90.0
QARD 100.0
QARD 120.0
QARD 140.0
QARD 160.0
QARD 180.0
QARD 200.0
QARD 220.0
QARD 240.0
QARD 270.0
QARD 300.0
QARD 350.0
QARD 400.0
QARD 450.0
QARD 500.0
QARD 555.0
QARD 600.0
QARD 650.0
QARD 700.0
QARD 770.0
QARD 856.0
XSEC1000.0        0.00 1.0          90.38  0.00034
1000.0  0.0 98.1  2.3 97.4  2.8 96.1 10.0 94.0 10.5 91.9 12.0 90.8
1000.0 13.0 89.8 14.5 89.5 16.0 89.8 17.5 89.4 19.0 89.6 20.5 89.4
1000.0 22.0 89.3 23.5 89.3 25.0 89.3 26.5 89.2 28.0 89.3 29.5 89.3
1000.0 31.0 89.3 32.5 89.3 34.0 89.3 35.5 89.3 37.0 89.3 38.5 89.4
1000.0 40.0 89.4 41.5 89.4 43.0 89.5 44.5 89.5 46.0 89.4 47.5 89.5
1000.0 49.0 89.6 50.5 89.9 52.0 90.3 53.2 90.5 58.0 93.9 77.8 95.2
1000.0 82.0 97.4 88.2 99.0
NS 1000.0        1.1          1.1          1.1          1.1          1.1          3.9
NS 1000.0  .4    3.9  .4    3.9          3.9  .18    3.9  .18    3.9  .18    3.9
NS 1000.0 0.18  3.9  0.18  3.9  0.18  3.9          3.9          3.9          3.9
NS 1000.0        3.9          3.9          3.9          3.9          3.9          3.9
NS 1000.0  .2    3.9  .2    3.9  .3    3.9          3.9          3.9          3.9
NS 1000.0  .4    3.9  .5    3.9  .5    3.9  .5    3.9          1.1          1.1
NS 1000.0        1.1          1.1
WSL 1000.0    90.81    90.85    91.09    91.27    91.40    91.52
WSL 1000.0    91.62    91.83    91.99    92.14    92.45    92.66
WSL 1000.0    93.10    93.25    93.39    93.52    93.64    93.76
WSL 1000.0    93.92    94.08    94.32    94.53    94.75    94.95
WSL 1000.0    95.15    95.31    95.47    95.64    95.87    96.12
CAL11000.0    90.82          7.5
VEL11000.0                                0.00 0.01 0.02 0.22 0.02 0.04 0.01
VEL11000.0  0.03 0.01 0.01 0.23 0.39 0.42 0.34 0.35 0.33 0.22 0.18 0.14
VEL11000.0  0.17 0.08 0.05 0.12 0.12 0.08 0.04-0.01-0.02 0.01
VEL11000.0
CAL21000.0    90.82          7.51
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0    95.15    555.0
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ

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RUN                                MID                                TRANSECT 3
IOC      1101100100001000101000
QARD 7.5
QARD 10.0
QARD 20.0
QARD 30.0
QARD 40.0
QARD 50.0
QARD 58.4
QARD 70.0
QARD 80.0
QARD 90.0
QARD 100.0
QARD 120.0
QARD 140.0
QARD 160.0
QARD 180.0
QARD 200.0
QARD 220.0
QARD 240.0
QARD 270.0
QARD 300.0
QARD 350.0
QARD 400.0
QARD 450.0
QARD 500.0
QARD 555.0
QARD 600.0
QARD 650.0
QARD 700.0
QARD 770.0
QARD 856.0
XSEC1000.0      0.00 1.0      90.38      0.00024
1000.0  0.0 96.9  2.0 96.4  3.6 96.1  4.6 95.4  6.0 95.0  7.3 94.5
1000.0  9.0 93.7 11.0 93.5 13.0 93.4 15.0 92.8 17.0 92.2 19.5 91.5
1000.0 20.0 91.5 21.0 91.3 22.0 91.2 24.0 90.6 26.0 90.4 28.0 90.4
1000.0 30.0 90.4 32.0 90.3 34.0 90.3 36.0 90.2 38.0 90.1 40.0 90.1
1000.0 42.0 90.0 44.0 90.0 46.0 90.0 48.0 89.9 50.0 89.9 52.0 89.9
1000.0 54.0 89.9 56.0 89.9 58.0 89.8 60.0 89.8 62.0 89.8 64.0 89.8
1000.0 66.0 89.8 68.0 89.7 69.0 89.9 69.1 91.6 69.6 90.4 70.0 92.0
1000.0 72.0 92.7 74.0 93.3 75.3 93.8 75.6 94.4 77.0 95.3 78.3 96.1
1000.0 79.9 96.8 81.7 98.3 82.7 99.8 83.4100.0
NS 1000.0      2.3      2.3      2.3      2.3      2.3      2.3
NS 1000.0      2.3      2.3      2.3      2.3      2.3      2.3
NS 1000.0 0.2      2.3 0.2      2.3 0.2      2.3 0.2      2.3      2.3      2.3
NS 1000.0      2.3      2.3      2.3      2.3      2.3      2.3      2.3
NS 1000.0      2.3      2.3      2.3      2.3      2.3      2.3      2.3
NS 1000.0      2.3 0.08      2.3 0.09      2.3      2.3      2.3      2.3
NS 1000.0      2.3      2.3      2.3      2.3      2.2      2.2
NS 1000.0      2.2      2.2      2.2      2.2
WSL 1000.0  90.84  90.88  91.13  91.30  91.43  91.54
WSL 1000.0  91.64  91.84  92.01  92.16  92.46  92.67
WSL 1000.0  93.11  93.27  93.40  93.54  93.66  93.77
WSL 1000.0  93.94  94.10  94.34  94.56  94.78  94.98
WSL 1000.0  95.18  95.34  95.51  95.67  95.90  96.16
CAL11000.0  91.63  58.4
VEL11000.0
VEL11000.0-0.07-0.02 0.01 0.03 0.32 0.56 0.67 0.64 0.64 0.73 0.77 0.86
VEL11000.0 0.90 1.07 1.01 1.07 1.10 1.01 1.12 1.07 1.00 0.98 0.66 0.71
VEL11000.0 0.74 0.46 0.09 0.00
VEL11000.0
CAL21000.0  90.83  7.5
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0  95.18  555.0
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ

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