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Ex. 280-US-466

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**Stream:** Five Mile Creek  
**Site:** 652  
**Date:** 9/16/1993  
**Habitat:** Run

**Flow:** High

(1) Level Loop Survey (BM & HP)									
BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)	BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	5.71	105.71			HP3			5.75	99.96
					HP2			6.50	99.21
					HP1			6.11	99.60
TP					HP1	6.10	105.70		
HP2					HP2			6.49	99.21
HP3					HP3			5.75	99.95
BM					BM			5.71	99.99

Comment:

**Date:** 5/16/1993  
**Habitat:** Run

**Flow:** Mid

(1) Level Loop Survey									
BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)	BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	6.11	106.11			HP1			6.52	99.59
					HP2			6.91	99.20
					HP3			6.15	99.96
TP					HP3	6.21	106.17		
HP2					HP2			6.97	99.20
HP1					HP1			6.58	99.59
BM					BM			6.17	100.00

Comment:

**Date:** 6/24/1993  
**Habitat:** Run

**Flow:** low

(1) Level Loop Survey									
BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)	BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	5.60	105.60			HP3			5.64	99.96
					HP2			6.40	99.20
					HP1			6.00	99.60
TP					HP1	6.08	105.68		
HP2					HP2			6.47	99.21
HP3					HP3			5.72	99.96
BM					BM			5.68	100.00

Comment:

(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)
	LWSE	RWSE							
TR1	9.20	9.19	0	105.15	9.20	0.00	95.95	95.96	21.6
TR2	9.18	9.18	8.3	105.15	9.18	0.00	95.97	95.97	21.1
TR3	10.24	10.24	128.1	106.38	10.24	0.00	96.14	96.14	20.6
			215.2		10.24	0.00	96.14	96.14	

Note: WSE slope = 0.108%

Ave Q= 21.1

(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)
	LWSE	RWSE							
TR1	10.35	10.30	0	106.17	10.35	0.00	95.82	95.85	
TR2	10.29	10.29	8.3	106.17	10.29	0.00	95.88	95.88	
TR3	10.07	10.07	128.1	106.17	10.07	0.00	95.88	96.10	
			215.2		10.07	0.00	96.10	96.10	

Note: WSE slope = 0.149%

Ave Q= 21.1

(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)
	LWSE	RWSE							
TR1	10.31	10.34	0	105.68	10.31	0.00	95.37	95.36	13.1
TR2	10.28	10.32	8.3	105.68	10.28	0.00	95.40	95.38	11.6
TR3	10.06	10.11	128.1	105.68	10.06	0.00	95.62	95.60	11.7
			215.2		10.11	0.00	95.57	95.57	

Note: WSE slope = 0.140%

Ave Q= 12.1







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RUN                HIGH                TRANSECT 1
IOC                1101100100001000101000
QARD  8.0
QARD  9.0
QARD 10.0
QARD 11.0
QARD 12.1
QARD 13.0
QARD 14.0
QARD 15.0
QARD 16.0
QARD 17.0
QARD 18.0
QARD 19.0
QARD 20.0
QARD 21.1
QARD 21.6
QARD 24.0
QARD 26.0
QARD 28.0
QARD 30.0
QARD 32.0
QARD 34.0
QARD 36.0
QARD 38.0
QARD 40.0
QARD 42.0
QARD 44.0
QARD 47.0
QARD 50.0
QARD 53.0
QARD 56.0
XSEC  0.0          0.0 1.0    93.055  0.00108
0.0  0.0 99.3  1.5 99.2  3.0 98.7  4.5 98.5  6.0 98.3  7.5 98.0
0.0  9.0 97.7 10.5 97.6 12.0 97.6 13.5 97.5 15.0 97.3 16.5 96.8
0.0 18.0 96.0 19.0 95.6 20.0 95.0 21.0 94.5 22.0 94.3 22.5 94.1
0.0 23.0 94.1 23.5 94.0 24.0 94.1 24.5 94.0 25.0 93.9 25.5 93.9
0.0 26.0 93.8 26.5 93.8 27.0 93.7 27.5 93.7 28.0 93.7 28.5 93.7
0.0 29.0 93.7 29.5 93.6 30.0 93.5 30.5 93.3 31.0 93.1 31.5 93.1
0.0 31.7 95.3 34.0 95.5 36.0 96.0 38.0 96.0 40.0 96.2 42.0 96.5
0.0 44.0 95.8 46.0 97.1 48.0 97.5 48.5 99.9 49.9 99.9
NS    0.0      1.0      1.0      1.0      1.0      1.0      1.0
NS    0.0      1.0      1.0      1.0      1.0      1.0      1.0
NS    0.0      1.0 .20    1.0 .15    1.0 .1    3.0    3.0    3.0
NS    0.0      3.0      3.0      3.0      3.0      3.0      3.0
NS    0.0      3.0      3.0      3.0      3.0      3.0      3.0
NS    0.0      3.0      3.0      3.0      3.0      3.0      3.0
NS    0.0 .15    1.0 .2    1.0 .2    1.0 .5    1.0      1.0      1.0
NS    0.0      1.0      1.0      1.0      1.0      1.0      1.0
WSL   0.0     95.01    95.10    95.18    95.26    95.36    95.47
WSL   0.0     95.55    95.61    95.67    95.73    95.79    95.85
WSL   0.0     95.90    95.96    95.99    96.18    96.27    96.35
WSL   0.0     96.42    96.49    96.60    96.66    96.71    96.77
WSL   0.0     96.82    96.87    96.95    97.02    97.09    97.16
CAL1  0.0     95.960    21.10
VEL1  0.0
VEL1  0.0 0.00 0.09 0.10 0.29 0.73 1.07 1.18 1.26 1.25 1.32 1.31 1.23
VEL1  0.0 1.21 1.17 1.07 1.09 0.94 1.08 0.93 0.96 0.55 0.48 0.28 0.38
VEL1  0.0 0.04 0.01 0.00
CAL2  0.0     95.850    21.10
VEL2  0.0
VEL2  0.0
VEL2  0.0
VEL2  0.0
CAL3  0.0     95.360    12.10
VEL3  0.0
VEL3  0.0
VEL3  0.0
VEL3  0.0
ENDJ

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RUN                HIGH                TRANSECT 2
IOC                1101100100001000101000
QARD  8.0
QARD  9.0
QARD 10.0
QARD 11.0
QARD 12.1
QARD 13.0
QARD 14.0
QARD 15.0
QARD 16.0
QARD 17.0
QARD 18.0
QARD 19.0
QARD 20.0
QARD 21.1
QARD 21.6
QARD 24.0
QARD 26.0
QARD 28.0
QARD 30.0
QARD 32.0
QARD 34.0
QARD 36.0
QARD 38.0
QARD 40.0
QARD 42.0
QARD 44.0
QARD 47.0
QARD 50.0
QARD 53.0
QARD 56.0
XSEC  0.0          0.0 1.0      92.57  0.00108
0.0  0.0 99.1  1.5 98.7  3.0 98.3  4.5 97.8  6.0 97.6  7.5 97.8
0.0  9.0 97.6 10.5 96.9 12.0 96.1 13.0 96.0 14.0 93.8 15.0 93.5
0.0 15.5 93.6 16.0 93.7 16.5 93.7 17.0 93.6 17.5 93.4 18.0 93.3
0.0 18.5 93.4 19.0 93.5 19.5 93.5 20.0 93.4 20.5 93.3 21.0 93.2
0.0 21.5 93.0 22.0 92.8 22.5 92.6 23.0 94.8 24.0 95.4 25.0 95.3
0.0 26.0 95.7 27.0 96.0 28.0 96.1 30.0 95.8 32.0 95.8 33.0 95.7
0.0 35.0 96.9 37.0 96.8 39.0 97.0 41.0 97.2 43.0 97.4 45.0 98.1
0.0 47.0 98.3 49.0 98.7 51.0 99.3 53.0 99.9 55.0 100.1 55.8 100.1
NS    0.0      1.0      1.0      1.0      1.0      1.0      1.0
NS    0.0      1.0      1.0      1.0      1.0      3.0      3.0      3.0
NS    0.0      3.0      3.0      3.0      3.0      3.0      3.0      3.0
NS    0.0      3.0 0.5    3.0      3.0 -0.5    1.0      1.0      1.0
NS    0.0      1.0      1.0      1.0      1.0      1.0      1.0      1.0
NS    0.0      1.0      1.0      1.0      1.0      1.0      1.0      1.0
WSL   0.0     95.04   95.13   95.21   95.29   95.39   95.50
WSL   0.0     95.58   95.63   95.69   95.75   95.81   95.87
WSL   0.0     95.92   95.98   96.01   96.20   96.29   96.37
WSL   0.0     96.44   96.51   96.61   96.67   96.72   96.78
WSL   0.0     96.83   96.88   96.96   97.03   97.10   97.17
CAL1  0.0     95.970   21.10
VEL1  0.0
VEL1  0.0 0.87 0.81 0.84 0.96 0.91 0.87 0.83 0.83 0.89 0.99 1.15 1.29
VEL1  0.0 1.40 1.01 0.38-0.05-0.06-0.07-0.04 0.00
VEL1  0.0
CAL2  0.0     95.880   21.10
VEL2  0.0
VEL2  0.0
VEL2  0.0
VEL2  0.0
CAL3  0.0     95.380   12.10
VEL3  0.0
VEL3  0.0
VEL3  0.0
VEL3  0.0
ENDJ

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RUN                HIGH                TRANSECT 3
IOC                1101100100001000101000
QARD 8.0
QARD 9.0
QARD 10.0
QARD 11.0
QARD 12.1
QARD 13.0
QARD 14.0
QARD 15.0
QARD 16.0
QARD 17.0
QARD 18.0
QARD 19.0
QARD 20.0
QARD 21.1
QARD 21.6
QARD 24.0
QARD 26.0
QARD 28.0
QARD 30.0
QARD 32.0
QARD 34.0
QARD 36.0
QARD 38.0
QARD 40.0
QARD 42.0
QARD 44.0
QARD 47.0
QARD 50.0
QARD 53.0
QARD 56.0
XSEC 0.0          0.0 1.0      92.740  0.00108
0.0  0.0 99.7  1.5 99.3  3.0 98.8  4.5 98.7  6.0 98.4  7.5 97.9
0.0  9.0 99.1 10.5 97.9 12.0 97.7 13.5 97.1 15.0 96.2 15.1 96.1
0.0 15.5 93.7 16.5 93.2 17.0 93.6 17.5 93.6 18.0 93.5 18.5 93.5
0.0 19.0 93.1 19.5 93.1 20.0 93.0 20.5 92.9 21.0 92.9 21.5 92.8
0.0 22.0 92.8 22.5 92.7 23.0 92.7 23.5 92.9 24.0 93.1 25.0 93.3
0.0 26.0 93.7 27.0 94.0 27.5 94.1 28.0 95.4 28.4 96.1 30.0 96.7
0.0 31.0 98.0 33.0 98.2 35.0 98.0 37.0 98.3 38.0 99.1 39.0 100.1
0.0 40.7 99.9
NS 0.0          1.0          1.0          1.0          1.0          1.0          1.0
NS 0.0          1.0          1.0          1.0          1.0          1.0          3.2
NS 0.0 0.6      3.2 .5      3.2          3.2          3.2          3.2          3.2
NS 0.0          3.2          3.2          3.2          3.2          3.2          3.2
NS 0.0          3.2          3.2          3.2          3.2          3.2          3.2
NS 0.0          3.2          3.2 .25      3.2 0.4      3.2          3.2          1.0
NS 0.0          1.0          1.0          1.0          1.0          1.0          1.0
NS 0.0          1.0
WSL 0.0          95.21      95.31      95.39      95.48      95.58      95.68
WSL 0.0          95.75      95.81      95.87      95.93      95.99      96.05
WSL 0.0          96.10      96.16      96.18      96.36      96.45      96.53
WSL 0.0          96.60      96.67      96.77      96.83      96.88      96.94
WSL 0.0          96.99      97.04      97.13      97.20      97.27      97.34
CAL1 0.0          96.140      21.10
VEL1 0.0
VEL1 0.0 0.01 0.13 0.36 0.53 0.60 0.72 0.75 0.63 0.74 0.93 0.99 0.99
VEL1 0.0 0.88 0.86 0.81 0.69 0.48 0.35 0.51 0.46 0.13 0.03 0.00
VEL1 0.0
CAL2 0.0          96.100      21.10
VEL2 0.0
VEL2 0.0
VEL2 0.0
VEL2 0.0
CAL3 0.0          95.600      12.10
VEL3 0.0
VEL3 0.0
VEL3 0.0
VEL3 0.0
ENDJ

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