

11-5-2008

Ex. 280-US-423

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Stream: Sprague River  
 Site: Sprague River  
 Date: 10/2/1901  
 Habitat: Riffle

Flow: High

(1) Level Loop Survey (BM & HP)

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	2.45	102.45		100.00
HP3			3.11	99.34
HP2			3.87	98.58
HP1			4.80	97.65
TP				
HP1	4.73	102.38		98.57
HP2			3.81	99.34
HP3			3.04	99.99
BM			2.39	99.99

Comment:

Date: 7/27/2006  
 Habitat: Riffle

Flow: Mid

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	2.24	102.24		100.00
HP3			2.90	99.34
HP2			3.67	98.57
HP1			4.59	97.65
TP				
HP1	4.54	102.19		98.57
HP2			3.62	99.34
HP3			2.85	100.00
BM			2.19	100.00

Comment:

Date: 8/29/2006  
 Habitat: Riffle

Flow: Low

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
HP3		102.40	3.05	99.35
BM	2.40			100.00
HP2			3.83	98.57
HP1			4.75	97.65
TP				
HP1	4.07	101.72	2.80	98.57
HP2			3.15	99.99
BM			1.73	99.99

Comment:

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0	102.38	7.11	0.48	95.75	95.75	421.6
1-R	0	0	7.19	0.55	95.74	95.74	96.86	432.7
2-L	142	161	102.38	6.07	0.52	96.83	96.88	424.2
2-R	179	373	102.38	5.56	1.13	97.95	98.00	426.2
3-L	360	386	102.38	5.35	1.02	98.05	98.05	426.2
3-R	386							

Note: WSE slope = 0.603%

Ave Q= 426.2

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0	102.19	7.15	0.32	95.36	95.32	196.0
1-R	0	0	7.44	0.52	95.27	95.27	230.3	201.3
2-L	142	161	102.19	6.25	0.44	96.38	96.42	209.2
2-R	179	373	102.19	6.32	0.58	96.45	97.62	209.2
3-L	360	386	102.19	5.54	0.97	97.62	97.76	209.2
3-R	386			4.89	0.46	97.76	97.76	209.2

Note: WSE slope = 0.637%

Ave Q= 209.2

(2) Water Surface Elevation (WSE) Survey

TR	River Station L/R bank (ft)	Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
1-L	0	0	100.45	5.85	0.52	95.12	95.07	131.9
1-R	0	0	6.52	1.08	95.01	95.01	96.24	144.2
2-L	142	161	102.40	6.53	0.36	96.23	96.25	142.8
2-R	179	373	102.14	6.48	0.33	96.25	97.44	142.8
3-L	360	386	102.14	5.36	0.66	97.44	97.58	139.6
3-R	386			4.93	0.37	97.58	97.58	139.6

Note: WSE slope = 0.655%

Ave Q= 139.6

(3) Meter and propeller ID for Velocity Correction

Meter ID: 3602  
 Propeller ID: 3a

(3) Meter and propeller ID for Velocity Correction

Meter ID: 3602  
 Propeller ID: 3a

(3) Meter and propeller ID for Velocity Correction

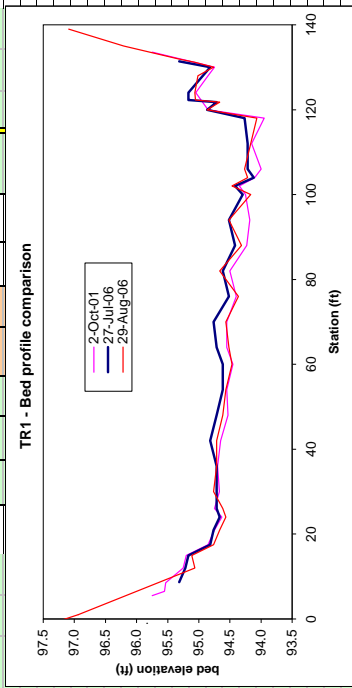
Meter ID: 3602  
 Propeller ID: 3A

TR	River Station L/R bank (ft)	Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
L, SIDE CHAN								
2-L			102.38	6.28	0.86	96.96	96.94	53.7
2-R			6.28	0.82	96.92	96.92		
11/5/2008								

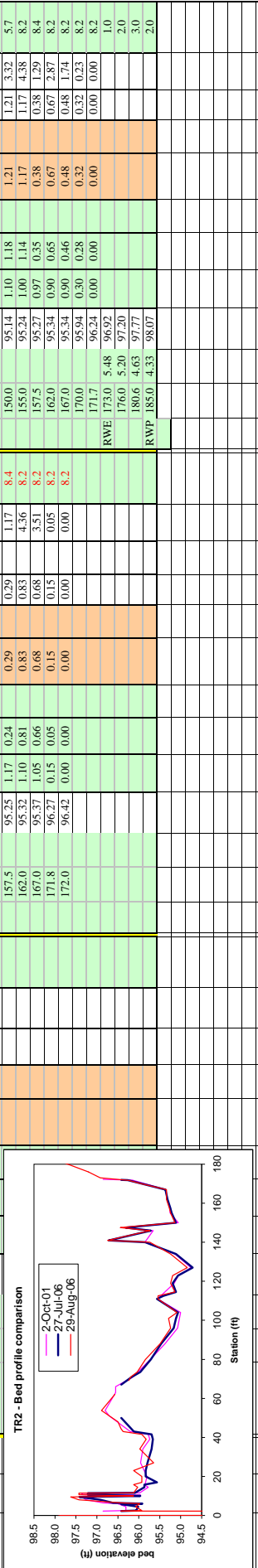
TR	River Station L/R bank (ft)	Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
L, SIDE CHAN								
2-L			102.19	6.20	0.64	96.63	96.63	21.9
2-R			6.37	0.81	96.63	96.63		

TR	River Station L/R bank (ft)	Ave (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
L, SIDE CHAN								
2-L			102.40	6.57	0.59	96.42	96.43	10.8
2-R			6.70	0.73	96.43	96.43		

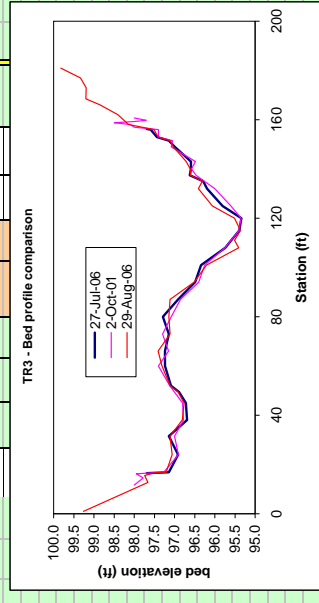
Stream: Squaw River		2-Oct-01				27-Jul-06				29-Aug-06					
Site: 041	Transect: 1	Substrate	q (cfs)	Angle (deg)	Substrate	q (cfs)	Angle (deg)	Substrate	q (cfs)	Angle (deg)	Substrate	q (cfs)	Angle (deg)		
Survey	HI	Q	FS (ft)	Ground (ft)	Depth (ft)	V <sub>0.5</sub> (ft/s)	V <sub>0.85</sub> (ft/s)	V <sub>0.95</sub> (ft/s)	V <sub>0.98</sub> (ft/s)	Depth (ft)	V <sub>0.5</sub> (ft/s)	V <sub>0.85</sub> (ft/s)	V <sub>0.95</sub> (ft/s)	V <sub>0.98</sub> (ft/s)	
10/2/90	102.38	421.6	LWP	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
7/27/2006	102.19	196.0	LWE	5.5	95.55	0.20	0.00	0.00	0.00	8.7	95.32	0.10	0.01	0.03	
8/29/2006	100.45	131.9		8.5	95.53	0.22	0.03	0.09	0.09	12.0	95.22	0.10	0.01	0.03	
				15.0	95.25	0.50	0.33	0.36	0.36	15.0	95.15	0.15	0.05	0.15	
				17.5	94.85	0.90	1.64	1.67	1.67	17.5	94.82	0.50	0.45	0.47	
				21.0	94.75	1.00	2.69	2.72	2.72	21.0	94.71	0.55	0.56	0.58	
				24.0	94.65	1.12	1.94	1.97	1.97	24.0	94.67	0.65	1.35	1.38	
				26.0	94.75	1.00	1.40	1.43	1.43	26.0	94.67	0.60	1.97	1.70	
				30.0	94.67	1.08	2.88	2.91	2.91	30.0	94.72	0.60	1.97	2.00	
				36.0	94.70	1.05	3.34	3.37	3.37	36.0	94.72	0.60	2.55	2.58	
				42.0	94.65	1.10	1.74	1.77	1.77	42.0	94.82	0.50	1.15	1.18	
				48.0	94.55	1.22	2.52	2.55	2.55	48.0	94.72	0.60	0.25	0.30	
				54.0	94.53	1.20	2.75	2.78	2.78	54.0	94.62	0.70	1.99	2.02	
				60.0	94.45	1.30	1.62	1.65	1.65	60.0	94.62	0.70	1.87	1.90	
				64.0	94.55	1.20	3.21	3.24	3.24	64.0	94.72	0.60	2.51	2.54	
				70.0	94.55	1.20	3.35	3.38	3.38	70.0	94.77	0.55	2.94	2.94	
				76.0	94.40	1.35	3.87	3.90	3.90	76.0	94.52	0.80	2.78	2.81	
				82.0	94.50	1.25	4.72	4.75	4.75	82.0	94.62	0.70	4.37	4.40	
				88.0	94.23	1.52	4.48	4.51	4.51	88.0	94.42	0.90	4.08	4.11	
				94.0	94.18	1.57	4.48	4.51	4.51	94.0	94.52	0.80	3.57	3.60	
				100.0	94.25	1.50	3.68	3.71	3.71	100.0	94.30	1.02	3.71	3.74	
				102.0	94.35	1.40	3.88	3.91	3.91	102.0	94.42	0.90	4.13	4.16	
				104.0	94.10	1.65	2.90	2.93	2.93	104.0	94.12	1.20	1.51	1.54	
				106.0	94.00	1.75	1.67	1.70	1.70	106.0	94.23	1.10	0.93	0.96	
				veg	112.0	94.15	1.60	1.55	1.58	1.58	112.0	94.22	1.10	2.87	2.90
				veg	118.0	95.95	1.80	1.67	1.70	1.70	118.0	94.27	1.05	3.19	3.22
				124.0	94.85	0.90	3.11	3.14	3.14	124.0	94.87	0.45	1.02	1.05	
				128.0	95.05	0.70	2.39	2.42	2.42	128.0	94.72	0.60	0.29	0.33	
				130.0	94.85	0.90	1.91	1.94	1.94	130.0	95.17	0.15	1.74	1.77	
				132.0	94.75	1.00	0.48	0.50	0.50	132.0	95.17	0.15	1.36	1.39	
				133.6	95.30	0.45	0.14	0.19	0.19	133.6	94.94	0.38	0.40	0.43	
				RWP	133.6	95.75	0.00	0.00	0.00	133.6	94.82	0.50	0.14	0.19	
				RWP	139.0					139.0	95.32	0.00	0.00	0.00	



Stream: Squague River	2-Oct-01				27-Jul-06				29-Aug-06																
	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	V <sub>2006</sub>	V <sub>08</sub>	Vel (ft/s)	NV <sub>2006</sub>	NV <sub>08</sub>	Angle (deg)	q (cfs)	substrate	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	V <sub>2006</sub>	V <sub>08</sub>	Vel (ft/s)	NV <sub>2006</sub>	NV <sub>08</sub>	Angle (deg)	q (cfs)	substrate	
Transect: 2	641																								
Habitat: Riffl																									
Survey	HI	Q																							
Date	(ft)	(cfs)																							
	10/2/1901	102.38	432.7																						
	7/27/2006	102.19	230.3																						
	8/29/2006	102.40	144.2																						



Stream: Sprague River			2-Oct-01		27-Jul-06		29-Aug-06	
Transect	Date	Depth (ft)	Ground (ft)	FS (ft)	Sta (ft)	Vel (ft/s)	q (cfs)	substrate
Habitat	Riffle					V <sub>0.2</sub>	V <sub>0.8</sub>	
Survey	HT	Q				NV <sub>0.2</sub>	NV <sub>0.8</sub>	
10/2/1901	102.38	424.2						
7/27/2006	102.19	201.3						
8/29/2006	102.14	142.8						
LWP	1.0	98.00	0.00	0.00	0.00	0.00	0.00	1.0
LWE	11.6	97.78	0.22	0.00	0.52	0.03	0.00	1.0
log w/s	16.2	97.95	0.05	0.50	0.52	0.03	0.00	1.0
edge log	16.8	97.27	0.73	2.70	2.73	7.78	5.6	1.0
	24.0	96.90	1.10	1.01	1.04	8.39	6.5	1.0
	31.5	97.00	1.00	2.07	2.10	14.69	6.5	1.0
	38.0	96.78	1.22	1.75	1.78	14.63	6.5	1.0
	45.0	96.80	1.20	1.56	1.59	13.34	6.5	1.0
	52.0	97.12	0.88	1.52	1.55	10.22	6.7	1.0
	60.0	97.40	0.60	1.15	1.18	4.95	6.7	1.0
	66.0	97.15	0.85	1.19	1.22	6.73	6.5	1.0
top of neck	73.0	97.30	0.70	1.68	1.71	8.37	6.5	1.0
bdr w/s	80.0	97.08	0.92	0.55	0.57	3.66	6.5	1.0
	87.0	96.85	1.15	1.27	1.30	10.46	6.5	1.0
	94.0	96.25	1.75	2.70	2.73	33.47	6.5	1.0
	101.0	96.40	1.60	1.54	1.57	17.57	6.7	1.0
	108.0	95.75	2.25	3.49	3.52	55.49	6.7	1.0
	115.0	95.40	2.60	4.76	4.79	58.42	6.7	1.0
	120.0	95.35	2.65	5.17	5.20	58.42	6.7	1.0
	125.0	95.60	2.40	2.98	3.01	43.39	6.7	1.0
	132.0	96.00	2.00	2.67	2.70	33.78	6.5	1.0
	137.5	96.47	1.53	1.43	1.46	8.93	6.5	1.0
	140.0	96.58	1.42	0.66	0.68	2.66	6.7	1.0
	143.0	96.48	1.52	1.46	1.49	10.18	6.5	1.0
	151.5	97.05	0.95	0.20	0.25	8.29	6.5	1.0
	149.0	97.08	0.92	2.09	2.12	21.2	6.5	1.0
	153.0	97.40	0.60	0.81	0.83	1.13	6.5	1.0
	156.0	97.40	0.60	0.56	0.58	0.69	6.5	1.0
	157.0	98.00	0.00	0.00	0.00			1.0
WE	157.0	98.00	0.00	0.00	0.00			1.0
WE	158.0	98.10	0.10	0.00	0.00			1.0
WE	159.3	98.00	0.00	0.00	0.00			1.0
WE	159.8	97.70	0.30	0.20	0.25			1.0
RWE	160.7	98.00	0.00	0.00	0.00			1.0
RWP	168.5							1.0



Riffle Sprague River  
 IOC 641  
 QARD 80.0  
 QARD 100.0  
 QARD 120.0  
 QARD 139.6  
 QARD 160.0  
 QARD 180.0  
 QARD 209.2  
 QARD 240.0  
 QARD 270.0  
 QARD 300.0  
 QARD 330.0  
 QARD 360.0  
 QARD 390.0  
 QARD 426.2  
 QARD 450.0  
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 NS 0.0 6.50 .025 6.50 6.50 6.50 6.50 .030 6.50  
 NS 0.0 0.05 5.60 .075 5.60 4.50 .042 4.50 8.20 .08 8.20  
 NS 0.0 .026 8.20 .032 8.20 .05 8.20 .2 1.20 .2 1.20 1.00  
 NS 0.0 1.00 1.00  
 WSL 0.0 95.01 95.07 95.13 95.17 95.23 95.28  
 WSL 0.0 95.35 95.42 95.48 95.54 95.59 95.64  
 WSL 0.0 95.69 95.74 95.78 95.82 95.86 95.89  
 WSL 0.0 95.95 95.99 96.04 96.09 96.14 96.20  
 WSL 0.0 96.25 96.30 96.34 96.39 96.43 96.47  
 CAL1 0.0 95.36 209.2  
 VEL1 0.0 0.00 0.03 0.15 0.47 0.58 1.38 1.70 2.00 2.58  
 VEL1 0.0 1.18 0.30 2.02 1.90 2.54 2.94 2.81 4.40 4.11 3.60 3.74 4.16  
 VEL1 0.0 1.54 0.96 2.90 3.22 1.05 0.33 1.77 1.39 0.43 0.19 0.00  
 VEL1 0.0  
 CAL2 0.0 95.12 139.6  
 VEL2 0.0  
 VEL2 0.0  
 VEL2 0.0  
 CAL3 0.0 95.75 426.2  
 VEL3 0.0  
 VEL3 0.0  
 VEL3 0.0  
 VEL3 0.0  
 ENDJ  
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Sprague River SP_1 07/27/06
Riffle Sprague River
IOC 641
QARD 80.0
QARD 100.0
QARD 120.0
QARD 139.6
QARD 160.0
QARD 180.0
QARD 209.2
QARD 240.0
QARD 270.0
QARD 300.0
QARD 330.0
QARD 360.0
QARD 390.0
QARD 426.2
QARD 450.0
QARD 480.0
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NS 0.0 0.07 6.5 6.5 .035 5.6 .035 7.6 5.6 .025 5.7
NS 0.0 5.7 8.2 .15 8.4 8.2 8.2 8.2
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WSL 0.0 96.00 96.08 96.15 96.21 96.28 96.34
WSL 0.0 96.43 96.50 96.58 96.64 96.71 96.76
WSL 0.0 96.81 96.88 96.91 96.96 97.00 97.04
WSL 0.0 97.10 97.15 97.20 97.25 97.31 97.36
WSL 0.0 97.42 97.47 97.52 97.57 97.61 97.66
CAL1 0.0 96.42 209.2
VEL1 0.0 0.00 0.00 0.00 0.00 0.00 0.24
VEL1 0.0 0.24 0.15 0.32 0.66 1.03 1.37 1.41 1.50 1.29 0.45 0.09
VEL1 0.0 0.00 0.00 0.15 1.11 1.95 2.60 2.85 2.13
VEL1 0.0 3.19 3.98-0.09 3.99 3.36 2.53 1.45 1.80 2.67 1.81 2.83
VEL1 0.0 2.13 1.04 0.29 0.83 0.68 0.15 0.00
CAL2 0.0 96.24 139.6
VEL2 0.0
VEL2 0.0
VEL2 0.0
VEL2 0.0
CAL3 0.0 96.86 426.2
VEL3 0.0
VEL3 0.0
VEL3 0.0
VEL3 0.0
ENDU
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Sprague River SP_1 07/27/06
Riffle Sprague River
IOC 641
QARD 80.0
QARD 100.0
QARD 120.0
QARD 139.6
QARD 160.0
QARD 180.0
QARD 209.2
QARD 240.0
QARD 270.0
QARD 300.0
QARD 330.0
QARD 360.0
QARD 390.0
QARD 426.2
QARD 450.0
QARD 480.0
QARD 510.0
QARD 540.0
QARD 580.0
QARD 620.0
QARD 660.0
QARD 700.0
QARD 750.0
QARD 800.0
QARD 850.0
QARD 900.0
QARD 950.0
QARD1000.0
QARD1050.0
QARD1100.0
XSEC 0.0 0.0 1.0 95.34 0.00630
0.0 1.099.26 12.797.66 16.597.69 16.897.14 24.096.91 31.597.14
0.0 38.096.69 45.096.72 49.596.89 52.097.09 60.097.24 66.097.24
0.0 73.097.14 80.097.29 87.096.91 94.096.49101.096.34108.095.74
0.0111.095.59115.095.39120.095.34125.095.81132.096.19135.096.29
0.0137.596.62140.096.59143.096.59149.096.99151.597.14153.097.44
0.0156.097.59156.297.69158.098.14162.098.41166.098.85168.599.20
0.0173.099.19177.099.33181.099.82
NS 0.0 1.0 1.0 .08 1.0 .10 5.6 0.18 6.5 .060 6.5
NS 0.0 6.5 6.5 6.7 0.2 6.7 6.7 6.7
NS 0.0 .15 6.7 .15 7.6 .15 6.7 6.7 6.7 8.6
NS 0.0 6.7 6.7 6.7 6.5 8.6 .2 8.6
NS 0.0 .2 8.6 8.6 6.7 .25 6.2 .25 2.6 .25 5.6
NS 0.0 2.6 2.6 6.7 1.0 1.0 1.0
NS 0.0 1.0 1.0 1.0
CAL1 0.0 97.69 209.2
VEL1 0.0 0.00 0.99 0.45 1.69 0.80 0.86 0.89-0.03 0.82 0.89
VEL1 0.0 0.27 0.15 0.26 1.51 2.32 1.72 2.58 2.63 2.86 2.03 0.99 0.31
VEL1 0.0 0.30 0.73 0.61 0.20 0.15 0.09 0.00 0.00
VEL1 0.0
CAL2 0.0 97.51 139.6
VEL2 0.0
VEL2 0.0
VEL2 0.0
VEL2 0.0
CAL3 0.0 98.00 426.2
VEL3 0.0
VEL3 0.0
VEL3 0.0
VEL3 0.0
ENDJ
→

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**Stream:** Sprague River  
**Site:** SP-1 (Lower Sprague River)  
**Date:** 5/28/1993  
**Habitat:** Run

**Flow:** High

(1) Level Loop Survey (BM & HP)

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	4.69	104.69		
HP1			4.70	99.99
HP2			6.51	98.18
HP3			4.76	99.93
TP				
HP3	4.64	104.57		
HP2			6.39	98.18
HP1			4.57	100.00
BM			4.58	99.99

Comment: HP1's FS=4.97 should be the reading error of 4.57

**Date:** 6/30/1993  
**Habitat:** Run

**Flow:** Mid

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	4.30	104.30		
HP1			4.30	100.00
HP2			6.11	98.19
HP3			4.36	99.94
TP				
HP3	4.24	104.18		
HP2			5.99	98.19
HP1			4.18	100.00
BM			4.18	100.00

Comment:

**Date:** 9/12/1993  
**Habitat:** Run

**Flow:** Low

(1) Level Loop Survey

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM	1.88	101.88		
HP3			1.95	99.93
HP2			3.69	98.19
HP1			1.88	100.00
TP				
HP1	1.92	101.92		
HP2			3.73	98.19
HP3			1.99	99.93
BM			1.92	100.00

Comment:

(2) Water Surface Elevation (WSE) Survey

	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)	
								L/R WSE
TR1	0	104.57	6.91	0.00	97.66	97.68	1148.1	
			6.87	0.00	97.70			
TR2	10.3	104.57	6.95	0.00	97.62	97.67		
			6.86	0.00	97.71			
TR3	41.3	104.57	6.96	0.00	97.61	97.70		
			6.78	0.00	97.79			
							Ave Q=	1148.1

Note: WSE slope= 0.048%

(2) Water Surface Elevation (WSE) Survey

	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)	
								L/R WSE
TR1	0	104.18	7.55	0.00	96.63	96.62	302.0	
			7.58	0.00	96.60			
TR2	10.3	104.18	7.51	0.00	96.67	96.66	310.8	
			7.54	0.00	96.64			
TR3	41.3	104.18	7.46	0.00	96.72	96.73	338.0	
			7.45	0.00	96.73			
							Ave Q=	316.9

Note: see QA/QC forms for determination of WSE  
WSE slope = 0.27%

(2) Water Surface Elevation (WSE) Survey

	Sta (ft)	HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)	
								L/R WSE
TR1	0	101.92	5.73	0.00	96.19	96.18	135.1	
			5.75	0.00	96.17			
TR2	10.3	101.92	5.70	0.00	96.22	96.21	116.0	
			5.72	0.00	96.20			
TR3	41.3	101.92	5.66	0.00	96.26	96.25	127.3	
			5.68	0.00	96.24			
							Ave Q=	126.2

Note: WSE slope = 0.17%







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RUN                                MID                                TRANSECT 1
IOC      1101100000001000101000
QARD 25.0
QARD 50.0
QARD 75.0
QARD 100.0
QARD 126.2
QARD 200.0
QARD 250.0
QARD 316.9
QARD 350.0
QARD 400.0
QARD 450.0
QARD 500.0
QARD 600.0
QARD 700.0
QARD 800.0
QARD 900.0
QARD1000.0
QARD1148.1
QARD1200.0
QARD1300.0
QARD1400.0
QARD1500.0
QARD1600.0
QARD1700.0
QARD1800.0
QARD1900.0
QARD2000.0
QARD2100.0
QARD2200.0
QARD2300.0
XSEC1000.0      0.00 1.0      95.00  0.00270
    1000.0  0.0 99.4  2.0 99.3  4.0 98.6  6.0 98.0  8.0 97.7  9.9 97.0
    1000.0 11.3 96.6 15.0 96.2 18.0 96.1 20.0 95.9 28.0 95.6 36.0 95.4
    1000.0 42.0 96.1 44.0 96.3 52.0 96.3 57.0 96.1 60.0 96.1 66.0 96.1
    1000.0 68.0 96.8 72.0 96.2 76.0 95.9 84.0 95.1 92.0 94.8100.0 94.5
    1000.0108.0 94.6116.0 94.6124.0 95.1132.0 95.5134.0 94.9140.0 94.6
    1000.0148.0 94.9156.0 95.0164.0 95.5172.0 95.9175.0 96.2176.4 96.6
    1000.0177.0 97.0179.5 96.4180.0 97.8182.5 98.0183.0 97.4184.5 98.7
    1000.0185.7 99.2192.7 99.1
NS 1000.0      1.1      1.1      1.1      1.1      1.1      1.1
NS 1000.0      6.2 0.2  6.2 0.2  6.2 0.2  2.6 0.2  2.6 0.2  2.6
NS 1000.0 0.20  9.6 0.20  2.1 0.20  2.6 0.20  2.6      2.6 .06  2.6
NS 1000.0 0.06  2.6 0.06  2.6      6.7      6.7 .043  6.7      6.7
NS 1000.0      6.7      6.7      6.7 0.12  6.7      6.7      6.7
NS 1000.0      6.7      6.7      6.7      6.7 .12  6.7      6.7
NS 1000.0      1.1      1.1      1.1      1.1      1.1      1.1
NS 1000.0      1.1      1.1
CAL11000.0      96.62      316.9
VEL11000.0      0.00 0.03 0.15 0.29 0.34 0.25
VEL11000.0-0.08-0.13-0.10-0.02 0.30 1.01      0.06 1.25 2.07 2.94 2.46
VEL11000.0 2.38 2.69 1.90 0.36 1.55 1.13 1.64 1.28 0.71 0.71 0.26 0.00
VEL11000.0
CAL21000.0      96.18      126.2
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0      97.66      1148.1
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ

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RUN                                MID                                TRANSECT 2
IOC      1101100100001000101000
QARD 25.0
QARD 50.0
QARD 75.0
QARD 100.0
QARD 126.2
QARD 200.0
QARD 250.0
QARD 316.9
QARD 350.0
QARD 400.0
QARD 450.0
QARD 500.0
QARD 600.0
QARD 700.0
QARD 800.0
QARD 900.0
QARD1000.0
QARD1148.1
QARD1200.0
QARD1300.0
QARD1400.0
QARD1500.0
QARD1600.0
QARD1700.0
QARD1800.0
QARD1900.0
QARD2000.0
QARD2100.0
QARD2200.0
QARD2300.0
XSEC1000.0      0.00 1.0      94.52  0.00270
1000.0  0.0 97.7  1.5 97.9  3.0 97.5  5.0 97.0  7.0 96.7  8.2 96.4
1000.0  9.0 96.5 10.0 96.3 12.0 95.7 15.0 95.4 20.0 95.3 25.0 95.2
1000.0 28.0 95.4 30.0 96.6 35.0 95.9 40.0 96.4 48.0 96.3 56.0 96.3
1000.0 59.0 96.3 64.0 96.9 69.0 96.3 72.0 96.1 80.0 95.2 88.0 94.5
1000.0 96.0 93.8104.0 94.0112.0 95.1120.0 95.3128.0 95.2136.0 94.9
1000.0144.0 94.9152.0 95.3160.0 95.4168.0 95.7170.0 95.8170.7 96.0
1000.0171.0 96.9173.0 97.2175.0 97.6177.0 98.8179.3 98.2197.3 99.6
NS 1000.0      1.1      1.1      1.1      1.1      1.1      1.1
NS 1000.0 0.3      1.1 0.27  9.9      9.9      9.9      9.9
NS 1000.0      9.9 0.3      9.9 0.3      9.9 0.3      9.9      9.9 0.30  9.9
NS 1000.0 0.30      9.9      9.9      9.9      6.7      6.7 .06  6.7
NS 1000.0 .06      6.7 .065  6.7      6.7 .08  6.7      6.7      6.7
NS 1000.0      6.7      6.7 0.1      6.7 0.09  6.7 .15  6.7 0.15  6.7
NS 1000.0 0.1      1.1 0.1      1.1 0.08  1.1      1.1      1.1      1.1
WSL 1000.0      95.65      95.84      95.98      96.09      96.19      96.41
WSL 1000.0      96.53      96.66      96.73      96.81      96.88      96.96
WSL 1000.0      97.09      97.21      97.32      97.43      97.52      97.66
WSL 1000.0      97.70      97.78      97.86      97.93      98.00      98.07
WSL 1000.0      98.13      98.20      98.26      98.32      98.37      98.43
CAL11000.0      96.66      316.9
VEL11000.0      0.00-0.050.001 0.28 0.42 0.49 0.33
VEL11000.0 0.220.001-0.02 0.01 0.12 0.03-0.03      0.23 0.39 1.13 2.65
VEL11000.0 3.20 2.52 1.71 1.07 1.27 1.17 1.59 1.33 0.56 0.56 0.07-0.03
VEL11000.0
CAL21000.0      96.21      126.2
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0      97.67      1148.1
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ

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RUN                                MID                                TRANSECT 3
IOC                                1101100100001000101000
QARD 25.0
QARD 50.0
QARD 75.0
QARD 100.0
QARD 126.2
QARD 200.0
QARD 250.0
QARD 316.9
QARD 350.0
QARD 400.0
QARD 450.0
QARD 500.0
QARD 600.0
QARD 700.0
QARD 800.0
QARD 900.0
QARD1000.0
QARD1148.1
QARD1200.0
QARD1300.0
QARD1400.0
QARD1500.0
QARD1600.0
QARD1700.0
QARD1800.0
QARD1900.0
QARD2000.0
QARD2100.0
QARD2200.0
QARD2300.0
XSEC1000.0      0.00 1.0      94.52  0.00270
1000.0-10.0 98.2 -5.3 98.5 -4.0 97.2 0.0 99.7 2.0 99.7 4.0 99.3
1000.0 5.0 99.0 6.0 98.7 7.0 98.4 8.0 98.1 9.0 98.0 10.0 97.6
1000.0 11.0 97.3 11.5 97.1 11.9 97.4 12.1 96.7 15.0 96.0 20.0 95.8
1000.0 25.0 95.7 30.0 96.7 35.0 96.6 40.0 96.6 45.0 96.9 50.0 96.6
1000.0 55.0 96.9 60.0 96.4 65.0 96.4 70.0 96.3 77.0 95.7 85.0 94.9
1000.0 93.0 94.1101.0 94.7109.0 94.7117.0 95.5125.0 95.5133.0 95.4
1000.0141.0 95.3149.0 95.3157.0 95.6165.0 95.9173.0 95.9177.0 96.1
1000.0178.0 96.2179.4 96.8180.0 97.2180.5 97.6181.5 97.7183.0 97.7
1000.0184.5 98.0186.0 98.1188.0 98.2190.0 98.5192.0 99.2194.7 99.3
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 0.10 1.6 .10 1.6
NS 1000.0 .10 1.6 .10 1.6 0.12 1.6 1.6 0.07 1.6 0.07 1.6
NS 1000.0 0.05 1.6 .08 1.6 .08 1.6 1.6 .07 6.7 6.7
NS 1000.0      6.7 .034 6.7 6.7 6.7 6.7 .08 6.7
NS 1000.0      6.7 6.7 6.7 0.1 6.7 6.7 6.7
NS 1000.0 0.08 6.7 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
WSL 1000.0     95.72 95.92 96.05 96.16 96.26 96.47
WSL 1000.0     96.59 96.72 96.79 96.86 96.94 97.02
WSL 1000.0     97.15 97.26 97.37 97.48 97.56 97.70
WSL 1000.0     97.74 97.82 97.89 97.96 98.03 98.10
WSL 1000.0     98.16 98.23 98.28 98.34 98.39 98.45
CAL11000.0     96.73 316.9
VEL11000.0
VEL11000.0      0.00 0.01 0.020.0010.001 0.01 0.34 0.001
VEL11000.0     0.01-0.02 1.01 0.94 3.02 3.26 3.97 2.93 2.83 2.02 0.66
VEL11000.0 1.83 1.41 0.89 0.37 1.06 0.29 0.03 0.00
VEL11000.0
CAL21000.0     96.25 126.2
VEL21000.0
VEL21000.0
VEL21000.0
VEL21000.0
CAL31000.0     97.70 1148.1
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
VEL31000.0
ENDJ

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