

10-30-2008

Ex. 277-US-463

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Stream: Spring Creek
Site: 640

Date: 9/24/1997
Habitat: Run

Flow: Mid

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM 2	1.66	101.66		
HP3		4.12	97.54	
HP2		3.66	98	
TP HP2	3.78	101.78		
BM 1	3.27	102.72		
TP BM1		5.04	97.68	
HP1		102.68	3.23	99.45
TP HP1	5.00	101.57		
BM1	2.12	101.57		
TP BM1		3.58	97.99	
TR2		101.61		
TP TR2	3.62	101.61		
TR3		4.07	97.54	
BM2		1.61	100.00	

Comment: LEVEL LOOP SURVEYED ON 9/23/97
WSE'S AND Q DONE ON 9/24/97

Date: 5/14/1998
Habitat: Run

Flow: High

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM1	2.19	101.64		99.45
HP1		3.95	97.69	
TP BM1	2.20	101.65		
HP2		3.65	98.00	
TP HP2	3.82	101.82		
HP3		4.27	97.55	
TP				
HP3	4.56	102.11		
TP HP2		4.11	98.00	
BM1	3.64	101.64		
TP BM1	2.36	101.81		
HP1		4.13	97.68	

Comment: BM 2 was not usable

Date: _____
Habitat: Run

Flow: Low

BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)
BM		100.00		100.00
HP1			100.00	
HP2			100.00	
HP3			100.00	
TP				
HP3		100.00		
HP2			100.00	
HP1			100.00	
BM				100.00

Comment:

(2) Water Surface Elevation (WSE) Survey

	L/R WSE (ft)	Sta (ft)	HI (ft)	FS (ft)	Rod Depth (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWSE 0	101.64	7.58	1.27	95.33	95.34	253.7	
	RWSE 0		7.43	1.13	95.34			
TR2	LWSE 435	101.69	9.13	2.80	95.36	95.36	257.9	
	RWSE 297		9.40	3.07	95.36			
TR3	LWSE 737	101.47	7.69	1.59	95.37	95.38	249.8	
	RWSE 610		7.25	1.16	95.38			

Note: WSE slope = 0.006%

(3) Meter and propeller ID for Velocity Correction

Meter ID: 0068 NOTE: No meter noted, calibration changed to
Propeller ID: NA 1.00 per cmh instructions

(2) Water Surface Elevation (WSE) Survey

	L/R WSE (ft)	Sta (ft)	HI (ft)	FS (ft)	Rod Depth (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWSE	101.81	7.56	1.09	95.34	95.34	268.6	
	RWSE							
TR2	LWSE	101.71	7.17	0.84	95.38	95.38	268.6	
	RWSE							
TR3	LWSE	102.65	8.31	1.06	95.40	95.40	268.6	
	RWSE							

Note: RWSE not collected
WSE slope = ?

(3) Meter and propeller ID for Velocity Correction

Meter ID: 0058 NOTE: No meter noted, calibration changed to
Propeller ID: NA 1.00 per cmh instructions

(2) Water Surface Elevation (WSE) Survey

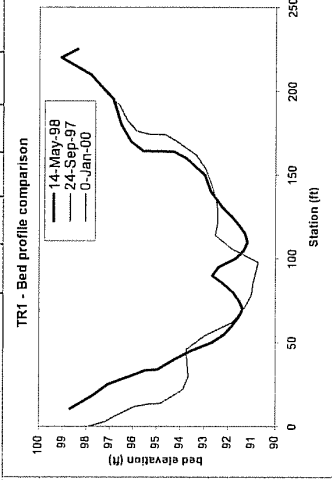
	L/R WSE (ft)	Sta (ft)	HI (ft)	FS (ft)	Rod Depth (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
TR1	LWSE	100.00	100.00		100.00	100.00	100.00	
	RWSE							
TR2	LWSE	100.00	100.00		100.00	100.00	100.00	
	RWSE							
TR3	LWSE	100.00	100.00		100.00	100.00	100.00	
	RWSE							

Note: WSE slope = ?
Ave Q =

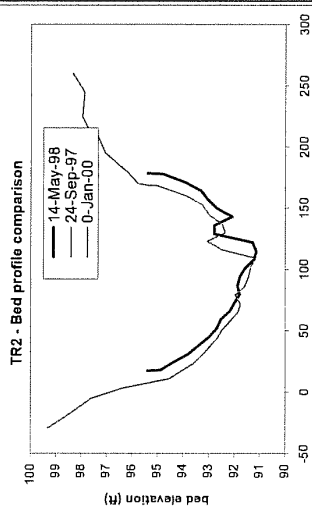
(3) Meter and propeller ID for Velocity Correction

Meter ID: _____
Propeller ID: _____

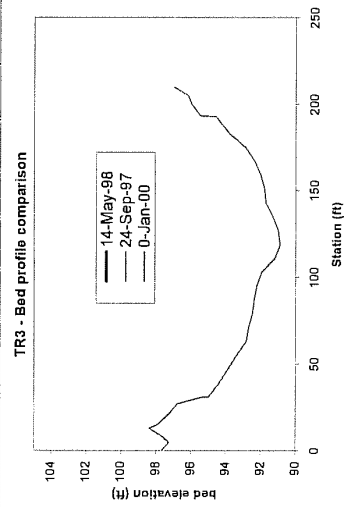
Stream: Spring Creek		24-Sep-97						14-May-98						0-Jan-00											
Transsect	I	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s)	V _{0.206}	V _{0.8}	Ave	q (cfs)	substrate	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	Vel (ft/s)	V _{0.206}	V _{0.8}	Ave	q (cfs)	substrate				
Habitat: Kum																									
Survey Date																									
9/24/1997	101.64	100.77	253.7																						
5/14/1998	100.77																								
1/01/2000	100.00																								
LWP		0.0	3.72	97.92								10.6	2.10	98.67											
		3.0	4.47	97.17								19.0	3.12	97.65											
		6.0	4.83	96.81								25.0	3.70	97.07											
		9.0	5.29	96.35								31.0	4.86	95.91											
		12.0	5.70	95.94								34.0	5.82	94.95											
		13.4		95.34	0.00	0.00	0.00	0.00	0.00	0.00		40.0	6.54	94.23											
		13.8		94.84	0.50	0.02	0.02	0.04	3.5			45.0	7.22	93.55											
		22.0		93.89	1.45	0.26	0.26	3.05	2.3			55.0	8.63	92.14											
		38.0		93.64	1.70	0.42	0.42	5.71	3.5			60.0	8.95	91.82											
		38.0		93.69	1.65	0.48	0.48	6.34	8.3			65.0	9.20	91.57											
		46.0		93.74	1.60	0.12	0.12	1.54	8.3			70.0	9.40	91.37											
		54.0		92.99	2.35	0.15	0.15	2.82	8.5			75.0	9.25	91.52											
		62.0		91.84	3.50	0.73	0.27	0.50	14.00	5.3		80.0	8.99	91.78											
		70.0		91.34	4.00	0.36	0.24	0.40	12.80	5.3		85.0	8.60	92.17											
		78.0		91.04	4.30	1.11	0.70	0.91	31.13	6.3		90.0	8.13	92.64											
		86.0		90.94	4.40	0.87	0.31	0.59	25.96	6.3		95.0	8.38	92.39											
		98.0		90.74	4.60	0.68	0.45	0.57	25.99	3.6		100.0	9.10	91.67											
		106.0		91.84	3.50	0.73	0.73	0.73	20.44	3.5		105.0	9.44	91.33											
		114.0		92.54	2.80	0.86	0.92	0.89	19.94	3.5		110.0	9.60	91.17											
		122.0		92.44	2.90	0.68	0.77	0.73	16.82	3.5		115.0	9.50	91.27											
		130.0		92.44	2.90	1.06	0.93	1.00	23.08	3.5		120.0	9.25	91.52											
		138.0		92.54	2.80	1.11	0.77	0.94	21.06	3.5		125.0	8.94	91.83											
		146.0		92.74	2.60	0.83	0.56	0.70	14.46	3.3		130.0	8.58	92.19											
		154.0		92.94	2.40	0.37	0.37	7.10	1.2	2.3		140.0	8.06	92.71											
		162.0		93.34	2.00	0.07	0.07	1.12	1.2	2.3		150.0	7.80	92.97											
		170.0		94.14	1.20	0.05	0.05	0.36	2.2	2.3		160.0	6.50	94.27											
		174.0		94.64	0.70	-0.02	-0.02	-0.03	2.3	2.3		170.0	4.69	96.08											
		174.3		95.34	0.00	0.00	0.00	0.00	0.00	1.1		180.0	4.27	96.50											
		176.0		95.82						1.1		195.0	3.94	96.83											
		182.0		96.22						1.1		210.0	2.96	97.81											
		192.0		96.59						1.1		220.0	1.70	99.07											
		198.1		4.52	97.12					1.1		225.1	2.40	98.37											
Control Profile: HI is in BS.																									



Stream: Spring Creek	24-Sep-97										14-May-98										0-Jan-00									
	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	V _{base} (ft/s)	V _{avg} (ft/s)	Ave (cf/s)	q (cf/s)	substrate	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	V _{base} (ft/s)	V _{avg} (ft/s)	Ave (cf/s)	q (cf/s)	substrate	Sta (ft)	FS (ft)	Ground (ft)	Depth (ft)	V _{base} (ft/s)	V _{avg} (ft/s)	Ave (cf/s)	q (cf/s)	substrate			
	-30.0	2.40	99.37					1.1		172	95.38	0.00	0.00	0.00	0.00	0.00	0.00													
	-20.0	3.14	98.63					1.1		18.0	94.88	0.50	0.01	0.01	0.01	0.02	0.00													
	-5.0	4.19	97.58					1.1		24.0	94.38	1.00	0.09	0.09	0.09	0.59	0.00													
	LWP	0.0	96.83					1.1		31.0	93.78	1.60	0.16	0.16	0.16	1.79	0.00													
	5/14/1997	101.77	257.9					1.1		38.0	93.38	2.00	0.21	0.21	2.94	0.00														
	5/14/1998	101.71	268.6					1.1		45.0	92.98	2.40	0.25	0.25	4.20	0.00														
	1/0/1900	100.00						1.1		52.0	92.68	2.70	0.61	0.42	0.52	9.73	0.00													
		11.0	94.51	0.85	0.09	0.09	0.33	2.2		59.0	92.53	2.85	0.66	0.59	0.63	12.47	0.00													
		16.0	94.16	1.20	0.25	0.25	1.80	2.2		66.0	92.18	3.20	0.76	0.69	0.73	16.24	0.00													
		23.0	93.61	1.75	0.12	0.12	1.47	2.2		73.0	91.98	3.40	0.92	0.79	0.86	20.35	0.00													
		30.0	93.26	2.10	0.25	0.25	3.68	2.2		80.0	91.78	3.60	0.93	0.84	0.89	22.30	0.00													
		37.0	92.96	2.40	0.25	0.25	4.20	3.3		87.0	91.88	3.50	0.97	0.88	0.93	22.66	0.00													
		44.0	92.66	2.70	0.60	0.49	10.30	3.3		94.0	91.78	3.60	0.76	0.59	0.68	17.01	0.00													
		51.0	92.46	2.90	0.69	0.53	6.11	12.38	3.3	101.0	91.58	3.80	0.78	0.63	0.71	18.75	0.00													
		58.0	92.16	3.20	0.77	0.65	7.71	15.90	3.5	108.0	91.23	4.15	0.69	0.64	0.67	19.32	0.00													
		65.0	91.86	3.50	0.90	0.67	7.79	19.23	3.5	115.0	91.13	4.25	0.64	0.68	0.66	19.64	0.00													
		72.0	91.76	3.60	0.97	0.72	8.85	21.29	3.5	122.0	91.28	4.10	0.75	0.66	0.71	20.23	0.00													
		79.0	91.96	3.40	0.81	0.72	7.77	18.21	3.3	129.0	92.78	2.60	0.90	0.87	0.89	16.11	0.00													
		86.0	91.61	3.75	0.66	0.56	6.61	16.01	3.5	136.0	92.78	2.60	0.70	0.74	0.72	13.10	0.00													
		93.0	91.46	3.90	0.78	0.69	7.74	22.93	3.5	143.0	92.08	3.30	0.60	0.45	0.53	12.13	0.00													
		100.0	91.16	4.20	0.88	0.69	7.79	23.08	3.5	150.0	92.68	2.70	0.55	0.39	0.47	8.88	0.00													
		107.0	92.46	2.90	0.90	0.59	7.75	15.12	5.3	157.0	93.03	2.35	0.33	0.33	5.43	0.00														
		114.0	93.06	2.30	0.93	0.93	14.97	5.3		164.0	93.28	2.10	0.19	0.19	2.79	0.00														
		121.0	92.36	3.00	0.66	0.60	6.63	13.23	5.3	171.0	93.88	1.50	0.18	0.18	1.89	0.00														
		128.0	92.46	2.90	0.51	0.51	10.35	2.3		178.0	94.78	0.60	0.01	0.01	0.02	0.00	0.00													
		135.0	92.96	2.40	0.37	0.37	7.10	2.3																						
		142.0	93.26	2.10	0.18	0.18	3.02	2.2																						
		149.0	93.86	1.50	0.21	0.21	2.43	2.1																						
		156.0	95.01	0.35	0.00	0.01	0.02	1.2																						
		163.0	95.36	0.00	0.00	0.00	0.00	0.0																						
		170.0	6.01	95.76				1.1																						
		177.0	5.57	96.20				1.1																						
		184.0	4.72	97.05				1.1																						
		191.0	4.41	97.36				1.1																						
		198.0	4.10	97.67				1.1																						
		205.0	3.81	97.96				1.1																						
		212.0	3.90	97.87				1.1																						
		219.0	3.43	98.34				1.1																						



Stream: Spring Creek		24-Sep-97										14-May-98										0-Jan-00									
Site: 640		Sta	FS	Ground	Depth	Vel (ft/s)		Depth		Vel (ft/s)		Depth		Vel (ft/s)		Depth		Vel (ft/s)		Depth		Vel (ft/s)									
Habitat: Run		(ft)	(ft)	(ft)	(ft)	V _{0.2m6}	V _{0.8}	Ave	q	substrate	Sta	FS	Ground	Depth	V _{0.2m6}	V _{0.8}	Ave	q	substrate	Sta	FS	Ground	Depth	V _{0.2m6}	V _{0.8}	Ave	q	substrate			
LWP		0.0	3.79	97.68						1.0																					
		5.0	4.21	97.26						1.1																					
		8.0	3.87	97.60						1.1																					
Survey HI Q		13.0	3.11	98.36						1.1																					
Date (ft) (cfs)		15.5	3.60	97.87						1.1																					
9/24/1997 101.47 249.8		22.0	4.27	97.20						1.1																					
5/14/1998 102.65		27.0	4.70	96.77						1.1																					
1/0/1900 100.00										1.1																					
LWE		30.8	95.38	0.00		0.00	0.00	0.00	0.00	1.1																					
		31.0	94.98	0.40		0.01	0.01	0.01	0.02	2.2																					
		39.0	94.38	1.00		0.22	1.76	2.3	3.2	3.2																					
		47.0	93.88	1.50		0.42	0.42	5.04	3.2	3.2																					
		55.0	93.38	2.00		0.59	0.59	9.44	3.3	3.3																					
		63.0	92.83	2.55		0.73	0.61	13.67	3.3	3.3																					
		71.0	92.68	2.70		0.76	0.53	13.93	5.3	5.3																					
		79.0	92.48	2.90		0.69	0.55	14.38	5.3	5.3																					
		87.0	92.38	3.00		0.74	0.62	16.32	3.5	3.5																					
		95.0	92.23	3.15		0.71	0.59	16.38	3.5	3.5																					
		103.0	91.93	3.45		0.71	0.64	18.63	3.5	3.5																					
		111.0	91.18	4.20		0.70	0.50	20.16	5.3	5.3																					
		119.0	90.88	4.50		0.68	0.39	19.26	5.6	5.6																					
		127.0	90.98	4.40		0.59	0.39	17.25	5.3	5.3																					
		135.0	91.28	4.10		0.73	0.52	20.50	5.3	5.3																					
		143.0	91.68	3.70		0.67	0.54	17.91	5.3	5.3																					
		151.0	91.78	3.60		0.62	0.49	15.98	3.5	3.5																					
		159.0	91.98	3.40		0.59	0.44	14.01	3.5	3.5																					
		167.0	92.33	3.05		0.43	0.32	9.15	3.5	3.5																					
		175.0	92.88	2.50		0.24	0.14	3.80	2.2	2.2																					
		183.0	93.78	1.60		0.15	0.15	2.12	2.3	2.3																					
		192.7	94.58	0.80		0.01	0.01	0.04	2.3	2.3																					
RWE		193.3	95.38	0.00		0.00	0.00	0.00	1.1	1.1																					
		193.5	98	95.40					1.1	1.1																					
		200.0	5.50	95.97					1.1	1.1																					
		205.0	5.29	96.18					1.1	1.1																					
RWP		210.0	4.49	96.98					1.1	1.1																					



Stream: Spring Creek
 Site: WM-17
 Date: 6/27/2004
 Habitat: Spawning

Flow: Mid

(1) Level Loop Survey (BM & HP)						
BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)		
BM	1.94	101.94		100.00		
HP1			5.69	96.25		
HP2			6.09	95.85		
TP						
HP2	6.18	102.03		95.85		
HP1			5.79	96.24		
BM			2.04	99.99		

Comment: HP's removed, use BM to re-set
 HP's if necessary

Date: _____
 Habitat: Spawning

Flow: _____

(1) Level Loop Survey						
BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)		
BM		100.00		100.00		
HP1				100.00		
HP2				100.00		
HP3				100.00		
TP						
HP3		100.00				
HP2				100.00		
HP1				100.00		
BM				100.00		

Comment: _____

Date: _____
 Habitat: Spawning

Flow: _____

(1) Level Loop Survey						
BM/HP (ft)	BS (ft)	HI (ft)	FS (ft)	Elev (ft)		
BM		100.00		100.00		
HP1				100.00		
HP2				100.00		
HP3				100.00		
TP						
HP3		100.00				
HP2				100.00		
HP1				100.00		
BM				100.00		

Comment: _____

(2) Water Surface Elevation (WSE) Survey

TR	Station		HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
	L/R bank (ft)	Ave (ft)						
WEIR	0	0	102.03	8.22	0.00	93.81	93.86	
1-L	36	37	102.03	7.97	0.00	94.06	94.03	287.6
1-R	37	37	102.03	8.03	0.00	94.00		
2-L	68	67	102.03	7.93	0.00	94.10	94.08	280.8
2-R	66	66	102.03	7.97	0.00	94.06		

Note: 120' u/s of TR2 FS=7.87, wse=94.16
 WSE slope = 0.299%

(3) Meter and propeller ID for Velocity Correction

Meter ID: 3602
 Propeller ID: 3a

(2) Water Surface Elevation (WSE) Survey

TR	Station		HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)	Q (cfs)
	L/R bank (ft)	Ave (ft)						
WEIR			100.00			100.00	#####	
1-L			100.00			100.00	#####	
1-R			100.00			100.00	#####	
2-L			100.00			100.00	#####	
2-R			100.00			100.00	#####	

Note: WSE slope = ?
 Ave Q=

(3) Meter and propeller ID for Velocity Correction

Meter ID: _____
 Propeller ID: _____

(2) Water Surface Elevation (WSE) Survey

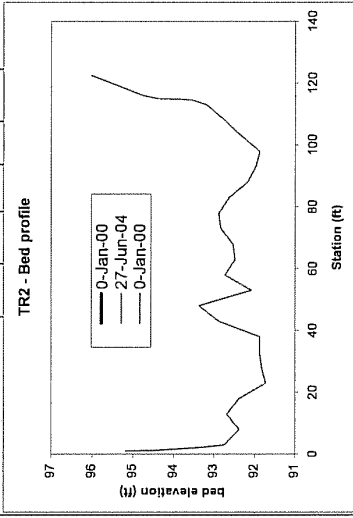
TR	Station		HI (ft)	FS (ft)	Rod (ft)	WSE (ft)	Ave WSE (ft)
	L/R bank (ft)	Ave (ft)					
WEIR			100.00			100.00	#####
1-L			100.00			100.00	#####
1-R			100.00			100.00	#####
2-L			100.00			100.00	#####
2-R			100.00			100.00	#####

Note: WSE slope = ?
 Ave Q=

(3) Meter and propeller ID for Velocity Correction

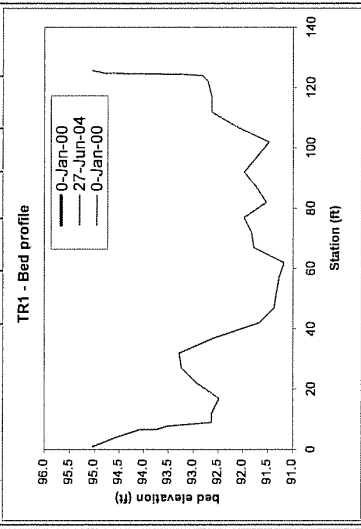
Meter ID: _____
 Propeller ID: _____

Stream: Spring Creek		27-Jun-04										0-Jan-00									
Site: WM-17		Sta	FS	Ground	Depth	Vel (ft/s)	q	substrate	Sta	FS	Ground	Depth	Vel (ft/s)	q	substrate						
Transect: 2		(ft)	(ft)	(ft)	(ft)	V _{0.2m,6}	Ave		(ft)	(ft)	(ft)	(ft)	V _{0.2m,6}	Ave							
Habitat: Spawning		RWP	1.0	6.87	95.16			1.1													
Survey HI Q		RBE	2.3	7.57	94.46	0.82	0.19	1.1													
Date (ft) (cfs)			3.0	92.74	1.34	0.48	0.50	2.1													
6/27/2004 102.03 280.8			8.0	92.38	1.70	1.52	1.55	4.5													
1/0/1900 100.00			13.0	92.68	1.40	1.06	1.09	4.5													
1/0/1900 100.00			18.0	92.38	1.70	1.28	1.31	5.4													
			23.0	91.73	2.35	0.94	0.97	5.3													
			28.0	91.83	2.25	1.46	1.49	4.5													
			33.0	91.88	2.20	0.98	1.01	4.5													
			38.0	91.88	2.20	0.95	0.98	5.4													
			43.0	92.88	1.20	2.09	2.12	5.4													
			48.0	93.38	0.70	2.43	2.46	4.5													
			53.0	92.08	2.00	2.30	2.33	5.4													
			58.0	92.73	1.35	2.37	2.40	5.4													
			63.0	92.48	1.60	2.19	2.22	5.4													
			68.0	92.53	1.55	2.39	2.42	4.5													
			73.0	92.83	1.25	2.79	2.82	4.5													
			78.0	92.88	1.20	2.54	2.57	4.5													
			83.0	92.63	1.45	1.75	1.78	5.4													
			88.0	92.18	1.90	1.30	1.33	4.5													
			93.0	91.98	2.10	1.52	1.55	5.4													
			98.0	91.88	2.20	1.25	1.28	5.4													
			103.0	92.33	1.75	0.53	0.55	5.4													
			108.0	92.73	1.35	0.57	0.59	5.4													
			113.0	93.18	0.90	0.60	0.62	5.3													
			114.5	93.55	0.55	0.15	0.20	5.3													
		LBE	114.8	93.78	0.30	0.00	0.01	1.2													
			115.0	7.67	94.36			1.1													
			116.0	7.29	94.74			1.1													
		LWP	122.5	6.02	96.01			1.1													



Left UCB = 0.2'
Right UCB = 0.5'

Stream: Spring Creek		27-Jun-04										0-Jan-00									
Site: WM-17		Sta	FS	Ground	Depth	V _{0.2m,d}	V _{0.8}	Ave	q	substrate	Sta	FS	Ground	Depth	V _{0.2m,d}	V _{0.8}	Ave	q	substrate		
Transect: I		(ft)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft/s)	(cfs)		(ft)	(ft)	(ft)	(ft)	(ft)	(ft/s)	(ft/s)	(ft/s)	(cfs)		
Habitat: Spawning		RWP	1.0	7.00	95.03					1.1											
Survey	HI	Q																			
Date	(ft)	(cfs)																			
6/27/2004	102.03	287.6	7.7	7.95	94.08	0.30	0.00	0.00	0.00	0.00	4.0	7.45	94.58	0.16	0.10	0.16	0.09	9.1	1.1		
1/01/1900	100.00		9.0	92.63	1.40	2.27	2.30	6.92	8.4	8.4	12.0	92.63	1.40	2.35	2.38	13.33	5.4	94.5	95.0		
1/01/1900	100.00		17.0	92.48	1.55	2.48	2.51	19.46	5.4	5.4	22.0	92.93	1.10	2.57	2.60	14.31	4.5	94.0	94.5		
			27.0	93.23	0.80	2.46	2.49	9.97	5.4	5.4	32.0	93.28	0.75	2.04	2.07	7.76	4.5	93.5	93.0		
			37.0	92.58	1.45	1.54	1.57	11.37	5.4	5.4	42.0	91.68	2.35	1.79	1.82	21.35	5.4	92.5	92.0		
			47.0	91.38	2.65	2.17	1.40	1.81	24.04	5.4	57.0	91.33	2.70	1.35	0.95	1.18	15.90	5.4	91.5	91.0	
			62.0	91.18	2.85	0.72	0.65	0.71	10.07	5.4	67.0	91.78	2.25	1.49	1.52	17.09	5.4				
			72.0	91.83	2.20	1.65	1.68	18.45	5.4	5.4	77.0	91.98	2.05	0.85	0.88	8.97	5.4				
			82.0	91.53	2.50	1.38	0.64	1.04	12.94	5.4	87.0	91.73	2.30	0.19	0.24	2.76	5.4				
			92.0	91.98	2.05	0.27	0.31	3.21	5.4	5.4	97.0	91.73	2.30	1.21	1.24	14.25	5.4				
			102.0	91.48	2.55	1.17	0.85	1.04	13.22	4.5	107.0	92.13	1.90	0.79	0.81	7.73	5.4				
			112.0	92.63	1.40	0.23	0.28	1.94	5.4	5.4	117.0	92.63	1.40	0.47	0.49	3.44	5.4				
			122.0	92.71	1.32	0.51	0.53	2.44	4.5	4.5	124.0	92.83	1.20	0.10	0.16	0.23	2.4	2.1			
			124.8	7.23	94.80	0.81	0.10	0.16	0.03	2.1	124.8	7.23	94.80	0.16	0.03	0.16	0.03	2.1	1.1		
			LWP	125.7	6.99	95.04															



Left UCB = 0.2'
Right UCB = 0.1'

Spring Creek WM_17 09/24/97

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Run          MID          TRANSECT 1
IOC          1100100100001000101000
QARD 130.0
QARD 140.0
QARD 150.0
QARD 160.0
QARD 170.0
QARD 180.0
QARD 190.0
QARD 200.0
QARD 210.0
QARD 220.0
QARD 230.0
QARD 250.0
QARD 253.8
QARD 268.8
QARD 290.0
QARD 310.0
QARD 330.0
QARD 350.0
QARD 370.0
QARD 390.0
QARD 410.0
QARD 430.0
QARD 450.0
QARD 470.0
QARD 490.0
QARD 510.0
QARD 530.0
QARD 550.0
QARD 575.0
QARD 600.0
XSEC 0.0      0.01.00    90.74  0.0000600
      0.0  0.0 97.9  3.0 97.2  6.0 96.8  9.0 96.3 12.0 95.9 13.4 95.3
      0.0 13.8 94.8 22.0 93.9 30.0 93.6 38.0 93.7 46.0 93.7 54.0 93.0
      0.0 62.0 91.8 70.0 91.3 78.0 91.0 86.0 90.9 98.0 90.7106.0 91.8
      0.0114.0 92.5122.0 92.4130.0 92.4138.0 92.5146.0 92.7154.0 92.9
      0.0162.0 93.3170.0 94.1174.0 94.6174.3 95.3176.0 95.8182.0 96.2
      0.0192.0 96.6198.1 97.1
NS      0.0      1.0      1.0      1.0      1.0      1.0      1.0
NS      0.0 .16    3.5      2.3      3.5      8.3      8.3      8.5
NS      0.0      5.3      5.3      6.3      6.3      3.6      3.5
NS      0.0      3.5      3.5      3.5      3.5      3.0      3.2
NS      0.0 .15    2.3 .15    2.0      2.3      1.0      1.0
NS      0.0      1.0      1.0
WSL     0.0      94.91    94.95    94.99    95.03    95.07    95.11
WSL     0.0      95.14    95.18    95.21    95.24    95.27    95.33
WSL     0.0      95.34    95.38    95.44    95.49    95.54    95.59
WSL     0.0      95.63    95.68    95.72    95.76    95.80    95.84
WSL     0.0      95.89    95.93    95.98    96.02    96.08    96.13
CAL1    0.0      95.340    253.8
VEL1    0.0
      0.00 0.02 0.26 0.42 0.48 0.12 0.15
VEL1    0.0 0.50 0.40 0.91 0.59 0.57 0.73 0.89 0.73 1.00 0.94 0.70 0.37
VEL1    0.0 0.07 0.05-0.02 0.00
CAL2    0.0      95.340    268.6
VEL2    0.0
VEL2    0.0
VEL2    0.0
ENDJ

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Spring Creek WM_17 09/24/97

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Run          MID          TRANSECT 2
IOC          1100100100001000101000
QARD 130.0
QARD 140.0
QARD 150.0
QARD 160.0
QARD 170.0
QARD 180.0
QARD 190.0
QARD 200.0
QARD 210.0
QARD 220.0
QARD 230.0
QARD 250.0
QARD 253.8
QARD 268.6
QARD 290.0
QARD 310.0
QARD 330.0
QARD 350.0
QARD 370.0
QARD 390.0
QARD 410.0
QARD 430.0
QARD 450.0
QARD 470.0
QARD 490.0
QARD 510.0
QARD 530.0
QARD 550.0
QARD 575.0
QARD 600.0
XSEC 0.0      0.0 1.0      91.16 0.000060
0.0-30.0 99.4-20.0 98.6 -5.0 97.6 0.0 96.8 3.0 96.4 5.0 95.9
0.0 7.3 95.4 11.0 94.5 16.0 94.2 23.0 93.6 30.0 93.3 37.0 93.0
0.0 44.0 92.7 51.0 92.5 58.0 92.2 65.0 91.9 72.0 91.8 79.0 92.0
0.0 86.0 91.6 93.0 91.5102.0 91.4109.0 91.2116.0 92.5123.0 93.1
0.0130.0 92.4137.0 92.5144.0 93.0153.0 93.3160.0 93.9168.4 95.0
0.0168.6 95.4170.0 95.8180.0 96.2195.0 97.1210.0 97.4213.0 97.7
0.0225.0 98.0245.0 97.9260.0 98.3
NS 0.0      1.0      1.0      1.0      1.0      1.0      1.0
NS 0.0      1.0 .075 2.0      2.0      2.0      2.0      3.0
NS 0.0      3.0      3.0      3.5      3.5      3.5      3.0
NS 0.0      3.5      3.5      9.3      3.5      5.3 .023 5.3
NS 0.0      5.3      2.3      2.3      2.0      2.1 .07 1.2
NS 0.0      1.0      1.0      1.0      1.0      1.0      1.0
NS 0.0      1.0      1.0      1.0
WSL 0.0      94.95 94.99 95.02 95.06 95.10 95.14
WSL 0.0      95.17 95.20 95.23 95.26 95.29 95.35
WSL 0.0      95.36 95.40 95.46 95.51 95.56 95.61
WSL 0.0      95.65 95.70 95.74 95.78 95.82 95.86
WSL 0.0      95.91 95.95 96.00 96.05 96.11 96.16
CAL1 0.0      95.360 253.8
VEL1 0.0
VEL1 0.0 0.55 0.61 0.71 0.79 0.85 0.77 0.61 0.74 0.65 0.79 0.75 0.93
VEL1 0.0 0.63 0.51 0.37 0.18 0.21 0.01 0.00
VEL1 0.0
CAL2 0.0      95.380 268.6
VEL2 0.0
VEL2 0.0
VEL2 0.0
VEL2 0.0
ENDJ

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Spring Creek WM_17 09/24/97

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Run          MID          TRANSECT 3
IOC          1100100100001000101000
QARD 130.0
QARD 140.0
QARD 150.0
QARD 160.0
QARD 170.0
QARD 180.0
QARD 190.0
QARD 200.0
QARD 210.0
QARD 220.0
QARD 230.0
QARD 250.0
QARD 253.8
QARD 268.6
QARD 290.0
QARD 310.0
QARD 330.0
QARD 350.0
QARD 370.0
QARD 390.0
QARD 410.0
QARD 430.0
QARD 450.0
QARD 470.0
QARD 490.0
QARD 510.0
QARD 530.0
QARD 550.0
QARD 575.0
QARD 600.0
XSEC 0.0      0.0 1.0      90.88 0.000060
      0.0 0.0 97.7  5.0 97.3  8.0 97.6 13.0 98.4 15.5 97.9 22.0 97.2
      0.0 27.0 96.8 30.8 95.4 31.0 95.0 39.0 94.4 47.0 93.9 55.0 93.4
      0.0 63.0 92.8 71.0 92.7 79.0 92.5 87.0 92.4 95.0 92.2103.0 91.9
      0.0111.0 91.2119.0 90.9127.0 91.0135.0 91.3143.0 91.7151.0 91.8
      0.0159.0 92.0167.0 92.3175.0 92.9183.0 93.8192.7 94.6193.3 95.4
      0.0193.5 95.5200.0 96.0205.0 96.2210.0 97.0
NS 0.0      1.0      1.0      1.0      1.0      1.0      1.0
NS 0.0      1.0      1.0 .2  2.0      2.3      3.2      3.0
NS 0.0      3.0      5.3      5.3      3.5      3.5      3.5
NS 0.0      5.3      5.6      5.3      5.3      5.3      3.5
NS 0.0      3.5      3.5      2.0      2.3 .20  2.3 .1  1.0
NS 0.0      1.0      1.0      1.0      1.0
WSL 0.0     94.97   95.01   95.04   95.08   95.12   95.16
WSL 0.0     95.18   95.22   95.25   95.28   95.30   95.36
WSL 0.0     95.37   95.41   95.47   95.53   95.58   95.63
WSL 0.0     95.67   95.72   95.76   95.80   95.84   95.88
WSL 0.0     95.93   95.97   96.02   96.06   96.12   96.17
CAL1 0.0     95.380   253.8
VEL1 0.0
      0.00 0.01 0.22 0.42 0.59
VEL1 0.0 0.67 0.65 0.62 0.68 0.65 0.68 0.60 0.54 0.49 0.63 0.61 0.56
VEL1 0.0 0.52 0.38 0.19 0.15 0.01 0.00
CAL2 0.0     95.400   268.6
VEL2 0.0
VEL2 0.0
VEL2 0.0
ENDJ

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Williamson River WM17 06/27/04

SPAWNING

MID

TRANSECT 1

IOC 1100000100001000100000

QARD 120.0
 QARD 140.0
 QARD 160.0
 QARD 180.0
 QARD 200.0
 QARD 220.0
 QARD 240.0
 QARD 260.0
 QARD 284.2
 QARD 290.0
 QARD 310.0
 QARD 330.0
 QARD 350.0
 QARD 370.0
 QARD 390.0
 QARD 410.0
 QARD 430.0
 QARD 450.0
 QARD 470.0
 QARD 490.0
 QARD 510.0
 QARD 530.0
 QARD 550.0
 QARD 570.0
 QARD 590.0
 QARD 610.0
 QARD 630.0
 QARD 650.0
 QARD 680.0
 QARD 710.0

XSEC 0.0 0.00 1.0 91.18 0.00300
 0.0 1.0 95.0 4.0 94.6 6.6 94.1 6.7 93.7 7.7 93.5 9.0 92.6
 0.0 12.0 92.6 17.0 92.5 22.0 92.9 27.0 93.2 32.0 93.3 37.0 92.6
 0.0 42.0 91.7 47.0 91.4 52.0 91.3 57.0 91.3 62.0 91.2 67.0 91.8
 0.0 72.0 91.8 77.0 92.0 82.0 91.5 87.0 91.7 92.0 92.0 97.0 91.7
 0.0102.0 91.5107.0 92.1112.0 92.6117.0 92.6122.0 92.7124.0 92.8
 0.0124.4 93.2124.8 94.8125.7 95.0
 NS 0.0 1.1 1.1 1.1 9.2 .1 9.1 8.4
 NS 0.0 5.4 5.4 4.5 5.4 4.5 5.4
 NS 0.0 5.4 5.4 5.4 5.4 5.4 5.4
 NS 0.0 5.4 5.4 5.4 5.4 5.4 5.4
 NS 0.0 4.5 5.4 .30 5.4 5.4 4.5 .2 2.4
 NS 0.0 .2 2.1 .2 1.1 1.1
 WSL 0.0 93.41 93.50 93.59 93.68 93.75 93.82
 WSL 0.0 93.89 93.96 94.03 94.05 94.11 94.17
 WSL 0.0 94.22 94.28 94.33 94.38 94.44 94.48
 WSL 0.0 94.53 94.58 94.63 94.67 94.72 94.76
 WSL 0.0 94.81 94.85 94.90 94.94 95.00 95.06
 CAL1 0.0 94.03 284.2
 VEL1 0.0 0.00 0.16 2.30 2.38 2.51 2.60 2.49 2.07 1.57
 VEL1 0.0 1.82 1.81 1.18 1.92 0.71 1.52 1.68 0.88 1.04 0.24 0.31 1.24
 VEL1 0.0 1.04 0.81 0.28 0.49 0.53 0.16 0.16
 CAL2 0.0 94.03 284.21
 VEL2 0.0
 VEL2 0.0

Williamson River WM17 06/27/04

SPAWNING

MID

TRANSECT 2

IOC 1100000100001000100000

QARD 120.0
 QARD 140.0
 QARD 160.0
 QARD 180.0
 QARD 200.0
 QARD 220.0
 QARD 240.0
 QARD 260.0
 QARD 284.2
 QARD 290.0
 QARD 310.0
 QARD 330.0
 QARD 350.0
 QARD 370.0
 QARD 390.0
 QARD 410.0
 QARD 430.0
 QARD 450.0
 QARD 470.0
 QARD 490.0
 QARD 510.0
 QARD 530.0
 QARD 550.0
 QARD 570.0
 QARD 590.0
 QARD 610.0
 QARD 630.0
 QARD 650.0
 QARD 680.0
 QARD 710.0

XSEC 0.0 0.00 1.0 91.73 0.00300
 0.0 1.0 95.2 1.2 94.5 2.3 93.3 3.0 92.7 8.0 92.4 13.0 92.7
 0.0 18.0 92.4 23.0 91.7 28.0 91.8 33.0 91.9 38.0 91.9 43.0 92.9
 0.0 48.0 93.4 53.0 92.1 58.0 92.7 63.0 92.5 68.0 92.5 73.0 92.8
 0.0 78.0 92.9 83.0 92.6 88.0 92.2 93.0 92.0 98.0 91.9 103.0 92.3
 0.0108.0 92.7 113.0 93.2 114.5 93.5 114.8 93.8 115.0 94.4 116.0 94.7
 0.0122.5 96.0
 NS 0.0 1.1 1.1 .1 2.1 .1 3.4 4.5 4.5
 NS 0.0 5.4 5.3 4.5 4.5 5.4 5.4
 NS 0.0 4.5 5.4 5.4 5.4 4.5 4.5
 NS 0.0 5.4 5.4 4.5 5.4 5.4 5.4
 NS 0.0 5.4 5.3 .12 5.3 .12 1.2 1.1 1.1
 NS 0.0 1.1
 WSL 0.0 93.47 93.56 93.65 93.72 93.80 93.87
 WSL 0.0 93.94 94.00 94.08 94.10 94.16 94.22
 WSL 0.0 94.27 94.33 94.38 94.44 94.49 94.54
 WSL 0.0 94.59 94.64 94.69 94.74 94.78 94.83
 WSL 0.0 94.88 94.92 94.97 95.01 95.07 95.14
 CAL1 0.0 94.08 284.2
 VEL1 0.0 0.24 0.50 1.55 1.09 1.31 0.97 1.49 1.01 0.98 2.12
 VEL1 0.0 2.46 2.33 2.40 2.22 2.42 2.82 2.57 1.78 1.33 1.55 1.28 0.55
 VEL1 0.0 0.59 0.62 0.20 0.01
 CAL2 0.0 94.08 284.21
 VEL2 0.0
 VEL2 0.0