

APPENDIX A

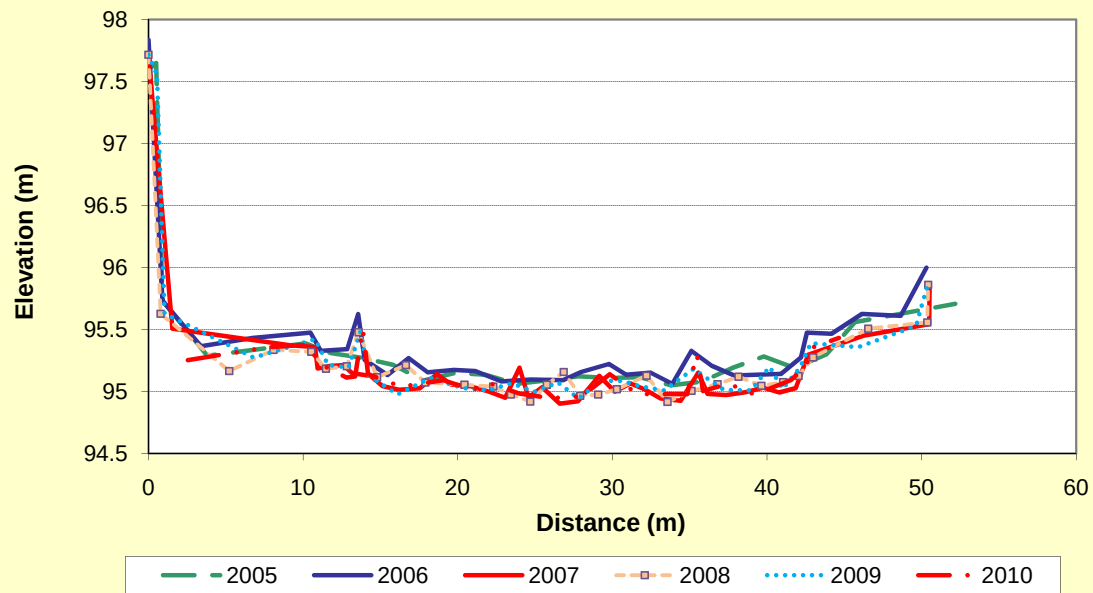
CHANNEL SURVEY DATA

Reach 2 Channel Cross-sections, Transects R2TA – R2TE (2005-2010)

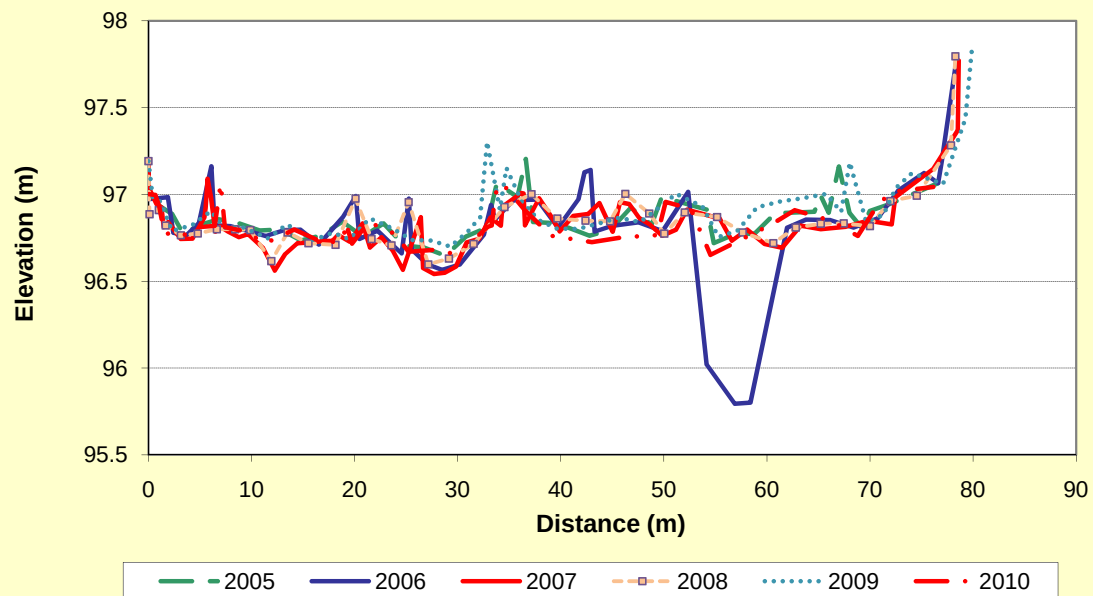
Reach 3 Channel Cross-sections, Transects R3TA – R3TE (2005-2010)

(This page intentionally blank)

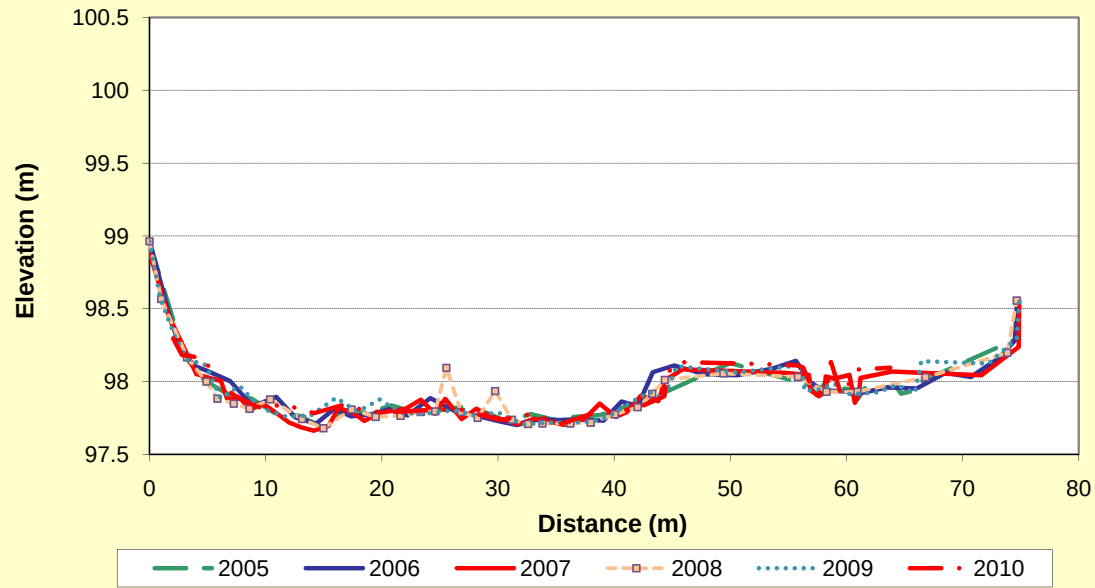
Reach 2, Transect E



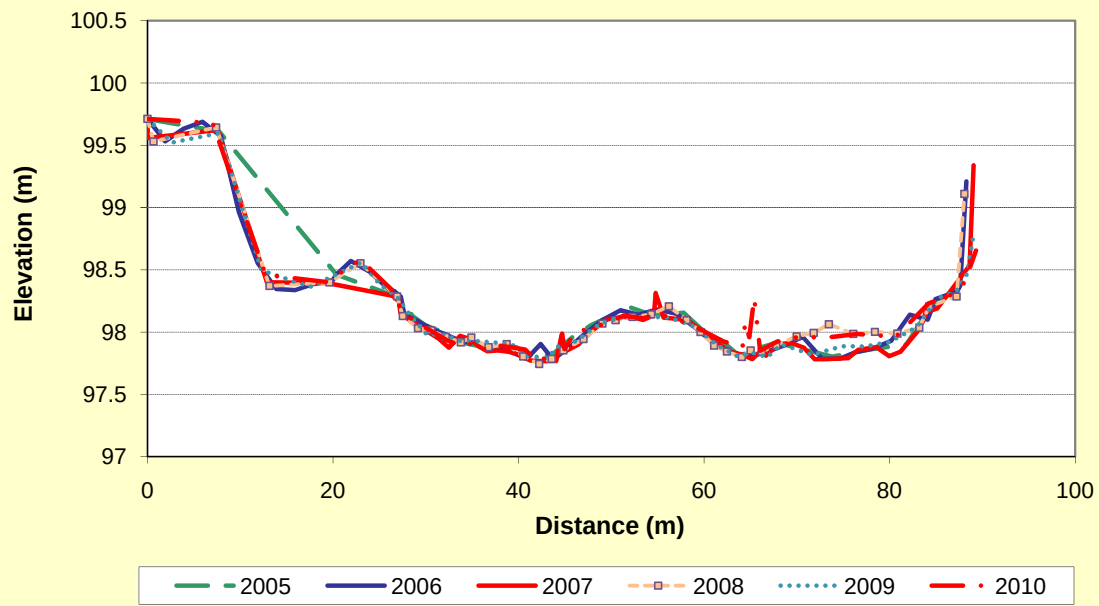
Reach 2, Transect D



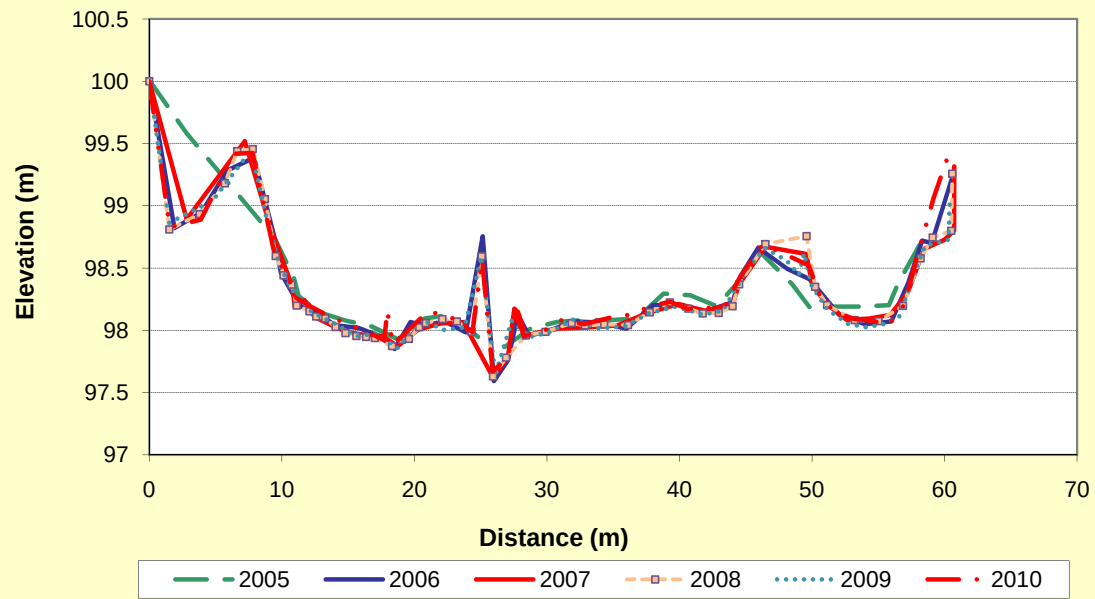
Reach 2, Transect C



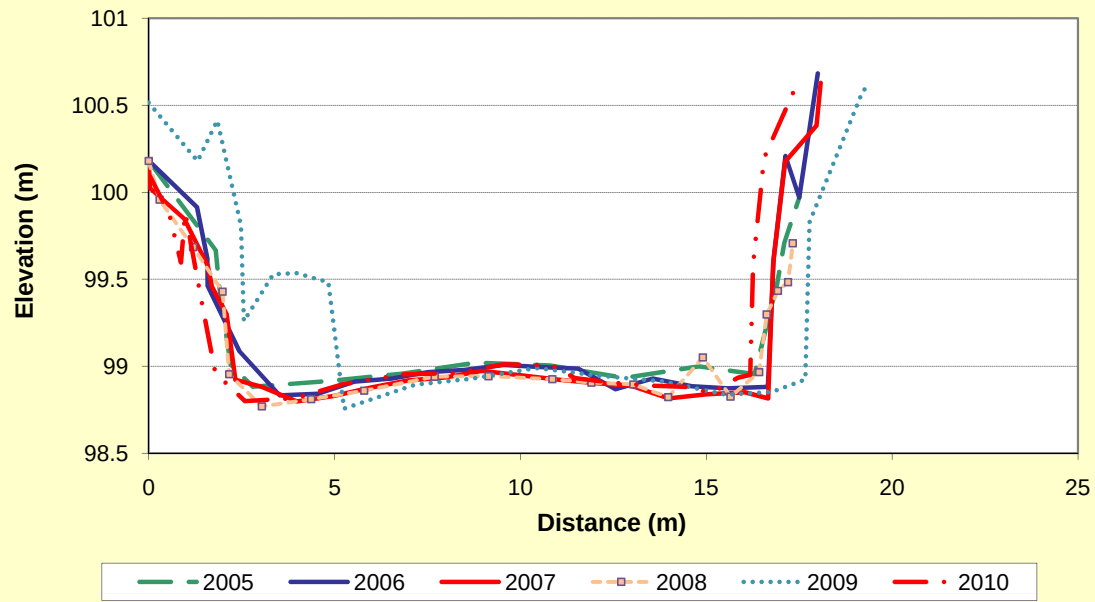
Reach 2, Transect B



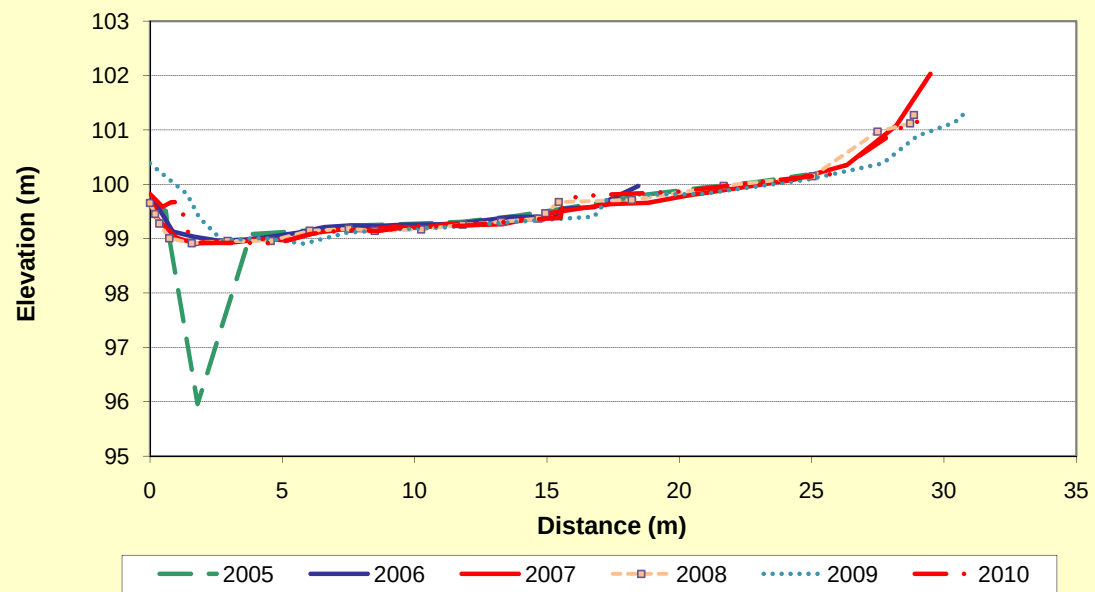
Reach 2, Transect A



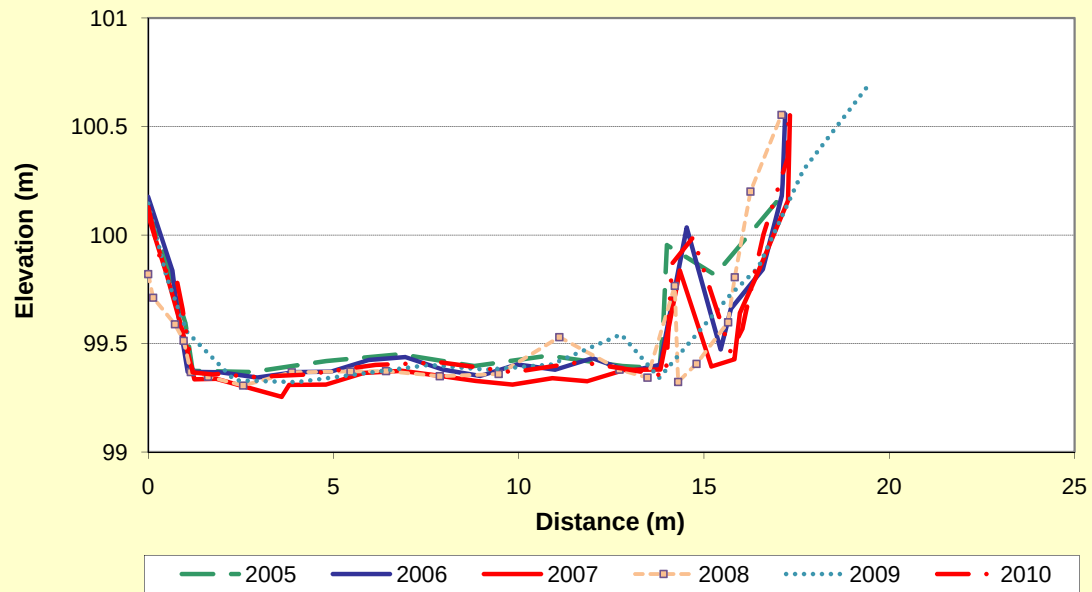
Reach 3, Transect E



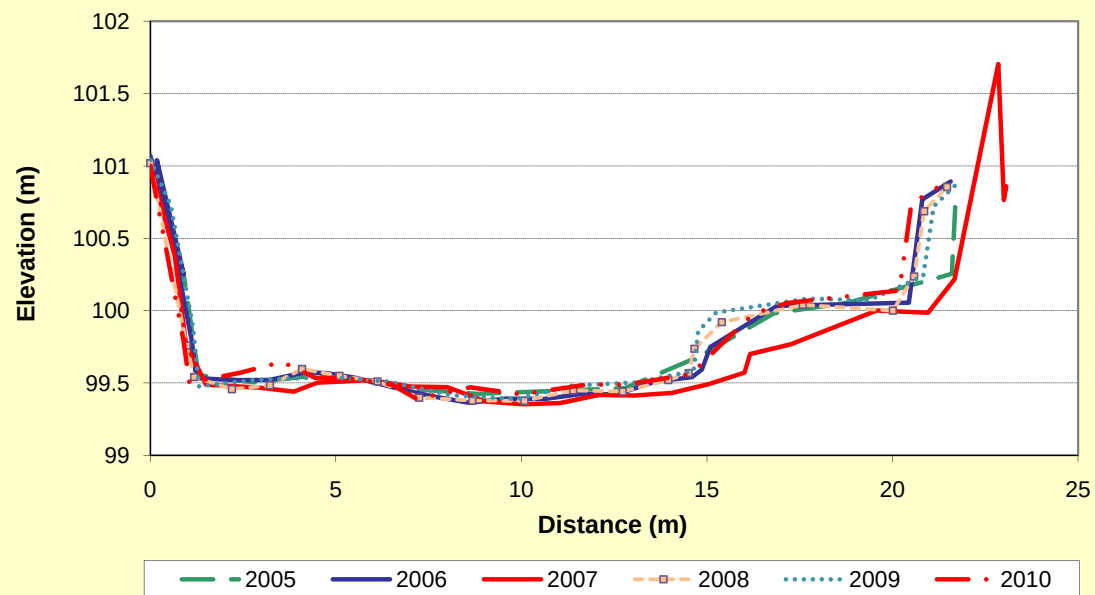
Reach 3 Transect D



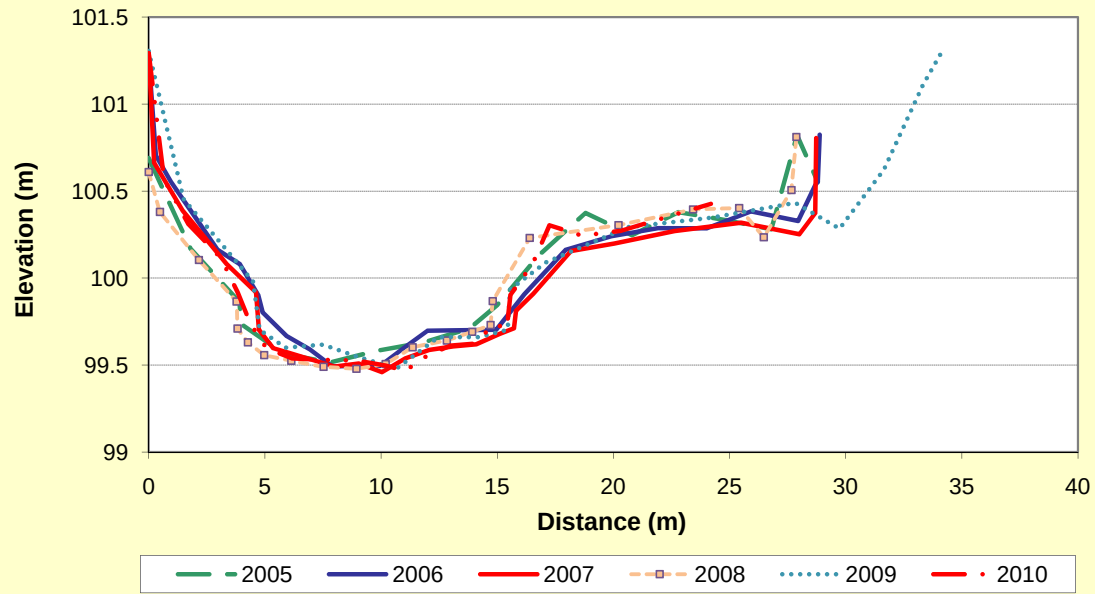
Reach 3, Transect C



Reach 3, Transect B



Reach 3, Transect A



Bear River
Reach 2 Channel Survey Data 2005

Project Name: Bear River, Id
Project Code: 283-001
Date: 2005_10_12 **Time:** 7:45 am
Reach 2 **Transects 1-5**
staff: Instrument - Brian Anderson, Rod - John Gangemi
Conditions: Partly cloudy, warming to upper 60's by mid day.
Tape was tied at 20 cm, adjusted distance column is true distance

Station	Back Site	Height of Instrument	Fore Site	Elevation (m)	Distance (m)	Adjusted Distance (m)	Comments	Depth (m)	Bankfull Depth (m)
Transect 1				100			BM		
	1.3	101.3							
			1.292	100.008	0.2	0	RBP		
			1.716	99.584	3	2.8			
			2.559	98.741	9.65	9.45	BF		0
			2.88	98.42	11.12	10.92	WP	0	0.321
			3.025	98.275	11.46	11.26	SA	0.145	0.466
			3.154	98.146	13	12.8	FI	0.274	0.595
			3.221	98.079	15	14.8	FI	0.341	0.662
			3.27	98.03	17	16.8	CO	0.39	0.711
			3.374	97.926	19	18.8	CO	0.494	0.815
			3.205	98.095	21	20.8	GR	0.325	0.646
			3.175	98.125	23	22.8	FI	0.295	0.616
			3.352	97.948	25	24.8	FI	0.472	0.793
			3.435	97.865	27	26.8	FI	0.555	0.876
			3.283	98.017	29	28.8	FI	0.403	0.724
			3.233	98.067	31	30.8	FI	0.353	0.674
			3.219	98.081	33	32.8	FI	0.339	0.66
			3.218	98.082	35	34.8	FI	0.338	0.659
			3.204	98.096	37	36.8	FI	0.324	0.645
			3.005	98.295	39	38.8	FI	0.125	0.446
			3.018	98.282	41	40.8	FI	0.138	0.459
			3.105	98.195	43	42.8	FI	0.225	0.546
			2.908	98.392	44.67	44.47	WP	0.028	0.349
			2.662	98.638	46.2	46			0.103
			2.93	98.37	48.7	48.5	WP	0.05	0.371
			3.112	98.188	50	49.8	FI	0.232	0.553
			3.109	98.191	52	51.8	FI	0.229	0.55
			3.109	98.191	54	53.8	FI	0.229	0.55
			3.098	98.202	56	55.8	FI	0.218	0.539
			2.92	98.38	56.7	56.5	WP	0.04	0.361
			2.58	98.72	58.5	58.3	BF		0.021
TP 1			2.69	98.61					
	2.32	100.93							
			1.22	99.71	0.2	0	RBP		
			1.318	99.612	7.9	7.7			
			2.468	98.462	20.58	20.38	BF		0
			2.656	98.274	27.4	27.2	WP	0	0.188
			2.803	98.127	28.8	28.6	GR	0.147	0.335

Bear River
Reach 2 Channel Survey Data 2005

Station	Back Site	Height of Instrument	Fore Site	Elevation (m)	Distance (m)	Adjusted Distance (m)	Comments	Depth (m)	Bankfull Depth (m)
Transect 2			2.874	98.056	30.15	29.95	GR	0.218	0.406
			2.93	98	32	31.8	MC	0.274	0.462
			3.013	97.917	34	33.8	GR	0.357	0.545
			3.042	97.888	36	35.8	MC	0.386	0.574
			3.039	97.891	38	37.8	FI	0.383	0.571
			3.053	97.877	40	39.8	SA	0.397	0.585
			3.142	97.788	42	41.8	FI	0.486	0.674
			3.1	97.83	44	43.8	CO	0.444	0.632
			2.972	97.958	46	45.8	CO	0.316	0.504
			2.875	98.055	48	47.8	CO	0.219	0.407
			2.808	98.122	50	49.8	FI	0.152	0.34
			2.725	98.205	52	51.8	FI	0.069	0.257
			2.778	98.152	54	53.8	FI	0.122	0.31
			2.79	98.14	56	55.8	SA	0.134	0.322
			2.774	98.156	58	57.8	SA	0.118	0.306
			2.912	98.018	60	59.8	SA	0.256	0.444
			2.995	97.935	62	61.8	SA	0.339	0.527
			3.121	97.809	64	63.8	CO	0.465	0.653
			3.06	97.87	66	65.8	SA	0.404	0.592
			3.016	97.914	68	67.8	FI	0.36	0.548
			3.052	97.878	70	69.8	FI	0.396	0.584
			3.128	97.802	74	73.8	FI	0.472	0.66
			3.07	97.86	78	77.8	FI	0.414	0.602
			3.03	97.9	82	81.8	FI	0.374	0.562
			2.753	98.177	84.4	84.2	WP	0.097	0.285
			2.56	98.37	87.8	87.6	BF		0.092
TP 2			2.605	98.325					
	1.09	99.415							
Trans. 3			0.461	98.954	0.2	0	RBP		
			1.239	98.176	3.2	3	BF		0
			1.412	98.003	5	4.8	WP	0	0.173
			1.502	97.913	7	6.8	FI	0.09	0.263
			1.533	97.882	9	8.8	CO	0.121	0.294
			1.632	97.783	11	10.8	CO	0.22	0.393
			1.649	97.766	13	12.8	CO	0.237	0.41
			1.724	97.691	15	14.8	CO	0.312	0.485
			1.612	97.803	17	16.8	CO	0.2	0.373
			1.632	97.783	19	18.8	CO	0.22	0.393
			1.58	97.835	21	20.8	CO	0.168	0.341
			1.625	97.79	23	22.8	CO	0.213	0.386
			1.612	97.803	25	24.8	CO	0.2	0.373
			1.591	97.824	27	26.8	MC	0.179	0.352
			1.623	97.792	29	28.8	MC	0.211	0.384
			1.69	97.725	31	30.8	GR	0.278	0.451
			1.639	97.776	33	32.8	MC	0.227	0.4
			1.678	97.737	35	34.8	MC	0.266	0.439
			1.656	97.759	37	36.8	GR	0.244	0.417
			1.645	97.77	39	38.8	MC	0.233	0.406

Bear River
Reach 2 Channel Survey Data 2005

Station	Back Site	Height of Instrument	Fore Site	Elevation (m)	Distance (m)	Adjusted Distance (m)	Comments	Depth (m)	Bankfull Depth (m)
			1.592	97.823	41	40.8	FI	0.18	0.353
			1.531	97.884	43.39	43.19	WP	0.119	0.292
			1.288	98.127	50.2	50			0.049
			1.439	97.976	56.94	56.74	WP	0.027	0.2
			1.508	97.907	57.65	57.45	CO	0.096	0.269
			1.432	97.983	58.3	58.1	WP	0.02	0.193
			1.472	97.943	60.51	60.31	WP	0.06	0.233
			1.538	97.877	61.15	60.95	FI	0.126	0.299
			1.458	97.957	61.8	61.6	WP	0.046	0.219
			1.453	97.962	64.52	64.32	WP	0.041	0.214
			1.498	97.917	64.91	64.71	FI	0.086	0.259
			1.482	97.933	65.74	65.54	FI	0.07	0.243
			1.445	97.97	65.81	65.61	WP	0.033	0.206
			1.135	98.28	74.5	74.3	BF		-0.104
TP 3			1.9	97.515					
	1.6	99.115							
Trans. 4			1.93	97.185	0.2	0	RBP		
			2.142	96.973	0.23	0.03	BF		0
			2.227	96.888	2.5	2.3	WP	0	0.085
			2.345	96.77	3.6	3.4	CO	0.118	0.203
			2.293	96.822	5	4.8	CO	0.066	0.151
			2.258	96.857	7	6.8	CO	0.031	0.116
			2.282	96.833	9	8.8	CO	0.055	0.14
			2.322	96.793	11	10.8	GR	0.095	0.18
			2.316	96.799	13	12.8	GR	0.089	0.174
			2.38	96.735	15	14.8	CO	0.153	0.238
			2.35	96.765	17	16.8	CO	0.123	0.208
			2.272	96.843	19	18.8	SA	0.045	0.13
			2.358	96.757	21	20.8	BO	0.131	0.216
			2.282	96.833	23	22.8	GR	0.055	0.14
			2.408	96.707	25	24.8	CO	0.181	0.266
			2.422	96.693	27	26.8	CO	0.195	0.28
			2.468	96.647	29	28.8	CO	0.241	0.326
			2.357	96.758	31	30.8	CO	0.13	0.215
			2.306	96.809	33	32.8	BO	0.079	0.164
			2.05	97.065	34	33.8	BO		
			2.13	96.985	36	35.8	BO		
			1.91	97.205	36.8	36.6	BO		
			2.274	96.841	37.5	37.3	GR	0.047	0.132
			2.278	96.837	39	38.8	MC	0.051	0.136
			2.308	96.807	41	40.8	GR	0.081	0.166
			2.353	96.762	43	42.8	GR	0.126	0.211
			2.32	96.795	45	44.8	BO	0.093	0.178
			2.191	96.924	47	46.8	BO		0.049
			2.29	96.825	49	48.8	GR	0.063	0.148
			2.13	96.985	50	49.8	BR		
			2.203	96.912	54.4	54.2	BR		0.061
			2.395	96.72	55.04	54.84	GR	0.168	0.253

Bear River
Reach 2 Channel Survey Data 2005

Station	Back Site	Height of Instrument	Fore Site	Elevation (m)	Distance (m)	Adjusted Distance (m)	Comments	Depth (m)	Bankfull Depth (m)
			2.345	96.77	57	56.8	CO	0.118	0.203
			2.341	96.774	59	58.8	FI	0.114	0.199
			2.223	96.892	61	60.8	BR		0.081
			2.215	96.9	64.8	64.6	BR		0.073
			2.12	96.995	65.4	65.2	BR		
			2.22	96.895	66.19	65.99	BR		0.078
			1.954	97.161	67.18	66.98	BO		
			2.221	96.894	68.2	68	FI		0.079
			2.31	96.805	69.44	69.24	FI	0.083	0.168
			2.21	96.905	70.18	69.98	FI		0.068
			2.17	96.945	72.1	71.9	WP		0.028
			2.05	97.065	76.8	76.6	BF		-0.092
TP 4			3.255	95.86					
	3.97	99.83							
Trans. 5			2.235	97.595	0.2	0	RBP		
			2.181	97.649	0.7	0.5			
			4.097	95.733	1.1	0.9	BF		0
			4.541	95.289	4	3.8		0.1	0.085
			4.441	95.389	10.37	10.17	WP	0	0.203
			4.52	95.31	12	11.8	CO	0.079	0.151
			4.558	95.272	14	13.8	CO	0.117	0.116
			4.615	95.215	16	15.8	BO	0.174	0.14
			4.741	95.089	18	17.8	BO	0.3	0.18
			4.681	95.149	20	19.8	MC	0.24	0.174
			4.695	95.135	22	21.8	MC	0.254	0.238
			4.768	95.062	24	23.8	MC	0.327	0.208
			4.74	95.09	26	25.8	MC	0.299	0.13
			4.708	95.122	28	27.8	BO	0.267	0.216
			4.72	95.11	30	29.8	BO	0.279	0.14
			4.715	95.115	32	31.8	MC	0.274	0.266
			4.78	95.05	34	33.8	BO	0.339	0.28
			4.75	95.08	36	35.8	MC	0.309	0.326
			4.638	95.192	38	37.8	BO	0.197	0.215
			4.548	95.282	40	39.8	BO	0.107	0.164
			4.64	95.19	42	41.8	BO	0.199	
			4.53	95.3	44.06	43.86	WP	0.089	
			4.27	95.56	45.9	45.7			
			4.123	95.707	52.38	52.18	BF		0.132
TP 5			1.77	98.06					
	3.49	101.55							
			2.135	99.415					
	0.42	99.835							
			1.63	98.205					
	4.815	103.02					Closure: .007*(total distance/100)1/2		

Bear River
Reach 3 Channel Survey Data 2005

Project Name: Bear River, Id
Project Code: 283-001
Date: 2005_10_15 Time: 8:40 am
Reach 3 **Transects 1-5**
Staff: Instrument - Brian Anderson, Rod - Drake
Conditions: Sunny, warming to 70's by mid day. Tape
 was tied at 20 cm, adjusted distance is true distance

Station	Back Site	Instr. Height	Fore Site	Elevation (m)	Distance (m)	Adjusted Distance (m)	Comments	Depth (m)	Bankfull Depth (m)
				100					
BM	2.714	102.714					BM @ top of triangle rock		
Trans 7			3.038	99.676	0.200	0.000	RBP, BF		0.000
TD			3.206	99.508	0.800	0.600	WP	0.000	0.168
			3.620	99.094	0.900	0.700	CO	0.414	0.582
			6.756	95.958	2.000	1.800	CO	3.550	3.718
			3.632	99.082	4.000	3.800	GR	0.426	0.594
			3.571	99.143	6.000	5.800	GR	0.365	0.533
			3.473	99.241	8.000	7.800	GR	0.267	0.435
			3.444	99.270	10.000	9.800	GR	0.238	0.406
			3.405	99.309	12.000	11.800	GR	0.199	0.367
			3.300	99.414	14.000	13.800	FI	0.094	0.262
			3.217	99.497	15.100	14.900	WP	0.011	0.179
			3.070	99.644	17.000	16.800			0.032
			2.903	99.811	19.000	18.800			
			2.782	99.932	21.000	20.800			
			2.680	100.034	23.000	22.800			
			2.540	100.174	25.000	24.800	BF		-0.498
Trans 6			2.535	100.179	0.200	0.000	RBP, BF		0.000
TE			3.048	99.666	2.000	1.800			0.513
			3.261	99.453	2.100	1.900	WP	0.000	0.726
			3.705	99.009	2.400	2.200	BO	0.444	1.170
			3.832	98.882	3.000	2.800	BO	0.571	1.297
			3.800	98.914	5.000	4.800	CO	0.539	1.265
			3.758	98.956	7.000	6.800	GR	0.497	1.223
			3.694	99.020	9.000	8.800	GR	0.433	1.159
			3.710	99.004	11.000	10.800	GR	0.449	1.175
			3.782	98.932	13.000	12.800	GR	0.521	1.247
			3.715	98.999	15.000	14.800	BO	0.454	1.180
			3.760	98.954	16.500	16.300	BO	0.499	1.225
			3.245	99.469	17.100	16.900	WP		0.710
			3.005	99.709	17.300	17.100	LBP		0.470
			2.745	99.969	17.700	17.500	LBF		0.210
Trans 8			2.574	100.140	0.200	0.000	RBP, BF		0.000
TC			3.118	99.596	1.200	1.000	WP	0.000	0.544
			3.340	99.374	1.400	1.200	GR	0.222	0.766
			3.345	99.369	3.000	2.800	GR	0.227	0.771
			3.295	99.419	5.000	4.800	CO	0.177	0.721
			3.263	99.451	7.000	6.800	GR	0.145	0.689
			3.318	99.396	9.000	8.800	GR	0.200	0.744
			3.270	99.444	11.000	10.800	GR	0.152	0.696

Bear River
Reach 3 Channel Survey Data 2005

Station	Back Site	Instr. Height	Fore Site	Elevation (m)	Distance (m)	Adjusted Distance (m)	Comments	Depth (m)	Bankfull Depth (m)
			3.318	99.396	13.000	12.800	GR	0.200	0.744
			3.328	99.386	14.000	13.800	GR	0.210	0.754
			3.133	99.581	14.100	13.900	WP	0.015	0.559
			2.760	99.954	14.200	14.000			0.186
			2.898	99.816	15.500	15.300			0.324
			2.533	100.181	17.300	17.100	BF		
Trans 9			1.675	101.039	0.200	0.000	RBP		
TB			2.465	100.249	1.100	0.900	BF		0.000
			2.990	99.724	1.400	1.200	WP	0.000	0.525
			3.160	99.554	1.500	1.300	CO	0.170	0.695
			3.210	99.504	3.000	2.800	GR	0.220	0.745
			3.153	99.561	5.000	4.800	GR	0.163	0.688
			3.250	99.464	7.000	6.800	GR	0.260	0.785
			3.290	99.424	9.000	8.800	GR	0.300	0.825
			3.270	99.444	11.000	10.800	GR	0.280	0.805
			3.250	99.464	13.000	12.800	GR	0.260	0.785
			3.030	99.684	15.000	14.800	WP	0.040	0.565
			2.734	99.980	17.000	16.800			0.269
			2.660	100.054	19.000	18.800			0.195
			2.460	100.254	21.800	21.600	BF		
			1.945	100.769	21.900	21.700	LBP		
Trans 10			2.025	100.689	0.200	0.000	RBP, BF		0.000
TA			2.546	100.168	2.000	1.800			0.521
			2.851	99.863	4.100	3.900	WP	0.000	0.826
			2.980	99.734	4.200	4.000	GR	0.129	0.955
			3.148	99.566	6.000	5.800	GR	0.297	1.123
			3.200	99.514	8.000	7.800	GR	0.349	1.175
			3.133	99.581	10.000	9.800	GR	0.282	1.108
			3.085	99.629	12.000	11.800	GR	0.234	1.060
			3.005	99.709	14.000	13.800	CO	0.154	0.980
			2.870	99.844	15.200	15.000	WP	0.019	0.845
			2.582	100.132	17.000	16.800			0.557
			2.340	100.374	19.000	18.800			0.315
			2.468	100.246	21.000	20.800			0.443
			2.335	100.379	23.000	22.800			0.310
			2.380	100.334	25.000	24.800			0.355
			2.434	100.280	27.000	26.800			0.409
			1.893	100.821	28.100	27.900	LBP		
			2.162	100.552	29.000	28.800	BF		0.137
TP 1			3.060	99.654					
	1.473	101.127				Closure: .007*(total distance/100)1/2			
			1.118	100.009			0.009		

Bear River
Reach 2 Channel Survey Data 2006

Project Name: Bear River, Id
Project Code: 283-001
Date: 2006_10_09 **Time:** 8:00 am
Reach 2 **Transects TA-TE**
Staff: Instrument - Drake Burford , Rod - Brian Anderson
Conditions: Overcase, warming to 50's by mid day.

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Comments
TA	0.000	100.000			RBP
	1.896	98.821			
	3.927	98.945			
	5.895	99.284			
	7.895	99.385			
	9.450	98.741		0.000	BF
	9.941	98.460		0.281	
	11.325	98.200	0.000	0.541	WP
	12.887	98.126	0.074	0.615	FI
	14.003	98.042	0.158	0.699	FI
	15.801	98.018	0.182	0.723	FI
	17.387	97.954	0.247	0.787	FI
	18.522	97.850	0.351	0.891	SA
	19.701	98.066	0.135	0.675	CO
	20.893	98.037	0.164	0.704	CO
	22.212	98.076	0.124	0.665	CO
	23.874	97.984	0.216	0.757	SA
	25.154	98.754			BO
	26.001	97.593	0.607	1.148	GR
	27.054	97.759	0.441	0.982	GR
	27.803	98.127	0.073	0.614	BO
	28.667	97.954	0.246	0.787	FI
	30.452	98.010	0.191	0.731	FI
	31.975	98.072	0.128	0.669	FI
	34.005	98.062	0.138	0.679	FI
	35.999	98.013	0.187	0.728	FI
	38.017	98.202		0.539	FI
	39.955	98.204		0.537	FI
	42.021	98.154	0.046	0.587	FI
	44.014	98.227		0.514	FI
	44.584	98.430		0.311	WP
	45.942	98.664		0.077	
	48.114	98.495		0.246	
	49.806	98.412		0.329	WP
	52.022	98.126	0.074	0.615	FI
	53.996	98.049	0.151	0.692	FI
	55.977	98.070	0.130	0.671	FI
	57.272	98.380		0.361	WP
	58.300	98.720		0.021	BF
	59.027	98.700			
	60.636	99.246			LBP

Bear River
Reach 2 Channel Survey Data 2006

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Comments
TB	0.000	99.713			RBP
	1.908	99.532			
	3.895	99.633			
	5.918	99.688			
	7.913	99.574			
	9.877	98.961			
	11.896	98.552			
	13.884	98.346			
	15.899	98.337			
	17.914	98.386			
	19.912	98.410			
	20.380	98.462		0.000	BF
	21.918	98.571			
	23.911	98.486			
	25.904	98.350		0.112	
	26.613	98.328	0.000	0.134	WP
	27.314	98.284	0.044	0.178	FI
	27.678	98.140	0.188	0.322	GR
	29.121	98.088	0.239	0.374	GR
	30.711	98.024	0.304	0.438	GR
	32.287	97.978	0.350	0.484	GR
	33.887	97.920	0.407	0.542	GR
	35.159	97.921	0.407	0.541	GR
	36.753	97.874	0.453	0.588	GR
	38.016	97.878	0.450	0.584	GR
	39.304	97.839	0.489	0.623	GR
	40.884	97.785	0.543	0.677	FI
	42.382	97.904	0.424	0.558	BO
	43.714	97.779	0.548	0.683	FI
	45.394	97.872	0.455	0.590	FI
	46.863	97.968	0.360	0.494	FI
	49.011	98.096	0.231	0.366	FI
	50.993	98.175	0.153	0.287	FI
	52.929	98.139	0.188	0.323	FI
	54.952	98.182	0.146	0.280	FI
	56.979	98.148	0.180	0.314	FI
	58.955	98.040	0.288	0.422	FI
	60.889	97.922	0.406	0.540	FI
	62.788	97.843	0.484	0.619	FI
	64.306	97.809	0.518	0.653	FI
	65.482	97.815	0.512	0.647	SA
	66.436	97.834	0.494	0.628	FI
	68.586	97.892	0.436	0.570	FI
	70.626	97.962	0.365	0.500	FI
	72.744	97.784	0.543	0.678	FI
	74.650	97.787	0.541	0.675	FI
	76.311	97.839	0.489	0.623	FI
	78.148	97.866	0.461	0.596	FI

Bear River
Reach 2 Channel Survey Data 2006

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Comments
	80.158	97.930	0.397	0.532	FI
	82.166	98.139	0.189	0.323	BO
	84.096	98.099	0.228	0.363	FI
	84.951	98.265	0.062	0.197	WP
	87.313	98.328		0.134	
	87.600	98.370		0.092	BF
	88.278	99.210			LBP
TC	0.000	98.972			RBP
	1.901	98.403			
	3.000	98.176		0.000	BF
	3.928	98.106		0.070	
	4.817	98.078	0.000	0.098	WP
	6.952	98.003	0.076	0.173	FI
	8.906	97.830	0.249	0.346	FI
	10.903	97.895	0.183	0.281	CO
	12.510	97.755	0.323	0.421	GR
	14.319	97.709	0.369	0.467	CO
	15.901	97.812	0.266	0.364	CO
	17.367	97.761	0.318	0.415	CO
	19.011	97.775	0.304	0.401	CO
	20.609	97.810	0.268	0.366	GR
	22.195	97.767	0.311	0.409	GR
	24.177	97.886	0.193	0.290	CO
	26.357	97.794	0.284	0.382	CO
	28.152	97.765	0.313	0.411	GR
	29.955	97.730	0.349	0.446	CO
	31.620	97.701	0.377	0.475	CO
	33.596	97.741	0.337	0.435	CO
	35.137	97.735	0.343	0.441	GR
	37.071	97.741	0.337	0.435	GR
	39.068	97.731	0.347	0.445	GR
	40.627	97.862	0.217	0.314	CO
	42.032	97.831	0.247	0.345	FI
	43.327	98.065	0.014	0.111	WP
	45.169	98.110		0.066	
	47.776	98.050	0.028	0.126	
	50.593	98.043	0.036	0.133	
	53.573	98.087		0.089	
	55.645	98.142		0.034	WP
	56.890	97.995	0.084	0.181	FI
	58.021	97.939	0.140	0.237	FI
	60.079	97.931	0.147	0.245	FI
	61.526	97.925	0.153	0.251	FI
	63.486	97.960	0.119	0.216	FI
	66.046	97.952	0.126	0.224	FI
	68.538	98.060	0.019	0.116	WP
	70.716	98.031		0.145	
	73.144	98.162		0.014	

Bear River
Reach 2 Channel Survey Data 2006

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Comments
	74.500	98.280			BF
	74.705	98.568			LBP
TD	0.000	97.198			RBP
	0.030	96.973		0.000	BF
	1.877	96.984	0.000		WP
	2.418	96.780	0.204	0.193	CO
	3.650	96.763	0.221	0.210	CO
	4.895	96.835	0.148	0.138	FI
	6.106	97.162			BO
	6.416	96.823	0.161	0.150	CO
	7.925	96.817	0.167	0.156	CO
	9.444	96.792	0.191	0.181	CO
	11.362	96.760	0.224	0.213	CO
	13.172	96.794	0.190	0.179	CO
	14.738	96.797	0.187	0.176	BO
	16.536	96.712	0.272	0.261	GR
	18.860	96.870	0.113	0.103	BR
	20.126	96.991			BR
	20.464	96.744	0.240	0.229	CO
	22.219	96.791	0.193	0.182	GR
	23.736	96.705	0.279	0.268	CO
	24.554	96.661	0.323	0.312	CO
	25.262	96.976	0.008		BO
	25.540	96.684	0.300	0.289	CO
	27.042	96.598	0.386	0.375	FI
	28.475	96.566	0.418	0.407	CO
	30.187	96.597	0.387	0.376	FI
	32.543	96.769	0.215	0.204	BR
	33.230	96.939	0.045	0.034	BR
	33.615	96.856	0.128	0.117	CO
	35.393	96.967	0.017	0.006	BR
	37.723	96.971	0.013	0.002	BR
	39.727	96.809	0.175	0.164	CO
	41.712	96.973	0.011	0.000	BR
	42.302	97.128			BO
	42.888	97.141			BO
	43.274	96.786	0.198	0.187	BR
	44.993	96.820	0.164	0.153	BR
	47.528	96.839	0.145	0.134	GR
	49.872	96.789	0.195	0.184	GR
	52.356	97.014			BR
	54.152	96.021	0.963	0.952	BR
	56.874	95.794	1.190	1.179	GR
	58.392	95.801	1.183	1.172	BR
	61.946	96.808	0.176	0.165	BR
	63.802	96.855	0.129	0.118	FI
	66.147	96.853	0.131	0.120	FI
	68.398	96.809	0.175	0.164	FI

Bear River
Reach 2 Channel Survey Data 2006

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Comments
	70.750	96.863	0.121	0.110	FI
	72.711	97.022			WP
	75.257	97.123			
	76.600	97.065			BF
	76.966	97.192			
	78.416	97.793			LBP
TE	0.000	97.836			RBP
	0.900	95.733		0.000	BF
	3.394	95.365		0.368	
	6.750	95.432		0.301	
	9.233	95.461		0.272	
	10.471	95.474	0.000	0.259	WP
	11.147	95.328	0.146	0.405	BR
	12.860	95.342	0.132	0.391	CO
	13.556	95.624		0.109	BO
	13.982	95.255	0.219	0.478	CO
	15.460	95.133	0.342	0.600	CO
	16.824	95.270	0.204	0.463	BO
	18.062	95.155	0.319	0.578	CO
	19.755	95.174	0.301	0.559	GR
	21.137	95.166	0.308	0.567	FI
	22.830	95.081	0.393	0.652	FI
	24.740	95.097	0.377	0.636	GR
	26.816	95.092	0.382	0.641	GR
	28.014	95.159	0.315	0.574	GR
	29.780	95.222	0.252	0.511	GR
	30.890	95.136	0.338	0.597	FI
	32.476	95.152	0.322	0.581	FI
	33.887	95.062	0.412	0.671	FI
	35.112	95.328	0.147	0.405	BO
	36.425	95.208	0.266	0.525	BO
	37.890	95.129	0.345	0.604	BO
	39.322	95.136	0.339	0.597	BO
	40.907	95.142	0.332	0.591	BO
	42.203	95.274	0.200	0.459	BO
	42.589	95.475		0.258	WP
	44.176	95.466		0.267	
	46.148	95.626		0.107	
	48.644	95.610		0.123	
	50.318	95.998			LBP/BF

Bear River
Reach 3 Channel Survey Data 2006

Project Name: Bear River, Id
Project Code: 283-001
Date: 2005_10_10 **Time:** 15:45 pm
Reach 3 **Transects TA-TE**
Staff: Instrument - Brian Anderson, Rod - Drake
Conditions: Sunny, warming to 70's by mid day.

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Comments
TA	0.00	101.270		0.000	RBP/BF
	0.31	100.704		0.566	
	0.96	100.553		0.717	
	1.98	100.353		0.917	
	2.96	100.163		1.108	
	3.92	100.080		1.190	
	4.71	99.903	0.000	1.367	WP
	4.90	99.803	0.100	1.467	GR
	5.93	99.666	0.237	1.604	GR
	6.94	99.589	0.313	1.681	GR
	7.91	99.493	0.410	1.778	GR
	8.95	99.495	0.408	1.776	GR
	9.95	99.495	0.408	1.776	GR
	11.00	99.600	0.303	1.670	GR
	12.00	99.698	0.205	1.573	CO
	12.94	99.699	0.204	1.571	GR
	13.98	99.701	0.202	1.570	GR
	14.95	99.703	0.200	1.568	CO
	16.17	99.907		1.363	WP
	17.95	100.162		1.108	
	19.91	100.240		1.031	
	21.92	100.286		0.984	
	24.02	100.286		0.985	
	25.92	100.384		0.887	
	27.95	100.328		0.942	
	28.69	100.533		0.737	
	28.80	100.552		0.718	BF
	28.88	100.823			LBP
	0.00	101.072			RBP
	0.90	100.249		0.000	BF
	0.18	101.039			
	1.12	99.795	0.000	0.454	WP
	1.24	99.534	0.261	0.715	GR
	2.21	99.519	0.276	0.730	CO
	3.21	99.520	0.275	0.729	FI
	4.18	99.574	0.221	0.675	FI
	4.76	99.568	0.227	0.681	CO

Bear River
Reach 3 Channel Survey Data 2006

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Comments
TB	5.56	99.534	0.261	0.715	CO
	6.61	99.465	0.329	0.784	GR
	7.60	99.407	0.387	0.842	GR
	8.60	99.363	0.432	0.886	GR
	9.57	99.390	0.404	0.859	CO
	10.61	99.389	0.406	0.860	CO
	11.58	99.422	0.373	0.827	GR
	12.57	99.420	0.374	0.829	GR
	13.59	99.508	0.287	0.741	GR
	14.60	99.540	0.255	0.709	SA
	14.86	99.591	0.204	0.658	SA
	15.09	99.748	0.047	0.501	WP
	16.89	100.032		0.217	
	20.44	100.055		0.194	
	20.80	100.768			
	21.56	100.892			LBP
	21.60	100.254			BF
TC	0.00	100.176		0.000	RBP/BF
	0.65	99.837		0.339	
	0.76	99.688	0.000	0.487	WP
	1.07	99.370	0.319	0.806	GR
	1.95	99.368	0.320	0.808	GR
	2.94	99.343	0.345	0.832	GR
	3.97	99.368	0.320	0.808	GR
	4.93	99.370	0.318	0.805	GR
	5.95	99.424	0.264	0.751	CO
	6.94	99.438	0.251	0.738	GR
	7.95	99.380	0.308	0.796	GR
	8.96	99.350	0.338	0.825	CO
	9.95	99.404	0.284	0.772	CO
	10.98	99.379	0.309	0.796	GR
	11.99	99.432	0.256	0.743	CO
	12.99	99.372	0.316	0.804	CO
	13.81	99.402	0.287	0.774	CO
	14.53	100.035		0.141	BO
	15.45	99.473	0.216	0.703	FI
	15.73	99.660	0.028	0.515	WP
	16.59	99.842		0.334	
	17.10	100.181			BF
	17.12	100.234			
	17.19	100.558			LBP
	0.00	99.698		0.000	RBP/BF
	0.24	99.633	0.000	0.065	WP
	0.86	99.129	0.504	0.569	BO
	1.66	99.035	0.597	0.662	CO

Bear River
Reach 3 Channel Survey Data 2006

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Comments
TD	2.59	98.963	0.670	0.735	CO
	3.59	98.981	0.652	0.717	GR
	4.60	99.037	0.596	0.661	GR
	5.59	99.108	0.525	0.590	GR
	6.60	99.213	0.420	0.485	CO
	7.60	99.244	0.389	0.454	CO
	8.59	99.232	0.401	0.466	CO
	9.56	99.254	0.379	0.443	GR
	10.58	99.260	0.373	0.438	GR
	11.64	99.275	0.358	0.422	GR
	12.62	99.335	0.298	0.363	SA
	13.62	99.396	0.237	0.301	SA
	14.64	99.403	0.230	0.295	SA
	15.27	99.381	0.252	0.317	SA
	15.54	99.548	0.085	0.150	FI
	16.78	99.578	0.055	0.119	WP
	18.45	99.967			LBP
	24.80	100.174			BF
TE	0.00	100.181		0.000	RBP/BF
	1.30	99.914		0.267	
	1.58	99.616	0.000	0.564	WP
	1.58	99.463	0.153	0.718	FI
	2.44	99.086	0.530	1.095	BO
	3.52	98.832	0.784	1.349	FI
	4.56	98.842	0.775	1.339	SA
	5.54	98.911	0.705	1.270	SA
	6.54	98.929	0.688	1.252	SA
	7.51	98.966	0.651	1.215	GR
	8.50	98.978	0.638	1.203	GR
	9.55	99.007	0.610	1.174	GR
	10.53	98.995	0.621	1.186	SA
	11.55	98.986	0.630	1.195	SA
	12.56	98.867	0.749	1.314	SA
	13.56	98.928	0.688	1.252	SA
	14.61	98.884	0.732	1.297	SA
	15.56	98.873	0.743	1.308	GR
	16.66	98.881	0.736	1.300	SA
	16.81	99.618		0.563	WP
	17.13	100.208			
	17.50	99.969		0.212	BF
	18.00	100.682			LBP

Bear River
Reach 2 Channel Survey Data 2007

Project Name: Bear River, Id
Project Code: 283-001
Date: 2007_10_08 **Time:** 8:30 am
Reach 2 **Transects TA-TE**
Staff: Instrument - Drake Burford , Rod - Brian Anderson
Conditions: Overcast, warming to 50's by mid day.

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
TA	0.000	100.000			RBP
	2.827	98.894			
	7.207	99.518			
	9.156	98.823			
	10.811	98.348	0.147	0.464	
	10.977	98.191	0.304	0.621	F
	11.714	98.241	0.255	0.571	C
	12.462	98.109	0.387	0.703	S
	13.458	98.055	0.440	0.757	F
	14.883	97.987	0.509	0.825	F
	16.063	97.965	0.530	0.847	G
	17.592	97.954	0.542	0.858	F
	18.731	97.872	0.623	0.939	S
	20.271	98.004	0.491	0.807	F
	22.019	98.056	0.440	0.756	G
	23.747	98.067	0.429	0.745	M
	24.318	97.944	0.551	0.868	S
	25.951	97.617	0.878	1.195	S
	27.067	97.787	0.708	1.025	F
	27.551	98.174	0.321	0.638	B
	27.831	98.147	0.348	0.665	B
	28.394	97.956	0.539	0.856	F
	29.614	97.989	0.506	0.823	F
	30.926	98.014	0.481	0.798	F
	33.007	98.023	0.472	0.789	F
	35.300	98.039	0.456	0.773	F
	37.502	98.136	0.360	0.676	F
	39.940	98.211	0.284	0.601	F
	41.950	98.155	0.340	0.657	F
	44.054	98.213	0.282	0.599	F
	44.475	98.364	0.131	0.448	
	46.492	98.671		0.141	
	49.570	98.613		0.199	
	50.034	98.361	0.134	0.451	F
	51.124	98.211	0.285	0.601	F
	52.619	98.084	0.412	0.728	F
	54.292	98.095	0.401	0.717	F
	55.904	98.124	0.371	0.688	C
	57.230	98.303	0.192	0.509	F
	58.028	98.532		0.280	M
	58.495	98.656		0.156	
	60.009	98.727		0.085	

Bear River
Reach 2 Channel Survey Data 2007

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
	60.713	98.801		0.011	
	60.733	99.316			LBP
	0.000	99.712			RBP
	0.034	99.559			
	7.554	99.623			
	12.869	98.400		0.064	
	19.423	98.394		0.070	
	26.391	98.291		0.173	
	27.113	98.245		0.219	
	27.257	98.160	0.033	0.304	S
	28.080	98.106	0.087	0.359	G
	29.035	98.065	0.128	0.399	G
	30.266	97.999	0.194	0.465	M
	31.313	97.952	0.241	0.512	M
	32.483	97.875	0.318	0.589	S
	33.699	97.969	0.224	0.495	C
	34.846	97.944	0.248	0.520	G
	35.700	97.885	0.308	0.579	S
	36.640	97.846	0.347	0.618	M
	37.750	97.852	0.341	0.612	F
	38.906	97.842	0.351	0.622	F
	40.093	97.815	0.378	0.649	M
	41.248	97.772	0.421	0.693	M
	42.642	97.766	0.427	0.698	M
	44.046	97.768	0.425	0.696	F
	44.632	97.971	0.221	0.493	B
	45.086	97.846	0.347	0.619	F
	46.432	97.900	0.293	0.565	F
	47.883	98.008	0.185	0.457	F
	49.611	98.104	0.089	0.361	F
	51.335	98.123	0.070	0.342	F
	52.772	98.109	0.084	0.355	F
	53.434	98.098	0.095	0.367	F
	54.385	98.128	0.065	0.336	F
	54.647	98.182	0.011	0.283	
	54.788	98.314		0.150	
	55.357	98.187	0.006	0.278	
	55.622	98.116	0.077	0.349	S
	56.400	98.110	0.083	0.354	F
	57.331	98.103	0.090	0.362	F
	58.247	98.095	0.098	0.369	F
	59.462	98.024	0.169	0.440	F
	61.043	97.938	0.255	0.527	F
	62.655	97.842	0.351	0.622	F
	64.061	97.820	0.373	0.644	M
	65.189	97.784	0.409	0.681	M
	66.239	97.858	0.335	0.607	F
	66.658	97.811	0.382	0.654	F
	68.025	97.903	0.290	0.561	F
	69.382	97.912	0.280	0.552	F
	70.742	97.875	0.318	0.590	F

TB

Bear River
Reach 2 Channel Survey Data 2007

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
	71.921	97.782	0.410	0.682	F
	73.351	97.783	0.410	0.681	F
	75.526	97.791	0.402	0.674	F
	76.627	97.858	0.335	0.607	F
	78.564	97.878	0.314	0.586	F
	79.939	97.807	0.386	0.658	F
	81.168	97.843	0.350	0.621	F
	82.963	98.002	0.191	0.462	F
	83.676	98.097	0.096	0.367	F
	83.857	98.157	0.036	0.307	
	85.150	98.191	0.002	0.274	
	88.613	98.535			
	89.040	99.339			LBP
TC	0.000	98.963			RBP
	0.006	98.880			
	1.651	98.452			
	4.038	98.051		0.093	
	6.155	98.003	0.024	0.141	
	6.677	97.883	0.144	0.261	F
	7.849	97.883	0.144	0.261	F
	8.654	97.798	0.229	0.346	F
	9.474	97.849	0.178	0.295	C
	10.129	97.829	0.198	0.315	M
	10.937	97.783	0.244	0.361	C
	12.006	97.719	0.308	0.425	F
	13.034	97.686	0.341	0.458	S
	14.128	97.662	0.365	0.482	F
	15.414	97.697	0.331	0.448	S
	16.271	97.819	0.208	0.325	B
	17.532	97.784	0.243	0.360	G
	18.486	97.729	0.298	0.415	M
	19.742	97.784	0.244	0.361	S
	20.719	97.797	0.230	0.347	S
	22.038	97.812	0.215	0.332	M
	23.360	97.875	0.153	0.270	C
	24.574	97.779	0.248	0.365	G
	25.466	97.881	0.146	0.263	C
	26.875	97.742	0.285	0.402	G
	28.128	97.814	0.213	0.330	M
	29.239	97.765	0.262	0.379	F
	30.398	97.738	0.289	0.406	F
	31.761	97.707	0.320	0.437	M
	33.094	97.744	0.283	0.400	G
	34.265	97.729	0.298	0.415	M
	35.715	97.701	0.326	0.443	M
	37.403	97.739	0.288	0.405	C
	38.755	97.848	0.179	0.296	C
	40.129	97.757	0.270	0.387	S
	41.084	97.790	0.237	0.354	F
	42.310	97.902	0.125	0.242	F
	43.798	97.866	0.161	0.278	F

Bear River
Reach 2 Channel Survey Data 2007

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
	44.369	98.007	0.020	0.137	
	45.888	98.084		0.060	
	54.678	98.060		0.085	
	56.766	98.045		0.099	
	56.910	97.939	0.088	0.205	F
	57.607	97.899	0.128	0.245	F
	58.085	97.920	0.107	0.224	
	58.217	98.035		0.109	
	58.980	98.020	0.007	0.124	
	60.261	98.046		0.099	
	60.719	97.854	0.173	0.290	F
	61.073	97.913	0.114	0.231	F
	61.200	98.025	0.002	0.119	
	63.901	98.068		0.076	
	71.639	98.043		0.101	
	74.830	98.237			
	74.865	98.560			LBP
	0.000	97.192			RBP
	0.034	97.039			
	0.775	96.945	0.013	0.149	
	1.268	96.925	0.033	0.169	
	1.479	96.812	0.146	0.282	F
	1.922	96.841	0.117	0.252	G
	3.121	96.744	0.214	0.349	C
	4.271	96.745	0.213	0.348	C
	5.422	96.867	0.091	0.227	C
	5.544	96.923	0.035	0.170	
	5.736	97.090		0.004	
	6.081	96.980		0.113	
	6.492	96.786	0.172	0.308	G
	6.949	96.817	0.141	0.277	C
	7.740	96.786	0.172	0.308	S
	8.768	96.754	0.204	0.339	C
	9.675	96.772	0.186	0.322	G
	11.123	96.692	0.265	0.401	C
	12.251	96.561	0.397	0.532	G
	13.256	96.656	0.302	0.438	G
	14.434	96.719	0.239	0.375	F
	16.011	96.725	0.233	0.369	C
	17.064	96.732	0.226	0.362	S
	17.853	96.733	0.225	0.361	BR
	18.405	96.766	0.191	0.327	S
	19.523	96.729	0.229	0.365	G
	20.776	96.833	0.125	0.260	BR
	21.486	96.694	0.263	0.399	S
	22.609	96.754	0.204	0.340	G
	23.699	96.677	0.281	0.416	G
	24.689	96.566	0.392	0.528	F
	26.416	96.869	0.089	0.224	BR
	26.634	96.576	0.382	0.517	F
	27.691	96.542	0.416	0.552	F

Bear River
Reach 2 Channel Survey Data 2007

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
TD	28.750	96.549	0.409	0.545	C
	29.821	96.584	0.374	0.509	F
	30.873	96.725	0.233	0.369	C
	32.077	96.744	0.213	0.349	G
	33.168	96.868	0.090	0.226	BR
	34.180	96.820	0.138	0.273	C
	34.345	96.930	0.028	0.164	
	36.150	97.008			
	36.381	97.005			
	36.529	96.822	0.135	0.271	F
	37.897	96.977			BR
	39.209	96.860	0.098	0.233	F
	39.902	96.788	0.170	0.306	C
	41.213	96.876	0.082	0.217	F
	42.663	96.888	0.070	0.206	G
	43.749	96.950	0.008	0.143	BR
	45.031	96.785	0.173	0.308	G
	45.744	96.956	0.002	0.138	BR
	46.654	96.945	0.013	0.149	BR
	47.614	96.865	0.093	0.229	G
	48.671	96.826	0.132	0.268	F
	49.832	96.762	0.196	0.332	F
	51.177	96.797	0.161	0.296	BR
	52.230	96.912	0.045	0.181	BR
	53.984	96.884	0.074	0.210	BR
	55.423	96.861	0.097	0.232	BR
	56.602	96.733	0.225	0.360	C
	58.076	96.798	0.160	0.296	C
	59.767	96.715	0.243	0.379	C
	61.468	96.693	0.265	0.400	F
	63.273	96.820	0.137	0.273	F
	65.230	96.800	0.158	0.293	F
	67.656	96.813	0.144	0.280	F
	69.827	96.849	0.109	0.245	F
	72.102	96.827	0.130	0.266	F
	72.444	96.983			
	76.161	97.148			
	78.507	97.369			
	78.603	97.772			LBP
	0.000	97.716			RBP
	1.546	95.507		0.018	
	9.153	95.372		0.153	
	10.777	95.359		0.166	F
	10.946	95.186	0.142	0.339	F
	11.746	95.206	0.122	0.319	C
	12.618	95.213	0.115	0.312	F
	13.166	95.148	0.180	0.377	C
	14.380	95.126	0.202	0.399	S
	15.132	95.043	0.285	0.482	C
	16.201	95.014	0.314	0.511	S
	17.544	95.026	0.302	0.499	C

Bear River
Reach 2 Channel Survey Data 2007

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
TE	18.664	95.141	0.187	0.384	F
	19.574	95.057	0.271	0.468	F
	20.837	95.042	0.286	0.483	M
	21.966	95.002	0.326	0.523	F
	23.071	94.950	0.378	0.575	BR
	23.995	95.192	0.136	0.333	S
	24.569	94.952	0.376	0.573	M
	25.462	95.035	0.293	0.490	F
	26.597	94.902	0.426	0.623	F
	27.774	94.921	0.407	0.604	BR
	29.155	95.126	0.202	0.399	F
	30.167	94.998	0.330	0.527	F
	31.167	95.066	0.262	0.459	F
	32.104	95.016	0.312	0.509	F
	33.107	94.944	0.384	0.581	BR
	34.417	94.925	0.403	0.600	BR
	35.555	95.152	0.176	0.373	F
	36.159	94.980	0.348	0.545	F
	37.373	94.972	0.356	0.553	F
	38.643	94.994	0.333	0.531	BR
	39.751	95.031	0.297	0.494	F
	40.794	94.992	0.336	0.533	F
	41.865	95.026	0.301	0.499	
	42.672	95.296	0.031	0.228	
	46.254	95.451		0.074	
	50.493	95.543		-0.018	
	50.526	95.857			LBP

Bear River
Reach 3 Channel Survey Data 2007

Project Name: Bear River, Id
Project Code: 283-001
Date: 2007_10_10 **Time:** 11:30 am
Reach 3 **Transects TA-TE**
Staff: Instrument - Brian Anderson , Rod - Drake Buford
Conditions: Overcase, warming to 50's by mid day.

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
TA	0.000	101.294		0.000	
	0.229	100.662		0.631	
	1.455	100.388		0.906	
	3.351	100.080		1.213	
	4.621	99.918		1.376	
	4.739	99.703	0.162	1.591	S
	5.357	99.597	0.269	1.697	G
	6.019	99.572	0.294	1.722	S
	7.033	99.530	0.335	1.764	S
	8.006	99.491	0.374	1.803	G
	9.040	99.509	0.356	1.785	C
	10.037	99.459	0.406	1.835	C
	11.042	99.539	0.327	1.755	C
	12.077	99.587	0.278	1.707	C
	13.105	99.607	0.258	1.687	S
	14.092	99.619	0.246	1.675	S
	15.098	99.678	0.187	1.615	G
	15.720	99.711	0.155	1.583	S
	15.812	99.812	0.053	1.481	
	16.557	99.909		1.385	
	18.181	100.155		1.138	
	20.049	100.198		1.096	
	22.632	100.271		1.023	
	25.498	100.318		0.975	
	28.005	100.252		1.042	
	28.692	100.373		0.921	
	28.727	100.804		0.490	
	0.000	101.032			
	0.020	100.994			
	0.664	100.378			
	0.963	99.768		0.481	
	1.507	99.488	0.246	0.761	S
	2.933	99.468	0.266	0.781	C
	3.866	99.440	0.293	0.809	G
	4.499	99.502	0.231	0.747	F
	5.908	99.519	0.214	0.730	F
	5.978	99.517	0.217	0.732	S
	7.001	99.475	0.258	0.774	F
	8.005	99.470	0.263	0.779	S
	9.045	99.371	0.363	0.878	C

Bear River
Reach 3 Channel Survey Data 2007

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
TB	10.035	99.352	0.382	0.897	C
	11.052	99.361	0.373	0.888	C
	12.081	99.417	0.317	0.832	C
	13.063	99.413	0.320	0.836	G
	14.055	99.431	0.303	0.818	G
	15.033	99.490	0.243	0.759	F
	16.011	99.571	0.162	0.678	B
	16.163	99.699	0.034	0.550	
	17.262	99.767		0.482	
	19.571	100.000		0.249	
	20.958	99.985		0.264	
	21.672	100.217		0.032	
	22.849	101.704			
	22.999	100.764			
	23.064	100.859			
TC	0.000	100.124		0.000	
	0.049	100.063		0.061	
	0.510	99.811		0.313	
	0.885	99.583	0.142	0.541	
	0.979	99.519	0.207	0.605	B
	1.246	99.335	0.391	0.789	S
	1.829	99.338	0.388	0.787	G
	3.602	99.254	0.471	0.870	G
	3.804	99.310	0.416	0.814	C
	4.798	99.311	0.415	0.814	S
	5.824	99.365	0.361	0.759	G
	6.854	99.374	0.352	0.750	C
	7.859	99.352	0.374	0.772	C
	8.840	99.328	0.398	0.796	C
	9.832	99.311	0.415	0.813	G
	10.910	99.340	0.385	0.784	G
	11.850	99.326	0.400	0.798	G
	12.859	99.379	0.347	0.746	B
	13.821	99.380	0.345	0.744	B
	14.349	99.836		0.288	B
	15.201	99.394	0.332	0.730	S
	15.821	99.427	0.299	0.697	F
	15.968	99.640	0.086	0.484	
	16.372	99.795		0.329	
	17.270	100.158			
	17.319	100.552			
	0.000	99.657		0.000	
	0.184	99.573		0.085	
	0.240	99.388	0.163	0.269	S
	0.613	99.203	0.348	0.454	B
	0.990	99.019	0.531	0.638	B
	1.738	98.903	0.647	0.754	B
	2.234	98.951	0.600	0.706	C

Bear River
Reach 3 Channel Survey Data 2007

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
TD	3.225	98.936	0.615	0.721	G
	4.205	98.993	0.558	0.664	S
	5.222	98.968	0.583	0.689	G
	6.294	99.109	0.442	0.548	G
	7.220	99.168	0.383	0.489	G
	8.187	99.153	0.398	0.504	G
	9.204	99.225	0.326	0.433	C
	10.248	99.195	0.356	0.462	G
	11.265	99.267	0.284	0.390	C
	12.273	99.251	0.300	0.406	G
	13.323	99.266	0.285	0.392	G
	14.229	99.356	0.195	0.301	C
	14.861	99.362	0.189	0.295	S
	15.150	99.472	0.079	0.185	F
	15.899	99.529	0.022	0.128	
	17.413	99.636		0.021	
	18.817	99.659			
	20.297	99.792			
	22.283	99.935			
	24.320	100.082			
	26.334	100.354			
	28.200	101.082			
	29.486	102.031			
TE	0.000	100.179		0.000	
	0.034	100.023		0.157	
	0.958	99.847		0.332	
	1.585	99.578	0.263	0.601	
	1.697	99.457	0.384	0.722	F
	2.096	99.300	0.541	0.880	BO
	2.332	98.922	0.920	1.258	F
	3.023	98.882	0.960	1.298	F
	3.987	98.797	1.044	1.382	S
	4.973	98.829	1.012	1.350	S
	5.987	98.877	0.964	1.302	S
	6.971	98.917	0.924	1.262	G
	7.987	98.935	0.906	1.244	G
	8.959	98.973	0.869	1.207	G
	9.979	98.948	0.893	1.231	G
	11.022	98.922	0.919	1.257	G
	11.965	98.903	0.938	1.276	S
	12.968	98.888	0.953	1.291	S
	13.985	98.814	1.027	1.365	S
	15.029	98.838	1.003	1.341	S
	16.041	98.850	0.991	1.329	S
	16.666	98.815	1.027	1.365	S
	16.799	99.588	0.254	0.592	
	17.121	100.176		0.004	
	17.965	100.383			

Bear River
Reach 3 Channel Survey Data 2007

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
	18.079	100.628			

Reach 2 Survey Data 2008

Bear River, Idaho

Project Name: Bear River, Id

Project Code: 283-001

Date: 2008_10_6

Reach 2 Transects TA-TE

Staff: Instrument- Drake Burford, Rod- Ben Sudduth

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TARBP	0.00	100.00			
R2TAXS	1.51	98.81			
R2TAXS	3.80	98.93			
R2TAXS	5.70	99.18			
R2TAXS	6.64	99.44			
R2TAXS	7.81	99.46			
R2TAXS	8.73	99.05			
R2TAXS	9.55	98.60			
R2TAXS	10.14	98.44		0.18	
R2TAXS	10.74	98.37	0.19	0.25	C
R2TAXS	11.12	98.20	0.36	0.42	C
R2TAXS	12.09	98.15	0.41	0.47	G
R2TAXS	12.59	98.11	0.45	0.51	C
R2TAXS	13.28	98.10	0.46	0.52	G
R2TAXS	14.05	98.03	0.53	0.59	G
R2TAXS	14.81	97.98	0.58	0.64	G
R2TAXS	15.63	97.95	0.61	0.67	G
R2TAXS	16.36	97.95	0.61	0.67	G
R2TAXS	17.02	97.94	0.62	0.68	G
R2TAXS	18.32	97.87	0.69	0.75	G
R2TAXS	19.06	97.92	0.64	0.70	G
R2TAXS	19.59	97.93	0.63	0.69	C
R2TAXS	20.37	98.02	0.53	0.60	G
R2TAXS	20.86	98.06	0.50	0.56	F
R2TAXS	22.11	98.09	0.47	0.53	G
R2TAXS	23.21	98.07	0.49	0.55	G
R2TAXS	24.32	97.99	0.57	0.63	G
R2TAXS	25.08	98.59	-0.03	0.03	B
R2TAXS	25.94	97.63	0.93	0.99	C
R2TAXS	26.91	97.78	0.78	0.84	G
R2TAXS	28.40	97.96	0.60	0.66	G
R2TAXS	29.89	97.99	0.57	0.63	G
R2TAXS	31.87	98.06	0.50	0.56	G
R2TAXS	32.87	98.04	0.52	0.58	F
R2TAXS	34.32	98.05	0.51	0.57	F
R2TAXS	36.12	98.04	0.52	0.58	F
R2TAXS	37.75	98.14	0.41	0.48	F
R2TAXS	39.28	98.22	0.34	0.40	F
R2TAXS	40.68	98.17	0.39	0.45	F
R2TAXS	41.75	98.14	0.42	0.48	C
R2TAXS	42.96	98.14	0.42	0.48	C
R2TAXS	44.01	98.19	0.37	0.43	C
R2TAXS	44.50	98.37	0.19	0.25	
R2TAXS	46.48	98.69		-0.07	

Reach 2 Survey Data 2008
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TAXS	49.59	98.76		-0.14	
R2TAXS	50.24	98.35	0.21	0.27	F
R2TAXS	51.14	98.20	0.36	0.42	F
R2TAXS	53.22	98.08	0.48	0.54	F
R2TAXS	55.01	98.07	0.49	0.55	F
R2TAXS	56.87	98.20	0.36	0.42	F
R2TAXS	58.19	98.58		0.04	F
R2TAXS	59.10	98.75	-0.19	-0.12	
R2TAXS	60.50	98.80		-0.18	
R2TAXS	60.58	99.26		-0.64	
R2TBXS	0.00	99.71			
R2TBXS	0.65	99.53			
R2TBXS	7.40	99.64			
R2TBXS	13.15	98.37			
R2TBXS	19.61	98.40			
R2TBXS	22.96	98.55		-0.13	
R2TBXS	26.91	98.29	-0.04	0.13	
R2TBXS	27.52	98.13	0.12	0.29	C
R2TBXS	29.15	98.03	0.22	0.39	C
R2TBXS	30.60	98.01	0.23	0.41	C
R2TBXS	32.15	97.96	0.29	0.46	C
R2TBXS	33.78	97.92	0.33	0.50	G
R2TBXS	34.91	97.96	0.29	0.46	G
R2TBXS	36.76	97.88	0.37	0.54	G
R2TBXS	38.72	97.90	0.34	0.51	G
R2TBXS	40.50	97.80	0.44	0.61	G
R2TBXS	42.22	97.74	0.50	0.67	G
R2TBXS	43.58	97.79	0.46	0.63	G
R2TBXS	44.82	97.85	0.39	0.57	G
R2TBXS	47.00	97.94	0.30	0.48	C
R2TBXS	49.03	98.07	0.18	0.35	C
R2TBXS	50.46	98.10	0.15	0.32	G
R2TBXS	52.28	98.12	0.13	0.30	G
R2TBXS	54.30	98.14	0.10	0.28	C
R2TBXS	56.20	98.21	0.04	0.21	C
R2TBXS	58.12	98.10	0.15	0.32	G
R2TBXS	59.62	98.00	0.25	0.42	G
R2TBXS	61.07	97.89	0.36	0.53	G
R2TBXS	62.45	97.84	0.40	0.58	G
R2TBXS	64.06	97.80	0.45	0.62	G
R2TBXS	65.01	97.85	0.39	0.57	B
R2TBXS	66.22	97.84	0.40	0.58	G
R2TBXS	67.78	97.90	0.35	0.52	F
R2TBXS	69.98	97.97	0.28	0.45	F
R2TBXS	71.81	97.99	0.25	0.43	F
R2TBXS	73.45	98.06	0.18	0.36	F
R2TBXS	76.08	97.99	0.26	0.43	F
R2TBXS	78.41	98.00	0.25	0.42	F
R2TBXS	80.83	97.99	0.26	0.43	F
R2TBXS	83.20	98.04	0.21	0.38	F

Reach 2 Survey Data 2008
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TBXS	84.25	98.21		0.21	
R2TBXS	87.22	98.29		0.13	
R2TBXS	88.06	99.11			
R2TCXS	0.00	98.96			
R2TCXS	1.00	98.57			
R2TCXS	3.24	98.17		0.02	
R2TCXS	4.90	98.00	0.02	0.18	
R2TCXS	5.85	97.88	0.14	0.30	C
R2TCXS	7.25	97.85	0.17	0.33	C
R2TCXS	8.61	97.81	0.21	0.37	C
R2TCXS	10.39	97.88	0.14	0.30	C
R2TCXS	13.14	97.74	0.28	0.44	C
R2TCXS	14.96	97.68	0.34	0.50	C
R2TCXS	17.39	97.81	0.21	0.37	C
R2TCXS	19.46	97.76	0.26	0.42	C
R2TCXS	21.61	97.76	0.25	0.42	G
R2TCXS	23.34	97.79	0.23	0.39	C
R2TCXS	24.59	97.79	0.22	0.39	C
R2TCXS	25.56	98.09	-0.08	0.09	B
R2TCXS	26.82	97.79	0.23	0.39	G
R2TCXS	28.24	97.75	0.27	0.43	G
R2TCXS	29.76	97.93	0.08	0.25	B
R2TCXS	31.20	97.74	0.28	0.44	C
R2TCXS	32.58	97.71	0.31	0.47	G
R2TCXS	33.83	97.71	0.31	0.47	G
R2TCXS	36.23	97.71	0.31	0.47	G
R2TCXS	37.98	97.72	0.30	0.46	C
R2TCXS	40.05	97.77	0.24	0.41	C
R2TCXS	42.03	97.82	0.19	0.36	G
R2TCXS	43.28	97.92	0.10	0.27	F
R2TCXS	44.36	98.01	0.01	0.17	
R2TCXS	49.41	98.06		0.13	
R2TCXS	55.83	98.03	-0.01	0.15	
R2TCXS	58.28	97.93	0.09	0.25	F
R2TCXS	60.95	97.93	0.09	0.25	F
R2TCXS	66.80	98.03	-0.01	0.15	
R2TCXS	73.85	98.20		-0.02	
R2TCXS	74.65	98.56			
R2TDXS	0.00	97.19			
R2TDXS	0.10	96.89		0.20	
R2TDXS	1.00	96.91	0.03	0.17	
R2TDXS	1.67	96.82	0.11	0.26	G
R2TDXS	3.14	96.76	0.17	0.32	C
R2TDXS	4.79	96.78	0.16	0.31	C
R2TDXS	6.64	96.80	0.14	0.28	B
R2TDXS	8.41	96.80	0.14	0.28	C
R2TDXS	9.87	96.79	0.14	0.29	C
R2TDXS	11.92	96.62	0.32	0.47	C
R2TDXS	13.49	96.78	0.15	0.30	C

Reach 2 Survey Data 2008
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TDXS	15.52	96.72	0.22	0.37	C
R2TDXS	18.15	96.71	0.23	0.37	C
R2TDXS	20.09	96.98	-0.04	0.11	B
R2TDXS	21.64	96.74	0.19	0.34	G
R2TDXS	23.57	96.71	0.23	0.38	G
R2TDXS	25.24	96.96	-0.02	0.13	B
R2TDXS	27.15	96.60	0.34	0.49	G
R2TDXS	29.15	96.63	0.31	0.45	C
R2TDXS	31.54	96.72	0.22	0.37	G
R2TDXS	34.54	96.93	0.01	0.16	BR
R2TDXS	37.16	97.00	-0.07	0.08	BR
R2TDXS	39.66	96.86	0.07	0.22	C
R2TDXS	42.39	96.85	0.09	0.24	C
R2TDXS	44.79	96.84	0.09	0.24	C
R2TDXS	46.26	97.00	-0.07	0.08	BR
R2TDXS	48.58	96.89	0.05	0.19	BR
R2TDXS	50.04	96.77	0.16	0.31	G
R2TDXS	52.02	96.90	0.04	0.19	BR
R2TDXS	55.16	96.87	0.07	0.21	BR
R2TDXS	57.64	96.78	0.15	0.30	G
R2TDXS	60.62	96.72	0.22	0.36	C
R2TDXS	62.80	96.81	0.13	0.28	BR
R2TDXS	65.22	96.83	0.10	0.25	BR
R2TDXS	67.45	96.83	0.10	0.25	F
R2TDXS	69.99	96.82	0.12	0.27	F
R2TDXS	71.97	96.96	-0.03	0.12	
R2TDXS	74.53	96.99		0.09	
R2TDXS	77.85	97.28		-0.20	
R2TDXS	78.28	97.80			
R2TEXS	0.00	97.72			
R2TEXS	0.79	95.63		-0.03	
R2TEXS	5.23	95.17		0.43	
R2TEXS	8.08	95.34		0.26	
R2TEXS	10.53	95.32	-0.02	0.27	
R2TEXS	11.48	95.18	0.11	0.41	C
R2TEXS	12.83	95.20	0.09	0.39	C
R2TEXS	13.58	95.48	-0.18	0.11	B
R2TEXS	14.79	95.12	0.18	0.48	C
R2TEXS	16.65	95.21	0.09	0.38	B
R2TEXS	17.91	95.07	0.23	0.52	C
R2TEXS	20.44	95.05	0.24	0.54	C
R2TEXS	22.30	95.04	0.26	0.55	G
R2TEXS	23.44	94.98	0.32	0.62	G
R2TEXS	24.69	94.92	0.38	0.67	G
R2TEXS	25.76	95.05	0.24	0.54	C
R2TEXS	26.85	95.16	0.14	0.43	B
R2TEXS	27.92	94.97	0.33	0.63	C
R2TEXS	29.09	94.98	0.32	0.62	C
R2TEXS	30.29	95.02	0.28	0.57	BR
R2TEXS	32.21	95.13	0.17	0.46	B

Reach 2 Survey Data 2008
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TEXS	33.57	94.92	0.38	0.68	C
R2TEXS	35.13	95.01	0.29	0.59	B
R2TEXS	36.81	95.06	0.24	0.53	BR
R2TEXS	38.16	95.12	0.18	0.47	BR
R2TEXS	39.64	95.05	0.25	0.55	G
R2TEXS	41.05	95.08	0.22	0.52	C
R2TEXS	42.05	95.13	0.17	0.47	G
R2TEXS	42.98	95.28	0.02	0.32	
R2TEXS	46.55	95.51		0.09	
R2TEXS	50.37	95.56		0.03	
R2TEXS	50.43	95.86			

Reach 3 Survey Data 2008

Bear River, Idaho

Project Name: Bear River, Id

Project Code: 283-001

Date: 2008_10_8

Reach 3 Transects TA-TE

Staff: Instrument- Drake Burford, Rod- Ben Sudduth

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TAXS	0.00	100.61		0.10	
R3TAXS	0.48	100.38		0.33	
R3TAXS	2.16	100.10		0.61	
R3TAXS	3.78	99.86	0.00	0.85	
R3TAXS	3.82	99.71	0.16	1.00	S
R3TAXS	4.27	99.63	0.24	1.08	S
R3TAXS	4.97	99.56	0.31	1.15	G
R3TAXS	6.14	99.52	0.34	1.19	G
R3TAXS	7.53	99.49	0.38	1.22	C
R3TAXS	8.94	99.48	0.39	1.23	G
R3TAXS	10.20	99.51	0.36	1.20	C
R3TAXS	11.36	99.60	0.26	1.11	G
R3TAXS	12.83	99.64	0.23	1.07	G
R3TAXS	13.92	99.69	0.18	1.02	G
R3TAXS	14.72	99.73	0.14	0.98	G
R3TAXS	14.81	99.87	0.00	0.84	
R3TAXS	16.40	100.23		0.48	
R3TAXS	20.22	100.30		0.41	
R3TAXS	23.43	100.39		0.32	
R3TAXS	25.41	100.40		0.31	
R3TAXS	26.47	100.23		0.48	
R3TAXS	27.66	100.51		0.20	
R3TAXS	27.88	100.81		-0.10	
R3TBXS	0.00	101.02			
R3TBXS	0.98	99.76	-0.01	0.55	
R3TBXS	1.18	99.54	0.21	0.77	S
R3TBXS	2.20	99.46	0.29	0.85	G
R3TBXS	3.22	99.48	0.26	0.82	G
R3TBXS	4.09	99.60	0.15	0.71	S
R3TBXS	5.10	99.55	0.20	0.76	G
R3TBXS	6.12	99.51	0.24	0.80	G
R3TBXS	7.25	99.40	0.35	0.91	G
R3TBXS	8.68	99.38	0.37	0.93	G
R3TBXS	10.08	99.38	0.37	0.93	G
R3TBXS	11.39	99.45	0.30	0.86	G
R3TBXS	12.73	99.44	0.31	0.87	S
R3TBXS	13.96	99.52	0.23	0.79	S
R3TBXS	14.51	99.57	0.18	0.74	S
R3TBXS	14.66	99.74	0.01	0.57	
R3TBXS	15.40	99.92		0.39	
R3TBXS	17.58	100.04		0.27	
R3TBXS	20.01	100.00		0.31	
R3TBXS	20.58	100.24		0.07	

Reach 3 Survey Data 2008
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TBXS	20.85	100.69		-0.38	
R3TBXS	21.47	100.85		-0.55	
R3TCXS	0.00	100.12		0.04	
R3TCXS	0.13	99.82		0.34	
R3TCXS	0.72	99.71		0.45	
R3TCXS	0.96	99.59	0.00	0.57	
R3TCXS	1.15	99.51	0.08	0.65	C
R3TCXS	1.61	99.37	0.22	0.79	G
R3TCXS	2.56	99.35	0.25	0.81	G
R3TCXS	3.88	99.31	0.29	0.85	G
R3TCXS	5.46	99.37	0.23	0.79	G
R3TCXS	6.42	99.37	0.22	0.79	G
R3TCXS	7.87	99.37	0.22	0.79	G
R3TCXS	9.46	99.35	0.24	0.81	G
R3TCXS	11.10	99.36	0.23	0.80	G
R3TCXS	12.72	99.53	0.06	0.63	B
R3TCXS	13.47	99.38	0.21	0.78	G
R3TCXS	14.21	99.34	0.25	0.82	G
R3TCXS	14.30	99.77	-0.17	0.39	B
R3TCXS	14.80	99.32	0.27	0.84	S
R3TCXS	15.65	99.41	0.19	0.75	S
R3TCXS	15.83	99.60	0.00	0.56	
R3TCXS	16.25	99.81		0.36	
R3TCXS	17.09	100.20		-0.04	
R3TCXS	17.45	100.55			
R3TDXS	0.00	99.66		0.03	
R3TDXS	0.19	99.45	0.01	0.23	
R3TDXS	0.35	99.28	0.18	0.41	B
R3TDXS	0.73	99.01	0.45	0.68	C
R3TDXS	1.58	98.92	0.54	0.77	C
R3TDXS	2.93	98.96	0.50	0.73	C
R3TDXS	4.56	98.96	0.50	0.73	G
R3TDXS	6.03	99.14	0.32	0.54	G
R3TDXS	7.51	99.18	0.28	0.50	B
R3TDXS	8.49	99.14	0.32	0.54	G
R3TDXS	10.25	99.17	0.29	0.52	G
R3TDXS	11.81	99.26	0.20	0.43	G
R3TDXS	13.27	99.31	0.15	0.38	G
R3TDXS	14.68	99.37	0.09	0.32	S
R3TDXS	14.94	99.47	-0.01	0.22	
R3TDXS	15.45	99.67		0.01	
R3TDXS	18.20	99.71		-0.03	
R3TDXS	21.68	99.97			
R3TDXS	25.04	100.15			
R3TDXS	27.49	100.97			
R3TDXS	28.72	101.12			
R3TDXS	28.86	101.27			
R3TEXS	0.00	100.18		-0.24	

Reach 3 Survey Data 2008
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TEXS	0.29	99.96		-0.01	
R3TEXS	1.19	99.68		0.26	
R3TEXS	1.99	99.43	0.00	0.51	
R3TEXS	2.16	98.95	0.48	0.99	B
R3TEXS	3.04	98.77	0.66	1.17	G
R3TEXS	4.37	98.81	0.62	1.13	G
R3TEXS	5.80	98.86	0.57	1.08	G
R3TEXS	7.69	98.94	0.49	1.00	G
R3TEXS	9.14	98.94	0.49	1.00	G
R3TEXS	10.86	98.92	0.51	1.02	G
R3TEXS	11.91	98.91	0.53	1.04	G
R3TEXS	13.04	98.89	0.54	1.05	G
R3TEXS	13.97	98.82	0.61	1.12	G
R3TEXS	14.91	99.05	0.38	0.89	B
R3TEXS	15.65	98.82	0.61	1.12	S
R3TEXS	16.42	98.97	0.46	0.98	S
R3TEXS	16.62	99.30	0.13	0.65	B
R3TEXS	16.93	99.43	0.00	0.51	
R3TEXS	17.20	99.48		0.46	
R3TEXS	17.33	99.71		0.24	

Reach 2 Survey Data 2009

Bear River, Idaho

Project Name: Bear River, Id

Project Code: 283-001

Date: 2009_10_7

Reach 2 Transects TA-TE

Staff: Instrument- Drake Burford, Rod- Trevor McGregor

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TARBP	0.00	100.00			
R2TAXS	1.50	98.86			
R2TAXS	4.82	99.05			
R2TAXS	7.70	99.45			
R2TAXS	8.83	98.91			
R2TAXS	9.82	98.53	-0.02	0.29	
R2TAXS	10.67	98.34	0.17	0.48	F
R2TAXS	12.22	98.15	0.36	0.67	G
R2TAXS	14.15	98.05	0.47	0.77	G
R2TAXS	15.61	97.95	0.56	0.87	G
R2TAXS	17.15	97.98	0.53	0.84	C
R2TAXS	18.72	97.86	0.65	0.96	C
R2TAXS	20.42	98.09	0.42	0.73	B
R2TAXS	22.20	98.00	0.51	0.82	G
R2TAXS	23.79	98.02	0.49	0.80	G
R2TAXS	25.05	98.59	-0.08	0.23	B
R2TAXS	26.11	97.64	0.87	1.18	G
R2TAXS	27.34	98.08	0.44	0.74	B
R2TAXS	28.62	97.94	0.57	0.88	G
R2TAXS	30.24	97.99	0.53	0.83	C
R2TAXS	31.99	98.09	0.42	0.73	G
R2TAXS	33.89	98.02	0.50	0.80	C
R2TAXS	35.87	98.03	0.48	0.79	C
R2TAXS	37.70	98.14	0.37	0.68	C
R2TAXS	39.74	98.19	0.32	0.63	C
R2TAXS	41.76	98.13	0.38	0.69	G
R2TAXS	43.24	98.15	0.36	0.67	C
R2TAXS	44.51	98.38	0.13	0.44	F
R2TAXS	45.11	98.49		0.33	
R2TAXS	46.45	98.66		0.16	
R2TAXS	48.08	98.56		0.26	
R2TAXS	49.02	98.45	0.06	0.37	F
R2TAXS	49.40	98.62	-0.11	0.20	F
R2TAXS	49.98	98.36	0.15	0.46	F
R2TAXS	51.14	98.17	0.34	0.65	F
R2TAXS	52.72	98.05	0.46	0.77	F
R2TAXS	54.07	98.03	0.49	0.79	G
R2TAXS	55.45	98.05	0.46	0.77	G
R2TAXS	56.63	98.12	0.40	0.70	F
R2TAXS	57.71	98.46	0.05	0.36	
R2TAXS	58.56	98.68		0.14	
R2TAXS	60.31	98.73			
R2TALBP	60.38	99.02			

Reach 2 Survey Data 2009
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TBRBP	0.00	99.71			
R2TBXS	2.65	99.52			
R2TBXS	7.73	99.60			
R2TBXS	12.28	98.50			
R2TBXS	17.53	98.36			
R2TBXS	23.08	98.56			
R2TBXS	25.08	98.38	-0.03	0.13	
R2TBXS	26.93	98.28	0.07	0.23	F
R2TBXS	28.24	98.14	0.21	0.37	C
R2TBXS	30.07	97.98	0.37	0.53	C
R2TBXS	32.16	97.98	0.38	0.54	C
R2TBXS	33.90	97.92	0.43	0.59	G
R2TBXS	35.61	97.93	0.43	0.59	F
R2TBXS	37.35	97.92	0.44	0.60	G
R2TBXS	39.24	97.90	0.45	0.61	G
R2TBXS	40.83	97.81	0.54	0.70	G
R2TBXS	43.01	97.79	0.57	0.73	G
R2TBXS	44.52	97.90	0.45	0.61	BR
R2TBXS	46.17	97.93	0.43	0.59	C
R2TBXS	48.76	98.07	0.29	0.45	C
R2TBXS	51.09	98.12	0.23	0.40	C
R2TBXS	54.09	98.12	0.23	0.39	F
R2TBXS	56.25	98.12	0.24	0.40	C
R2TBXS	59.03	98.04	0.31	0.47	C
R2TBXS	61.35	97.90	0.46	0.62	C
R2TBXS	63.61	97.81	0.55	0.71	C
R2TBXS	65.26	97.83	0.52	0.68	G
R2TBXS	66.82	97.80	0.55	0.72	F
R2TBXS	68.30	97.90	0.45	0.61	F
R2TBXS	69.88	97.86	0.49	0.65	F
R2TBXS	71.66	97.81	0.54	0.70	F
R2TBXS	73.75	97.86	0.49	0.65	F
R2TBXS	75.06	97.89	0.47	0.63	F
R2TBXS	77.31	97.88	0.47	0.63	F
R2TBXS	79.91	97.92	0.43	0.60	F
R2TBXS	82.91	98.04	0.32	0.48	F
R2TBXS	85.12	98.27	0.08	0.24	F
R2TBXS	87.19	98.33	0.03	0.19	
R2TBXS	88.36	98.47			
R2TBLBP	89.02	98.78			
R2TCRBP	0.00	98.96			
R2TCXS	0.94	98.56			
R2TCXS	2.15	98.32			
R2TCXS	3.20	98.15		0.15	
R2TCXS	4.83	98.11	0.00	0.19	
R2TCXS	6.12	97.88	0.23	0.42	F
R2TCXS	7.74	97.97	0.15	0.34	B
R2TCXS	9.55	97.82	0.30	0.49	C
R2TCXS	11.61	97.76	0.36	0.55	C
R2TCXS	13.88	97.77	0.35	0.54	B

Reach 2 Survey Data 2009
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TCXS	16.07	97.89	0.23	0.42	B
R2TCXS	17.91	97.79	0.33	0.51	G
R2TCXS	19.81	97.88	0.24	0.43	B
R2TCXS	21.55	97.79	0.33	0.52	G
R2TCXS	23.66	97.78	0.34	0.53	C
R2TCXS	26.11	97.80	0.32	0.50	C
R2TCXS	28.12	97.76	0.35	0.54	G
R2TCXS	30.00	97.79	0.33	0.52	B
R2TCXS	32.14	97.70	0.41	0.60	G
R2TCXS	33.90	97.71	0.40	0.59	G
R2TCXS	35.97	97.72	0.40	0.59	G
R2TCXS	37.73	97.72	0.40	0.59	G
R2TCXS	39.47	97.76	0.36	0.55	G
R2TCXS	41.42	97.86	0.26	0.45	C
R2TCXS	43.03	97.93	0.19	0.38	BR
R2TCXS	44.24	97.88	0.23	0.42	F
R2TCXS	45.40	98.11	0.01	0.20	
R2TCXS	50.64	98.06		0.25	
R2TCXS	56.17	98.11	0.00	0.19	
R2TCXS	56.39	97.94	0.18	0.37	F
R2TCXS	57.54	97.94	0.18	0.36	C
R2TCXS	59.01	97.98	0.14	0.32	F
R2TCXS	59.85	97.91	0.20	0.39	C
R2TCXS	61.21	97.92	0.20	0.39	F
R2TCXS	62.69	97.93	0.19	0.38	F
R2TCXS	64.31	97.98	0.14	0.33	F
R2TCXS	65.89	97.92	0.19	0.38	F
R2TCXS	66.45	98.14	-0.02	0.17	
R2TCXS	72.22	98.12		0.18	
R2TCXS	74.66	98.30			
R2TCLBP	74.90	98.58			
R2TDRBP	0.00	97.19			
R2TDXS	0.44	96.96			
R2TDXS	0.84	97.00	0.06	0.20	
R2TDXS	2.32	96.79	0.27	0.41	C
R2TDXS	4.26	96.82	0.24	0.38	C
R2TDXS	6.04	96.90	0.16	0.30	C
R2TDXS	7.34	96.81	0.25	0.39	C
R2TDXS	9.26	96.81	0.25	0.39	C
R2TDXS	11.60	96.75	0.31	0.45	B
R2TDXS	13.44	96.83	0.23	0.37	C
R2TDXS	16.01	96.74	0.32	0.46	C
R2TDXS	17.88	96.78	0.28	0.42	BR
R2TDXS	19.49	96.74	0.32	0.46	C
R2TDXS	21.47	96.86	0.20	0.34	BR
R2TDXS	23.67	96.80	0.26	0.39	C
R2TDXS	25.58	96.74	0.32	0.46	C
R2TDXS	27.47	96.73	0.32	0.46	C
R2TDXS	29.29	96.70	0.36	0.50	C
R2TDXS	30.99	96.79	0.27	0.41	C

Reach 2 Survey Data 2009
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TDXS	32.19	96.87	0.19	0.33	B
R2TDXS	32.85	97.30	-0.24	-0.10	B
R2TDXS	34.10	96.91	0.15	0.29	BR
R2TDXS	34.73	97.15	-0.09	0.05	B
R2TDXS	36.25	96.96	0.10	0.24	C
R2TDXS	37.91	96.85	0.21	0.35	G
R2TDXS	39.61	96.80	0.26	0.40	G
R2TDXS	41.71	96.80	0.26	0.40	G
R2TDXS	43.82	96.84	0.22	0.36	C
R2TDXS	45.67	96.87	0.19	0.33	G
R2TDXS	47.65	96.84	0.22	0.36	G
R2TDXS	49.54	96.93	0.13	0.27	G
R2TDXS	51.18	97.00	0.06	0.20	BR
R2TDXS	53.74	96.93	0.13	0.27	BR
R2TDXS	55.30	96.75	0.30	0.44	C
R2TDXS	57.15	96.79	0.27	0.41	C
R2TDXS	59.05	96.93	0.13	0.27	BR
R2TDXS	61.39	96.96	0.10	0.24	BR
R2TDXS	63.32	96.98	0.08	0.22	BR
R2TDXS	65.75	97.00	0.06	0.20	BR
R2TDXS	67.20	96.90	0.16	0.30	BR
R2TDXS	68.03	97.19	-0.13	0.01	B
R2TDXS	69.62	96.84	0.22	0.36	BR
R2TDXS	71.29	96.88	0.18	0.32	F
R2TDXS	72.48	97.04	0.02	0.16	F
R2TDXS	74.06	97.12	-0.06	0.08	
R2TDXS	77.08	97.06		0.14	
R2TDXS	79.25	97.43			
R2TDXS	79.89	97.84			
R2TERBP	0.00	97.72			
R2TEXS	0.55	97.56			
R2TEXS	1.03	95.63			
R2TEXS	6.80	95.27		0.31	
R2TEXS	10.77	95.42	-0.02	0.16	
R2TEXS	11.62	95.21	0.19	0.37	C
R2TEXS	12.93	95.19	0.21	0.39	C
R2TEXS	13.70	95.48	-0.07	0.10	B
R2TEXS	14.27	95.13	0.28	0.45	C
R2TEXS	16.11	94.98	0.43	0.60	C
R2TEXS	18.24	95.11	0.30	0.47	C
R2TEXS	20.31	95.03	0.38	0.55	G
R2TEXS	21.93	95.01	0.40	0.57	B
R2TEXS	23.50	95.07	0.34	0.51	B
R2TEXS	24.98	95.00	0.41	0.58	G
R2TEXS	26.48	95.07	0.33	0.51	B
R2TEXS	27.82	94.94	0.46	0.63	C
R2TEXS	29.27	95.09	0.32	0.49	B
R2TEXS	30.67	95.08	0.32	0.49	BR
R2TEXS	31.77	95.04	0.36	0.54	F
R2TEXS	33.34	95.01	0.40	0.57	B

Reach 2 Survey Data 2009
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TEXS	35.25	95.18	0.22	0.40	B
R2TEXS	37.22	95.01	0.39	0.57	B
R2TEXS	38.95	95.01	0.40	0.57	G
R2TEXS	40.17	95.20	0.21	0.38	B
R2TEXS	41.02	95.02	0.38	0.56	G
R2TEXS	42.15	95.19	0.21	0.38	BR
R2TEXS	42.83	95.39	0.02	0.19	
R2TEXS	45.90	95.36		0.22	
R2TEXS	49.65	95.53			
R2TEXS	50.39	95.86			

Reach 3 Survey Data 2009

Bear River, Idaho

Project Name: Bear River, Id
Project Code: 283-001
Date: 2009_10_6
Reach 3 **Transects TA-TE**
Staff: Instrument- Drake Burford, Rod- Trevor McGregor

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TAXS	0.00	101.30			
R3TAXS	1.50	100.45			
R3TAXS	3.66	100.11		0.67	
R3TAXS	4.49	99.98	-0.02	0.80	
R3TAXS	4.77	99.70	0.26	1.08	S
R3TAXS	5.89	99.60	0.36	1.18	S
R3TAXS	7.51	99.62	0.34	1.16	G
R3TAXS	8.91	99.55	0.41	1.23	G
R3TAXS	10.67	99.48	0.48	1.30	G
R3TAXS	12.47	99.66	0.30	1.12	G
R3TAXS	14.22	99.66	0.30	1.12	G
R3TAXS	15.45	99.70	0.25	1.08	G
R3TAXS	15.56	99.93	0.02	0.85	
R3TAXS	17.10	100.09		0.69	
R3TAXS	20.62	100.29		0.49	
R3TAXS	24.20	100.35		0.44	
R3TAXS	27.83	100.43		0.35	
R3TAXS	29.74	100.28		0.50	
R3TAXS	31.64	100.62		0.16	
R3TAXS	33.32	101.11			
R3TAXS	34.07	101.29			
R3TBXS	0.00	101.04			
R3TBXS	0.55	100.73			
R3TBXS	1.16	99.88	-0.01	0.84	
R3TBXS	1.31	99.48	0.39	1.25	G
R3TBXS	2.84	99.52	0.35	1.20	G
R3TBXS	4.84	99.54	0.33	1.18	G
R3TBXS	6.41	99.51	0.36	1.21	G
R3TBXS	8.10	99.41	0.45	1.31	C
R3TBXS	9.86	99.39	0.48	1.34	G
R3TBXS	11.36	99.48	0.39	1.24	G
R3TBXS	13.10	99.50	0.36	1.22	S
R3TBXS	14.64	99.58	0.29	1.14	S
R3TBXS	14.76	99.86	0.01	0.87	
R3TBXS	15.25	99.99		0.74	
R3TBXS	17.69	100.08		0.64	
R3TBXS	19.36	100.07		0.65	
R3TBXS	20.83	100.24		0.49	
R3TBXS	21.11	100.72			
R3TBXS	21.75	100.88			
R3TCXS	0.00	100.14			
R3TCXS	0.50	99.80	0.02	0.61	

Reach 3 Survey Data 2009
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TCXS	1.05	99.55	0.27	0.86	B
R3TCXS	2.33	99.33	0.50	1.08	G
R3TCXS	4.00	99.32	0.51	1.09	S
R3TCXS	5.82	99.36	0.46	1.05	C
R3TCXS	7.58	99.40	0.43	1.01	S
R3TCXS	9.12	99.38	0.45	1.03	G
R3TCXS	10.87	99.40	0.42	1.01	G
R3TCXS	12.76	99.54	0.28	0.87	B
R3TCXS	13.79	99.34	0.49	1.07	S
R3TCXS	15.71	99.72	0.10	0.69	B
R3TCXS	16.46	99.85	-0.02	0.56	
R3TCXS	17.68	100.30		0.11	
R3TCXS	19.40	100.68			
R3TCXS	20.50	101.03			
R3TDXS	0.00	100.38			
R3TDXS	1.40	99.82	0.00	0.82	
R3TDXS	1.87	99.38	0.43	1.25	F
R3TDXS	2.74	98.97	0.85	1.67	G
R3TDXS	4.23	99.01	0.80	1.62	B
R3TDXS	5.80	98.91	0.91	1.73	S
R3TDXS	7.44	99.11	0.71	1.53	G
R3TDXS	9.26	99.17	0.64	1.47	G
R3TDXS	11.16	99.21	0.60	1.43	G
R3TDXS	13.01	99.28	0.53	1.36	S
R3TDXS	15.09	99.35	0.46	1.28	G
R3TDXS	16.78	99.40	0.41	1.23	S
R3TDXS	17.41	99.81	0.00	0.83	
R3TDXS	20.80	99.82		0.82	
R3TDXS	24.88	100.09		0.55	
R3TDXS	27.69	100.39		0.25	
R3TDXS	29.00	100.89			
R3TDXS	30.41	101.14			
R3TDXS	30.76	101.30			
R3TEXS	0.00	100.51			
R3TEXS	1.32	100.18		0.36	
R3TEXS	1.84	100.41		0.12	
R3TEXS	2.48	99.81		0.73	
R3TEXS	2.56	99.26	0.56	1.28	F
R3TEXS	3.35	99.53	0.29	1.01	B
R3TEXS	3.97	99.54	0.28	1.00	B
R3TEXS	4.83	99.48	0.33	1.05	B
R3TEXS	5.25	98.76	1.06	1.78	S
R3TEXS	7.17	98.89	0.92	1.64	S
R3TEXS	8.69	98.93	0.89	1.61	S
R3TEXS	10.42	98.99	0.83	1.55	S
R3TEXS	12.10	98.95	0.87	1.59	S
R3TEXS	13.84	98.91	0.90	1.62	S
R3TEXS	15.53	98.84	0.98	1.70	S
R3TEXS	16.76	98.85	0.97	1.68	S

Reach 3 Survey Data 2009
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TEXS	17.66	98.92	0.89	1.61	F
R3TEXS	17.78	99.83		0.71	
R3TEXS	19.17	100.56			
R3TEXS	19.36	100.63			

Reach 2 Survey Data 2010

Bear River, Idaho

Project Name: Bear River, Id
Project Code: 283-001
Date: 2010_10_4
Reach 2 **Transects TA-TE**
Staff: Instrument- Drake Burford, Rod- Trevor McGregor

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TARBP	0.00	100			
R2TAXS	1.55	98.827			
R2TAXS	3.91	98.88983			
R2TAXS	6.37	99.41692			
R2TAXS	7.79	99.423			
R2TAXS	9.50	98.59155		0.24	
R2TAXS	10.60	98.41653		0.41	
R2TAXS	10.78	98.280	0.19	0.55	F
R2TAXS	12.26	98.1862	0.28	0.64	G
R2TAXS	13.84	98.09991	0.37	0.73	G
R2TAXS	16.14	98.00289	0.47	0.82	G
R2TAXS	17.74	97.92035	0.55	0.91	G
R2TAXS	17.95	98.16029	0.31	0.67	B
R2TAXS	18.38	97.88265	0.59	0.95	G
R2TAXS	21.05	98.1545	0.32	0.67	C
R2TAXS	22.80	98.10232	0.37	0.73	G
R2TAXS	24.38	97.98573	0.48	0.84	G
R2TAXS	25.10	98.5689	-0.10	0.26	B
R2TAXS	25.91	97.67108	0.80	1.16	C
R2TAXS	27.07	97.77901	0.69	1.05	G
R2TAXS	27.62	98.13545	0.33	0.69	B
R2TAXS	28.28	97.95348	0.52	0.87	G
R2TAXS	29.63	97.98661	0.48	0.84	G
R2TAXS	31.08	98.07994	0.39	0.75	G
R2TAXS	32.81	98.05093	0.42	0.78	G
R2TAXS	34.73	98.1011	0.37	0.73	C
R2TAXS	36.30	98.12673	0.34	0.70	C
R2TAXS	37.76	98.19165	0.28	0.64	C
R2TAXS	39.30	98.2285	0.24	0.60	C
R2TAXS	40.60	98.17278	0.30	0.65	C
R2TAXS	41.98	98.17784	0.29	0.65	G
R2TAXS	43.42	98.19662	0.27	0.63	G
R2TAXS	44.49	98.41312		0.41	
R2TAXS	46.28	98.69384		0.13	
R2TAXS	49.74	98.52187		0.31	
R2TAXS	50.73	98.23954	0.23	0.59	G
R2TAXS	51.96	98.13706	0.33	0.69	G
R2TAXS	53.13	98.09439	0.38	0.73	G
R2TAXS	54.47	98.07659	0.39	0.75	G
R2TAXS	55.80	98.04513	0.42	0.78	G
R2TAXS	56.97	98.20692	0.26	0.62	C
R2TAXS	57.76	98.52711		0.30	
R2TAXS	59.19	99.06381		-0.24	
R2TALBP	60.29	99.40979			

Reach 2 Survey Data 2010
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TBRBP	0.00	99.712			
R2TBXS	7.03	99.67872			
R2TBXS	12.73	98.45958			
R2TBXS	19.28	98.403			
R2TBXS	22.96	98.58095		-0.09	
R2TBXS	26.99	98.29258		0.20	
R2TBXS	27.16	98.198	0.06	0.29	G
R2TBXS	28.84	98.07833	0.18	0.41	G
R2TBXS	30.53	98.01237	0.25	0.48	G
R2TBXS	32.44	97.928	0.33	0.56	G
R2TBXS	34.15	97.88222	0.38	0.61	G
R2TBXS	35.40	97.92657	0.34	0.56	G
R2TBXS	36.49	97.85049	0.41	0.64	G
R2TBXS	37.91	97.89	0.37	0.60	S
R2TBXS	39.21	97.87805	0.38	0.61	S
R2TBXS	40.72	97.85872	0.40	0.63	S
R2TBXS	42.07	97.76165	0.50	0.73	S
R2TBXS	43.26	97.80581	0.46	0.68	C
R2TBXS	44.13	97.77768	0.48	0.71	G
R2TBXS	44.68	97.98784	0.27	0.50	B
R2TBXS	44.96	97.86433	0.40	0.63	C
R2TBXS	46.11	97.9964	0.27	0.49	C
R2TBXS	47.64	98.02865	0.23	0.46	C
R2TBXS	49.30	98.06681	0.20	0.42	G
R2TBXS	51.31	98.1314	0.13	0.36	C
R2TBXS	53.39	98.10909	0.15	0.38	C
R2TBXS	55.19	98.14639	0.12	0.34	C
R2TBXS	56.99	98.0979	0.16	0.39	C
R2TBXS	58.43	98.06715	0.19	0.42	C
R2TBXS	59.94	98.0093	0.25	0.48	C
R2TBXS	62.07	97.92569	0.34	0.56	C
R2TBXS	64.15	97.88033	0.38	0.61	C
R2TBXS	64.44	98.08004	0.18	0.41	B
R2TBXS	64.86	97.95961	0.30	0.53	C
R2TBXS	65.41	98.27365	-0.01	0.22	B
R2TBXS	66.05	97.85043	0.41	0.64	C
R2TBXS	67.85	97.9231	0.34	0.57	F
R2TBXS	69.97	97.95827	0.30	0.53	F
R2TBXS	73.40	97.95855	0.30	0.53	F
R2TBXS	76.51	97.98442	0.28	0.51	F
R2TBXS	80.66	97.96248	0.30	0.53	F
R2TBXS	84.22	98.23159		0.26	
R2TBXS	86.36	98.28578		0.20	
R2TBXS	88.08	98.39834		0.09	
R2TBXS	89.31	98.65465			
R2TCRBP	0.00	98.963			
R2TCXS	2.04	98.29595			
R2TCXS	2.77	98.18232		0.12	
R2TCXS	4.62	98.160		0.14	

Reach 2 Survey Data 2010
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TCXS	5.50	98.0543		0.24	
R2TCXS	7.20	97.90921	0.17	0.39	B
R2TCXS	9.28	97.825	0.25	0.47	G
R2TCXS	11.68	97.84003	0.23	0.46	B
R2TCXS	14.18	97.7823	0.29	0.52	C
R2TCXS	16.64	97.839	0.24	0.46	B
R2TCXS	18.93	97.79418	0.28	0.50	G
R2TCXS	21.27	97.79147	0.28	0.51	G
R2TCXS	24.21	97.80467	0.27	0.49	G
R2TCXS	26.78	97.80711	0.27	0.49	C
R2TCXS	30.19	97.73551	0.34	0.56	C
R2TCXS	33.02	97.77937	0.29	0.52	C
R2TCXS	35.44	97.71049	0.36	0.59	G
R2TCXS	38.23	97.78297	0.29	0.52	C
R2TCXS	40.07	97.78879	0.29	0.51	G
R2TCXS	42.32	97.82872	0.25	0.47	S
R2TCXS	44.31	97.89815	0.18	0.40	S
R2TCXS	44.63	98.06311		0.24	
R2TCXS	45.55	98.13321		0.17	
R2TCXS	51.64	98.1223		0.18	
R2TCXS	55.73	98.11114		0.19	
R2TCXS	56.24	98.09731		0.20	
R2TCXS	57.24	97.92202	0.15	0.38	G
R2TCXS	58.29	97.92753	0.15	0.37	G
R2TCXS	58.66	98.13318		0.17	
R2TCXS	58.69	98.13102		0.17	
R2TCXS	59.55	97.90562	0.17	0.39	G
R2TCXS	61.05	98.08225		0.22	
R2TCXS	63.77	98.09481		0.20	
R2TCXS	66.45	98.14364		0.16	
R2TCXS	69.31	98.0917		0.21	
R2TCXS	72.35	98.14242		0.16	
R2TCXS	74.69	98.3021		0.00	
R2TCLBP	74.72	98.58227			
R2TDRBP	0.00	97.192			
R2TDXS	0.04	97.00184		0.22	
R2TDXS	0.68	96.99699		0.22	
R2TDXS	1.04	96.932		0.29	
R2TDXS	1.52	96.78171	0.19	0.44	C
R2TDXS	3.00	96.75348	0.22	0.46	C
R2TDXS	5.02	96.812	0.16	0.41	C
R2TDXS	6.42	96.81953	0.15	0.40	C
R2TDXS	7.00	97.06526	-0.09	0.15	B
R2TDXS	7.42	96.812	0.16	0.41	C
R2TDXS	9.51	96.78552	0.19	0.43	C
R2TDXS	11.29	96.71749	0.26	0.50	C
R2TDXS	14.14	96.79847	0.17	0.42	C
R2TDXS	17.13	96.71819	0.25	0.50	C
R2TDXS	18.91	96.73959	0.23	0.48	B
R2TDXS	19.14	96.83837	0.13	0.38	B

Reach 2 Survey Data 2010
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TDXS	19.75	96.71718	0.26	0.50	C
R2TDXS	21.37	96.84188	0.13	0.38	BR
R2TDXS	23.84	96.77482	0.20	0.44	C
R2TDXS	25.25	96.66973	0.30	0.55	C
R2TDXS	27.55	96.67975	0.29	0.54	G
R2TDXS	29.60	96.65897	0.31	0.56	C
R2TDXS	31.18	96.71761	0.26	0.50	C
R2TDXS	32.88	96.81271	0.16	0.41	BR
R2TDXS	33.29	96.82158	0.15	0.40	BR
R2TDXS	33.67	97.00668	-0.03	0.21	BR
R2TDXS	34.28	97.06725	-0.09	0.15	B
R2TDXS	35.35	96.99165	-0.02	0.23	BR
R2TDXS	36.52	96.90851	0.06	0.31	C
R2TDXS	39.06	96.76214	0.21	0.46	G
R2TDXS	43.02	96.72553	0.25	0.49	G
R2TDXS	45.96	96.75281	0.22	0.47	G
R2TDXS	49.36	96.76565	0.21	0.45	G
R2TDXS	50.18	96.95706	0.02	0.26	BR
R2TDXS	52.60	96.91677	0.06	0.30	BR
R2TDXS	54.51	96.65177	0.32	0.57	BR
R2TDXS	57.79	96.74913	0.22	0.47	BR
R2TDXS	60.39	96.82587	0.15	0.39	BR
R2TDXS	62.70	96.90982	0.06	0.31	BR
R2TDXS	66.21	96.84907	0.12	0.37	BR
R2TDXS	68.81	96.76117	0.21	0.46	BR
R2TDXS	70.79	96.94408	0.03	0.27	F
R2TDXS	72.15	97.0143		0.20	
R2TDXS	76.14	97.04304		0.18	
R2TDXS	77.47	97.14134		0.08	
R2TDXS	78.53	97.4349		-0.22	
R2TDLBP	79.10	97.75689			
R2TERBP	0.00	97.716			
R2TEXS	0.97	95.649		-0.04	
R2TEXS	2.55	95.25239		0.36	
R2TEXS	7.66	95.35648		0.25	
R2TEXS	10.39	95.378		0.23	
R2TEXS	10.98	95.2302	0.13	0.38	C
R2TEXS	12.80	95.11286	0.25	0.50	C
R2TEXS	13.36	95.122	0.24	0.49	C
R2TEXS	13.86	95.50882			B
R2TEXS	14.20	95.1405	0.22	0.47	C
R2TEXS	16.36	95.038	0.33	0.57	C
R2TEXS	19.07	95.09195	0.27	0.52	C
R2TEXS	20.93	95.01437	0.35	0.60	C
R2TEXS	22.12	95.06363	0.30	0.55	C
R2TEXS	24.00	94.98289	0.38	0.63	C
R2TEXS	26.03	94.94546	0.42	0.67	G
R2TEXS	28.02	94.96149	0.40	0.65	C
R2TEXS	29.83	95.13943	0.22	0.47	B
R2TEXS	31.64	94.97905	0.38	0.63	BR

Reach 2 Survey Data 2010
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R2TEXS	33.28	94.97993	0.38	0.63	B
R2TEXS	34.83	94.97762	0.39	0.63	C
R2TEXS	35.47	95.30125	0.06	0.31	B
R2TEXS	35.87	95.00395	0.36	0.61	C
R2TEXS	37.51	95.06357	0.30	0.55	G
R2TEXS	39.21	94.97567	0.39	0.64	C
R2TEXS	40.35	95.03178	0.33	0.58	BR
R2TEXS	41.56	95.09344	0.27	0.52	BR
R2TEXS	42.57	95.21198	0.15	0.40	B
R2TEXS	42.83	95.34944		0.26	
R2TEXS	44.65	95.43162		0.18	
R2TEXS	46.37	95.41662		0.19	
R2TEXS	48.44	95.58206		0.03	
R2TEXS	50.75	95.57335		0.04	
R2TELBP	50.86	95.86632			

Reach 3 Survey Data 2010

Bear River, Idaho

Project Name: Bear River, Id
Project Code: 283-001
Date: 2010_10_5
Reach 3 **Transects TA-TE**
Staff: Instrument- Drake Burford, Rod- Trevor McGregor

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TAXS	0.00	101.2929			
R3TAXS	0.66	100.567		0.12	
R3TAXS	1.70	100.3117		0.38	
R3TAXS	3.13	100.112		0.58	
R3TAXS	3.83	99.918		0.77	
R3TAXS	4.39	99.73617	0.17	0.95	S
R3TAXS	5.07	99.59684	0.31	1.09	G
R3TAXS	6.17	99.538	0.37	1.15	G
R3TAXS	7.51	99.53003	0.38	1.16	G
R3TAXS	8.95	99.52652	0.38	1.16	G
R3TAXS	10.20	99.497	0.41	1.19	G
R3TAXS	11.04	99.46773	0.44	1.22	G
R3TAXS	12.00	99.55594	0.35	1.13	G
R3TAXS	12.99	99.61193	0.30	1.08	G
R3TAXS	13.99	99.62299	0.29	1.06	G
R3TAXS	14.90	99.7358	0.17	0.95	G
R3TAXS	15.41	99.70715	0.20	0.98	G
R3TAXS	15.57	99.90341		0.78	
R3TAXS	16.53	100.0821		0.61	
R3TAXS	17.25	100.3034		0.38	
R3TAXS	18.65	100.2432		0.44	
R3TAXS	20.32	100.2707		0.42	
R3TAXS	24.20	100.4262			
R3TBXS	0.00	101.0015			
R3TBXS	0.90	99.792			
R3TBXS	1.06	99.49879	0.28	0.99	C
R3TBXS	2.44	99.57151	0.21	0.92	C
R3TBXS	3.55	99.645	0.14	0.85	C
R3TBXS	4.44	99.53548	0.25	0.96	G
R3TBXS	5.41	99.53079	0.25	0.96	C
R3TBXS	6.52	99.487	0.29	1.00	C
R3TBXS	7.18	99.38885	0.39	1.10	G
R3TBXS	8.63	99.46968	0.31	1.02	C
R3TBXS	9.99	99.421	0.36	1.07	G
R3TBXS	11.77	99.48778	0.29	1.00	G
R3TBXS	12.83	99.4887	0.29	1.00	G
R3TBXS	13.79	99.52841	0.25	0.96	G
R3TBXS	14.57	99.56054	0.22	0.93	G
R3TBXS	15.40	99.77021		0.72	
R3TBXS	16.27	99.97997		0.51	
R3TBXS	17.16	100.0523		0.44	
R3TBXS	20.19	100.1382		0.35	
R3TBXS	20.51	100.7404			

Reach 3 Survey Data 2010
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TBXS	21.34	100.8697			
R3TCXS	0.00	100.1279			
R3TCXS	0.38	99.846		0.22	
R3TCXS	0.75	99.80831		0.26	
R3TCXS	0.93	99.65762		0.41	
R3TCXS	1.20	99.367	0.29	0.70	G
R3TCXS	1.76	99.35696	0.30	0.71	G
R3TCXS	1.91	99.36029	0.29	0.71	G
R3TCXS	2.78	99.345	0.31	0.72	G
R3TCXS	4.23	99.35623	0.30	0.71	C
R3TCXS	6.14	99.40137	0.25	0.66	G
R3TCXS	7.91	99.412	0.24	0.65	G
R3TCXS	9.85	99.36733	0.29	0.70	G
R3TCXS	11.66	99.41506	0.24	0.65	G
R3TCXS	12.77	99.38598	0.27	0.68	G
R3TCXS	13.97	99.35056	0.30	0.72	G
R3TCXS	14.14	99.86836	-0.21	0.20	B
R3TCXS	14.70	99.9893	-0.34	0.08	B
R3TCXS	15.72	99.46157	0.19	0.60	S
R3TCXS	16.03	99.56575	0.09	0.50	F
R3TCXS	16.14	99.65064		0.42	
R3TCXS	16.61	100.0037		0.06	
R3TCXS	17.26	100.3562			
R3TCXS	17.29	100.5648			
R3TDXS	0.00	99.81977			
R3TDXS	0.48	99.585		0.42	
R3TDXS	0.79	99.66667	-0.07	0.34	
R3TDXS	1.13	99.67475	-0.08	0.33	B
R3TDXS	1.49	99.036	0.56	0.97	B
R3TDXS	1.94	98.91808	0.67	1.09	C
R3TDXS	3.40	98.92433	0.67	1.08	G
R3TDXS	4.83	98.920	0.67	1.08	G
R3TDXS	6.06	99.0835	0.51	0.92	G
R3TDXS	7.31	99.15299	0.44	0.85	G
R3TDXS	8.63	99.142	0.45	0.86	S
R3TDXS	9.97	99.23203	0.36	0.77	G
R3TDXS	11.85	99.23526	0.36	0.77	G
R3TDXS	13.54	99.31106	0.28	0.69	G
R3TDXS	14.86	99.36477	0.23	0.64	S
R3TDXS	15.50	99.37815	0.21	0.63	S
R3TDXS	15.59	99.59958		0.40	
R3TDXS	16.02	99.75863		0.25	
R3TDXS	16.88	99.80142		0.20	
R3TDXS	19.93	99.86305		0.14	
R3TDXS	22.60	100.017		-0.01	
R3TDXS	25.80	100.1875		-0.18	
R3TDXS	28.67	101.1337			
R3TDXS	29.26	101.1623			
R3TDXS	29.30	101.3474			

Reach 3 Survey Data 2010
Bear River, Idaho

Transect	STN (m)	Elevation adjusted for BM 100 (m)	WP Depth (m)	BF Depth (m)	Substrate
R3TEXS	0.00	100.106			
R3TEXS	0.55	99.87677			
R3TEXS	0.87	99.59562		0.44	
R3TEXS	0.98	99.882	-0.29	0.15	BB
R3TEXS	1.46	99.3334	0.26	0.70	BB
R3TEXS	1.79	98.95984	0.63	1.08	S
R3TEXS	2.59	98.799	0.79	1.24	G
R3TEXS	3.98	98.8164	0.78	1.22	G
R3TEXS	5.24	98.89705	0.70	1.14	G
R3TEXS	6.85	98.952	0.64	1.08	G
R3TEXS	8.29	98.95966	0.63	1.08	G
R3TEXS	9.54	99.01028	0.58	1.03	S
R3TEXS	10.85	99.00532	0.59	1.03	S
R3TEXS	11.47	98.93171	0.66	1.10	S
R3TEXS	12.45	98.9054	0.69	1.13	S
R3TEXS	13.44	98.88778	0.70	1.15	S
R3TEXS	14.44	98.88044	0.71	1.16	S
R3TEXS	15.13	98.84463	0.75	1.19	S
R3TEXS	15.85	98.93369	0.66	1.10	S
R3TEXS	16.18	98.94966	0.64	1.09	S
R3TEXS	16.26	99.58913		0.45	
R3TEXS	16.55	100.1954		-0.16	
R3TELBP	17.45	100.6262			

APPENDIX B

PERIPHYTON DATA

(This page intentionally blank)

Bear River, Idaho
Periphyton AFDW
2005-2010

Sample Site	Reach	Transect	2005 AFDW (g/m2)	2006 AFDW (g/m2)	2007 AFDW (g/m2)	2008 AFDW (g/m2)	2009 AFDW (g/m2)	2010 AFDW (g/m2)
BEAR-R1TA-AFDW	Reach 1	TA	25.00	68.75	58.75	36.75	39.06	13.31
BEAR-R1TB-AFDW	Reach 1	TB	35.00	51.88	52.50	14.81	43.63	46.50
BEAR-R1TC-AFDW	Reach 1	TC	17.50	123.13	725.00	48.19	62.06	44.50
BEAR-R1TD-AFDW	Reach 1	TD	21.25	257.50	145.63	8.44	100.00	33.06
BEAR-R1TE-AFDW	Reach 1	TE	6.88	85.00	62.50	13.38	215.00	69.38
BEAR-R2TA-AFDW	Reach 2	TA	40.00	88.75	220.63	131.25	80.00	119.38
BEAR-R2TB-AFDW	Reach 2	TB	35.00	65.63	144.38	70.00	79.38	153.13
BEAR-R2TC-AFDW	Reach 2	TC	10.00	21.88	83.13	151.25	115.63	59.44
BEAR-R2TD-AFDW	Reach 2	TD	153.13	31.25	47.50	153.75	126.25	113.13
BEAR-R2TE-AFDW	Reach 2	TE	8.75	50.00	56.25	90.00	100.63	178.75
BEAR-R3TA-AFDW	Reach 3	TA	51.88	72.50	13.13	72.50	138.13	224.38
BEAR-R3TB-AFDW	Reach 3	TB	34.38	150.00	111.25	38.31	23.31	20.06
BEAR-R3TC-AFDW	Reach 3	TC	48.13	111.88	33.75	71.88	28.94	286.88
BEAR-R3TD-AFDW	Reach 3	TD	29.38	103.75	31.25	121.88	66.25	54.75
BEAR-R3TE-AFDW	Reach 3	TE	44.38	48.13	43.75	81.25	81.88	24.19
BEAR-R4TA-AFDW	Reach 4	TA	28.75	58.75	46.25	49.13	216.25	131.25
BEAR-R4TB-AFDW	Reach 4	TB	22.50	83.75	17.50	98.13	177.50	64.38
BEAR-R4TC-AFDW	Reach 4	TC	66.25	54.38	29.38	162.50	214.38	179.38
BEAR-R4TD-AFDW	Reach 4	TD	248.13	5.00	80.00	24.75	275.00	168.13
BEAR-R4TE-AFDW	Reach 4	TE	4.38	71.25	25.63	16.63	73.75	145.00

Periphyton Chlorophyll a
2005-2010
Bear River, Idaho

Study Reach	Transect	Analyte	2005 Chl (mg/m ²)	2006 Chl (mg/m ²)	2007 Chl (mg/m ²)	2008 Chl (mg/m ²)	2009 Chl (mg/m ²)	2010 Chl (mg/m ²)
Reach 1	TA	Chla	84.4	110.6	38.6	29.8	32.3	8.3
Reach 1	TB	Chla	61.4	44.9	45.1	18.4	79.4	49.6
Reach 1	TC	Chla	16.6	127.5	80.0	37.6	107.5	93.8
Reach 1	TD	Chla	29.6	318.1	78.1	9.4	217.5	6.3
Reach 1	TE	Chla	21.8	147.5	51.1	21.9	185.0	33.3
Reach 2	TA	Chla	119.4	423.1	234.4	196.3	68.8	242.5
Reach 2	TB	Chla	105.6	123.8	151.3	162.5	135.0	86.3
Reach 2	TC	Chla	104.4	117.5	70.0	156.9	245.0	31.3
Reach 2	TD	Chla	457.5	63.8	243.1	333.1	283.1	87.5
Reach 2	TE	Chla	25.6	97.5	64.4	169.4	227.5	162.5
Reach 3	TA	Chla	285.0	175.0	49.1	29.3	122.5	295.6
Reach 3	TB	Chla	245.0	225.6	205.6	126.3	132.5	44.6
Reach 3	TC	Chla	181.3	318.1	181.9	151.3	90.0	350.6
Reach 3	TD	Chla	155.0	138.8	86.9	67.5	120.0	165.0
Reach 3	TE	Chla	170.6	172.5	105.6	183.8	115.0	110.6
Reach 4	TA	Chla	226.9	207.5	356.3	450.6	348.1	460.6
Reach 4	TB	Chla	163.8	253.8	80.0	340.0	162.5	535.6
Reach 4	TC	Chla	693.8	181.3	171.3	285.6	310.6	345.6
Reach 4	TD	Chla	282.5	52.8	279.4	125.6	380.6	570.6
Reach 4	TE	Chla	19.4	339.4	237.5	47.2	150.0	580.6

APPENDIX C

FILAMENTOUS ALGAE DATA

(This page intentionally blank)

Filamentous Algae
2005 - 2010
Bear River, Idaho

Filamentous Algae: Bear River, October 2005

Transect	Reach 1					Reach 2					Reach 3					Reach 4				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
TA	12	6	1	1	20	5	1	1	25	32	20	18	18	18	74	25	25	25	25	100
TB	25	25	21	25	96	10	8	5	2	25	4	6	2	3	15	25	25	25	25	100
TC	25	25	25	25	100	1	1	1	25	28	14	1	0	4	19	15	6	23	12	56
TD	25	25	25	25	100	1	5	2	1	9	0	0	0	0	0	25	25	22	25	97
TE	20	25	25	21	91	5	25	10	15	55	0	0	0	0	0	25	18	11	15	69
Average					81	Average					Average					Average				
Stdev					35	Stdev					Stdev					Stdev				
CI					25	Average					Average					Average				

Filamentous Algae: Bear River, October 2006

Transect	Reach 1					Reach 2					Reach 3					Reach 4				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
TA	20	25	25	25	95	25	25	25	25	100	2	2	2	2	8	23	25	25	25	98
TB	6	6	6	6	24	25	25	23	23	96	0	2	0	0	2	25	25	25	25	100
TC	15	22	15	15	67	18	23	9	25	75	0	0	0	0	0	25	25	25	25	100
TD	25	25	22	22	94	13	3	20	20	56	0	0	0	0	0	15	15	25	22	77
TE	25	25	20	25	95	0	9	3	6	18	0	0	0	0	0	25	25	25	25	100
Average					75	Average					Average					Average				
Stdev					31	Stdev					Stdev					Stdev				
CI					23	CI					CI					CI				

Filamentous Algae: Bear River, October 2007

Transect	Reach 1					Reach 2					Reach 3					Reach 4				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
TA	2	2	2	0	6	22	25	25	22	94	0	0	0	0	0	25	25	25	25	100
TB	0	0	0	0	0	25	25	25	20	95	0	0	0	2	2	25	25	25	25	100
TC	8	10	4	10	32	23	23	24	16	86	0	0	0	0	0	25	25	25	25	100
TD	5	3	12	8	28	24	20	18	18	80	0	0	0	0	0	25	25	25	25	100
TE	5	5	0	5	15	16	16	16	18	66	0	0	0	0	0	23	25	25	25	98
Average					16	Average					Average					Average				
Stdev					14	Stdev					Stdev					Stdev				
CI					10	CI					CI					CI				

Filamentous Algae
2005 - 2010
Bear River, Idaho

Filamentous Algae: Bear River, October 2008

Transect	Reach 1					Reach 2					Reach 3					Reach 4				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
TA	5	3	5	5	18	25	25	25	25	100	8	4	6	9	27	25	25	25	25	100
TB	0	0	2	2	4	25	25	22	25	97	3	7	5	6	21	25	25	25	25	100
TC	20	14	11	15	60	18	20	25	23	86	25	25	25	25	100	23	25	22	22	92
TD	15	11	16	14	56	25	24	25	25	99	20	20	19	13	72	25	24	23	25	97
TE	16	10	8	6	40	15	15	13	23	66	14	16	9	4	43	25	22	24	25	96
Average					36	Average					Average					Average				
Stdev					24	Stdev					Stdev					Stdev				
CI					18	CI					CI					CI				

Filamentous Algae: Bear River, October 2009

Transect	Reach 1					Reach 2					Reach 3					Reach 4				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
TA	6	4	8	2	20	25	25	25	25	100	8	8	3	1	20	13	2	1	4	20
TB	18	25	25	20	88	13	15	15	17	60	3	6	3	7	19	8	14	14	22	58
TC	15	20	22	25	82	8	8	8	10	34	0	0	0	0	0	22	25	14	18	79
TD	25	25	25	25	100	18	20	20	18	76	0	1	5	2	8	18	22	16	24	80
TE	25	25	25	25	100	17	8	8	18	51	4	3	2	4	13	20	24	12	15	71
Average					78	Average					Average					Average				
Stdev					33	Stdev					Stdev					Stdev				
CI					25	CI					CI					CI				

Filamentous Algae: Bear River, October 2010

Transect	Reach 1					Reach 2					Reach 3					Reach 4				
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
TA	2	2	2	2	8	25	25	25	25	100	16	12	13	13	54	23	12	19	14	68
TB	0	2	3	3	8	25	25	25	24	99	9	12	11	14	46	25	25	23	18	91
TC	0	3	0	4	7	6	6	8	12	32	12	14	16	13	55	19	25	22	25	91
TD	4	3	0	2	9	20	20	18	24	82	12	16	20	18	66	22	25	23	25	95
TE	16	14	0	7	37	23	23	18	20	84	2	0	2	2	6	25	25	18	25	93
Average					14	Average					Average					Average				
Stdev					13	Stdev					Stdev					Stdev				
CI					10	CI					CI					CI				

APPENDIX D

FISHERIES DATA

(This page intentionally blank)

Fish Survey Data
Reach 1,
Sample Years 2005-2007

	Reach 1 2005	Reach 1 2006	Reach 1 2007
Date:	10/13/2005	10/10/2006	10/9/2007
Field Staff	Drake Burford	Drake Burford	Drake Burford
	John Gangemi	Brian Anderson	Sean Newman
	Brian Anderson	Matt Umberger	Brian Anderson
H2O Temp:	7 °C	6.9 °C	6.9 °C
Air Temp:	12.5 °C	3.5 °C	7.3 °C
Start Time:	11:30:00 AM	1/0/1900	1/0/1900
End Time:	2:30:00 PM	1/0/1900	1/0/1900
Electrofisher			
Unit:	Smith Root 12-B	Smith Root 12-B	Halltech HT-2000
E-Fishing	2 consecutive		
Method:	upstream passess	2 consecutive upstream passess	2 consecutive upstream passess
Settings:	G4 @ 400	G4 @ 400	80/250
Effort (time in seconds):	9/28/1902	10/13/1902	11/30/1902

Reach 1 2005			Reach 1 2006			Reach 1 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)
Carp	516	2550	Carp	95	18	Carp	92	14
Carp	609	4104	Carp	104	20	Carp	55	4
LN DC	65	8	Carp	84	10	Carp	66	10
LN DC	46	4	LN DC	88	14	LN DC	53	6
LN DC	41	6	LN DC	96	12	LN DC	46	6
LN DC	40	4	LN DC	101	8	LN DC	48	6
LN DC	43	4	LN DC	79	6	LN DC	50	6
LN DC	49	6	LN DC	65	2	LN DC	45	4
LN DC	45	6	LN DC	72	6	LN DC	43	4
LN DC	63	10	LN DC	79	8	LN DC	89	8
LN DC	54	8	LN DC	77	6	LN DC	69	8
LN DC	48	6	LN DC	66	4	LN DC	53	4
LN DC	64	6	LN DC	67	4	LN DC	47	4
LN DC	46	6	LN DC	46	2	LN DC	43	4
LN DC	54	8	LN DC	50	2	LN DC	48	4
LN DC	57	10	LN DC	54	2	LN DC	46	4
LN DC	75	12	LN DC	48	2	LN DC	41	4

Fish Survey Data
 Reach 1,
 Sample Years 2005-2007

Reach 1 2005			Reach 1 2006			Reach 1 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)
LN DC	53	8	MOT SC	97	16	LN DC	77	8
LN DC	44	6	MOT SC	83	12	LN DC	47	4
LN DC	44	8	MOT SC	62	4	LN DC	45	4
LN DC	75	10	MOT SC	61	4	LN DC	53	4
LN DC	76	12	MOT SC	81	10	LN DC	45	4
LN DC	59	6	MOT SC	64	4	LN DC	47	4
LN DC	71	6	MOT SC	53	4	LN DC	72	6
LN DC	76	6	MOT SC	59	6	LN DC	54	4
LN DC	48	4	MOT SC	78	6	LN DC	87	10
LN DC	66	6	MOT SC	57	2	LN DC	68	6
LN DC	52	4	MOT SC	93	12	LN DC	51	4
LN DC	71	6	MOT SC	93	14	LN DC	47	4
LN DC	67	6	SMB	67	8	LN DC	48	4
LN DC	80	10	SMB	72	8	LN DC	56	6
LN DC	69	8	SMB	62	4	LN DC	54	4
LN DC	57	8	SMB	64	4	LN DC	49	4
LN DC	43	4	SMB	51	2	LN DC	86	10
LN DC	84	12	SMB	54	2	LN DC	77	6
LN DC	67	6	SMB	64	6	LN DC	94	8
LN DC	47	4	SMB	65	2	LN DC	72	6
LN DC	63	6	SMB	54	4	LN DC	45	4
LN DC	68	6	UT SU	99	10	MOT SC	100	12
LN DC	102	14				MOT SC	92	10
LN DC	77	8				MOT SC	104	14
LN DC	83	10				MOT SC	80	8
LN DC	44	6				MOT SC	64	6
LN DC	51	4				MOT SC	84	8
LN DC	49	4				MOT SC	79	8
LN DC	51	4				MOT SC	79	4
LN DC	90	8				MOT SC	84	10
LN DC	47	4				MOT SC	109	20
LN DC	46	4				MOT SC	105	10
LN DC	55	4				MOT SC	85	8
LN DC	46	4				MOT SC	61	6

Fish Survey Data
 Reach 1,
 Sample Years 2005-2007

Reach 1 2005			Reach 1 2006			Reach 1 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)
LN DC	90	8				MOT SC	44	4
LN DC	67	4				MOT SC	56	4
LN DC	56	4				MOT SC	81	8
LN DC	67	6				MOT SC	62	6
LN DC	67	6				MOT SC	88	12
LN DC	43	4				MOT SC	80	6
MOT SC	89	16				MOT SC	84	8
MOT SC	94	14				RD SH	46	4
MOT SC	92	14						
MOT SC	98	14						
MOT SC	66	6						
MOT SC	63	8						
MOT SC	98	16						
MOT SC	62	6						
MOT SC	57	4						
MOT SC	97	12						
MOT SC	90	8						
MOT SC	101	16						
MOT SC	102	16						
MOT SC	88	12						
MOT SC	75	6						
MOT SC	110	20						
MOT SC	92	10						
MOT SC	66	4						
MOT SC	65	6						
MOT SC	65	6						
MOT SC	69	6						
MOT SC	84	8						
MOT SC	67	6						
MOT SC	90	12						
MOT SC	61	6						
MOT SC	74	8						
SMB	116	30						

Fish Survey Data
 Reach 1,
 Sample Years 2005-2007

Reach 1 2005			Reach 1 2006			Reach 1 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)
Fish Species Abbreviations								
Carp:	Common Carp							
LN DC:	Longnose Dace							
MOT SC:	Mottled Sculpin							
SMB:	Smallmouth Bass							
RD SH:	Redside Shiner							
RBT:	Rainbow Trout							
UT SU:	Utah Sucker							

Fish Survey Data
Reach 2,
Sample Years 2005-2007

	Reach 2 2005	Reach 2 2006	Reach 2 2007
Date:	10/13/2005	10/11/2006	10/9/2007
Field Staff	Drake Burford	Drake Burford	Drake Burford
	John Gangemi	Brian Anderson	Sean Newman
	Brian Anderson	Matt Umberger	Brian Anderson
H2O Temp:	n/a	10.6 °C	11.7 °C
Air Temp:	n/a	3.8 °C	18.2 °C
Start Time:	3:00:00 PM	8:45:00 AM	11:30:00 AM
End Time:	5:20:00 PM	10:00:00 AM	1:30:00 PM
Electrofisher Unit:	Smith Root 12-B	Smith Root 12-B	Halltech HT-2000
E-Fishing Method:	2 consecutive upstream passes	2 consecutive upstream passes	2 consecutive upstream passes
Settings:	G4 @ 400	G4 @ 400	80/250
Effort (time in seconds):	1305	1358	1240

Reach 2 2005			Reach 2 2006			Reach 2 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)
LN DC	84	6	LN DC	91	12	LN DC	90	10
LN DC	70	8	LN DC	90	10	LN DC	96	12
LN DC	71	10	LN DC	94	10	LN DC	85	12
LN DC	78	8	LN DC	88	8	LN DC	96	16
LN DC	72	10	LN DC	82	6	LN DC	106	16
LN DC	60	8	LN DC	91	12	LN DC	105	18
LN DC	65	8	LN DC	85	6	LN DC	97	14
LN DC	70	8	LN DC	87	10	LN DC	58	6
LN DC	65	8	LN DC	92	8	LN DC	59	6
LN DC	67	8	LN DC	93	6	LN DC	77	6
LN DC	58	8	LN DC	88	8	LN DC	95	12
LN DC	66	8	LN DC	73	6	LN DC	94	14
LN DC	58	4	LN DC	69	4	LN DC	62	4
LN DC	80	8	LN DC	79	10	LN DC	58	4
LN DC	49	1	LN DC	93	10	LN DC	100	16
LN DC	73	8	LN DC	63	6	LN DC	99	18
LN DC	58	6	LN DC	80	10	LN DC	93	10

Fish Survey Data
 Reach 2,
 Sample Years 2005-2007

Reach 2 2005			Reach 2 2006			Reach 2 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)
LN DC	85	14	LN DC	65	2	LN DC	92	12
LN DC	67	6	LN DC	71	4	LN DC	60	6
LN DC	83	14	LN DC	81	6	LN DC	97	12
LN DC	73	8	LN DC	81	4	LN DC	55	4
LN DC	82	12	LN DC	97	10	LN DC	100	14
LN DC	50	4	LN DC	100	12	LN DC	53	4
LN DC	66	8	LN DC	78	4	LN DC	101	16
LN DC	54	4	LN DC	75	4	LN DC	88	12
LN DC	75	8	LN DC	59	4	LN DC	85	8
LN DC	86	14	LN DC	55	4	LN DC	64	6
LN DC	83	12	LN DC	80	6	LN DC	102	12
LN DC	55	4	LN DC	57	4	LN DC	86	8
LN DC	66	8	RD SH	93	14	LN DC	100	12
LN DC	63	6	RD SH	84	6	LN DC	66	8
LN DC	59	6	SMB	72	8	LN DC	83	10
LN DC	53	4	UT SU	101	12	RD SH	84	10
SMB	66	8				RD SH	57	4
						RD SH	60	4
						RD SH	63	6
						RD SH	57	6
						SMB	64	8
						UT SU	224	140

Fish Species Abbreviations	
Carp:	Common Carp
LN DC:	Longnose Dace
MOT SC:	Mottled Sculpin
SMB:	Smallmouth Bass
RD SH:	Redside Shiner
RBT:	Rainbow Trout
UT SU:	Utah Sucker

Fish Survey Data
Reach 3,
Sample Years 2005-2007

	Reach 3 2005	Reach 3 2006	Reach 3 2007
Date:	10/15/2005	10/10/2006	10/10/2007
Field Staff	Drake Burford	Drake Burford	Drake Burford
	John Gangemi	Brian Anderson	Sean Newman
	Brian Anderson	Matt Umberger	Brian Anderson
H2O Temp:	9.8 °C	12.1 °C	12.7 °C
Air Temp:	18.4 °C	16.6 °C	17.7 °C
Start Time:	1:30:00 PM	2:25:00 PM	1:30:00 PM
End Time:	4:00:00 PM	4:45:00 PM	4:45:00 PM
Electrofisher			
Unit:	Smith Root 12-B	Smith Root 12-B	Halltech HT-2000
E-Fishing	2 consecutive		2 consecutive
Method:	upstream passes	2 consecutive upstream passes	upstream passes
Settings:	G4 @ 400	G4 @ 400	80/450
Effort (time in seconds):	696	799	996

Reach 3 2005			Reach 3 2006				Reach 3 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)
RD SH	36	4	LN DC	47	4		Carp	709	4960
RD SH	39	4	LN DC	51	4		LN DC	58	4
RD SH	35	4	LN DC	58	4		LN DC	62	6
RD SH	41	4	RBT	281	294	Ftbridge 2006	LN DC	82	10
RD SH	50	4	RD SH	78	6		LN DC	38	2
RD SH	42	4	RD SH	65	4		LN DC	41	2
RD SH	43	4	RD SH	79	8		RD SH	50	4
RD SH	38	4	RD SH	75	6		RD SH	57	4
RD SH	39	4	RD SH	51	4		RD SH	53	4
RD SH	32	4	RD SH	58	2		RD SH	49	2
RD SH	53	4	RD SH	71	4		RD SH	46	2
RD SH	36	4	RD SH	45	2		RD SH	50	4
RD SH	42	4	RD SH	53	2		RD SH	51	4
RD SH	43	4	RD SH	52	2		RD SH	49	4
RD SH	32	4	RD SH	44	2		RD SH	52	4
RD SH	49	4	RD SH	47	2		RD SH	42	2

Fish Survey Data
Reach 3,
Sample Years 2005-2007

Reach 3 2005			Reach 3 2006				Reach 3 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)
RD SH	40	4	RD SH	44	2		RD SH	45	4
RD SH	32	4	RD SH	48	2		RD SH	53	4
RD SH	45	4	RD SH	44	2		RD SH	46	2
RD SH	57	4	RD SH	45	2		RD SH	48	4
SMB	57	4	RD SH	48	2		RD SH	53	4
UT SU	63	6	RD SH	46	2		RD SH	47	4
UT SU	71	4	RD SH	50	2		RD SH	41	4
UT SU	71	6	RD SH	41	2		RD SH	46	4
UT SU	59	4	RD SH	35	2		RD SH	42	4
UT SU	58	4	RD SH	41	2		RD SH	43	2
UT SU	62	4	RD SH	39	2		RD SH	50	4
UT SU	68	4	RD SH	40	2		RD SH	51	4
UT SU	50	2	RD SH	40	2		RD SH	59	4
UT SU	66	6	RD SH	79	4		RD SH	49	4
UT SU	56	4	RD SH	102	12		RD SH	39	2
UT SU	49	4	RD SH	86	8		RD SH	65	4
UT SU	83	8	RD SH	76	6		RD SH	54	4
Fish Species Abbreviations Carp: Common Carp LN DC: Longnose Dace MOT SC: Mottled Sculpin SMB: Smallmouth Bass RD SH: Redside Shiner RBT: Rainbow Trout UT SU: Utah Sucker			RD SH	83	8		RD SH	52	4
			RD SH	53	2		RD SH	49	4
			RD SH	52	4		RD SH	83	8
			RD SH	45	2		RD SH	46	4
			RD SH	52	4		RD SH	44	4
			RD SH	47	2		RD SH	40	4
			RD SH	45	2		RD SH	44	4
			RD SH	45	2		RD SH	52	4
			RD SH	39	2		RD SH	46	4
			RD SH	48	2		RD SH	57	4
			RD SH	51	2		RD SH	52	4
			RD SH	45	2		RD SH	41	4
			RD SH	54	2		RD SH	46	4
			RD SH	46	2		RD SH	45	2
			RD SH	48	2		RD SH	50	4
			RD SH	45	2		RD SH	79	8
			RD SH	42	2		RD SH	49	4

Fish Survey Data
 Reach 3,
 Sample Years 2005-2007

Reach 3 2005			Reach 3 2006				Reach 3 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)
			RD SH	54	2		RD SH	48	4
			RD SH	33	2		RD SH	54	4
			RD SH	40	2		RD SH	57	4
			RD SH	47	2		RD SH	40	2
			RD SH	47	2		RD SH	50	4
			RD SH	45	2		RD SH	41	2
			RD SH	38	2		RD SH	57	4
			RD SH	50	2		RD SH	55	4
			RD SH	49	2		SMB	82	10
			RD SH	87	8		SMB	77	12
			RD SH	46	2		SMB	66	8
			RD SH	60	2		UT SU	486	1410
			RD SH	70	4		UT SU	466	1256
			RD SH	86	8		UT SU	352	496
			RD SH	47	2		UT SU	259	162
			RD SH	45	2		UT SU	68	6
			RD SH	42	2		UT SU	242	170
			RD SH	49	2		UT SU	267	242
			RD SH	71	4		UT SU	241	178
			RD SH	97	10				
			RD SH	45	2				
			RD SH	76	4				
			RD SH	74	4				
			RD SH	90	8				
			RD SH	82	6				
			RD SH	72	6				
			RD SH	57	2				
			UT SU	65	6				
			UT SU	78	6				
			UT SU	61	4				
			UT SU	65	4				
			UT SU	77	6				
			UT SU	159	46				
			UT SU	174	58				

Fish Survey Data
 Reach 3,
 Sample Years 2005-2007

Reach 3 2005			Reach 3 2006				Reach 3 2007		
Species	Length (mm)	Weight (g)	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)
			UT SU	166	52				
			UT SU	61	4				
			UT SU	63	4				
			UT SU	62	4				
			UT SU	145	40				

Fish Survey Data
Reach 4,
Sample Years 2005-2007

	Reach 4 2005	Reach 4 2006	Reach 4 2007
Date:	10/14/2005	10/11/2006	10/9/2007
Field Staff	Drake Burford	Drake Burford	Drake Burford
	John Gangemi	Brian Anderson	Sean Newman
	Brian Anderson	Matt Umberger	Brian Anderson
H2O Temp:	n/a	10.1 °C	12.3 °C
Air Temp:	n/a	10 °C	16.6 °C
Start Time:	1/0/1900	10:30:00 AM	2:00:00 PM
End Time:	1/0/1900	1:30:00 PM	5:45:00 PM
Electrofisher			
Unit:	Smith Root 12-B	Smith Root 12-B	Halltech HT-2000
E-Fishing	2 consecutive upstream		
Method:	passes	2 consecutive upstream passes	2 consecutive upstream passes
Settings:	G4 @ 400	G4 @ 400	80/350
Effort (time in seconds):	902	1469	1188

Reach 4 2005				Reach 4 2006				Reach 4 2007			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
LN DC	41	4		LN DC	75	8		LN DC	95	13	
LN DC	38	4		LN DC	80	8		LN DC	47	2	
LN DC	35	4		LN DC	91	14		LN DC	37	2	
LN DC	36	4		LN DC	83	10		LN DC	46	2	
LN DC	37	4		LN DC	71	6		LN DC	80	6	
LN DC	38	4		LN DC	54	2		LN DC	93	10	
LN DC	87	8		LN DC	82	6		LN DC	40	2	
LN DC	87	12		LN DC	76	4		LN DC	46	2	
LN DC	66	6		LN DC	71	4		LN DC	72	6	
LN DC	94	14		LN DC	66	4		LN DC	85	6	
LN DC	63	4		LN DC	58	2		LN DC	84	8	
LN DC	45	4		LN DC	46	2		LN DC	81	8	
LN DC	38	4		LN DC	81	6		LN DC	87	8	
LN DC	49	4		LN DC	85	6		LN DC	45	2	
LN DC	37	2		LN DC	67	4		LN DC	49	2	
LN DC	33	2		LN DC	65	4		LN DC	67	4	
LN DC	85	6		LN DC	37	2		LN DC	58	6	

Fish Survey Data
 Reach 4,
 Sample Years 2005-2007

Reach 4 2005				Reach 4 2006				Reach 4 2007			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
LN DC	71	12		LN DC	85	12		LN DC	70	6	
LN DC	59	6		LN DC	67	4		LN DC	95	12	
LN DC	46	4		LN DC	72	4		LN DC	49	4	
LN DC	45	4		LN DC	66	4		LN DC	101	14	
LN DC	35	2		LN DC	67	4		LN DC	102	14	
LN DC	34	2		LN DC	60	4		LN DC	84	10	
LN DC	46	4		LN DC	37	2		LN DC	66	4	
LN DC	88	18		LN DC	51	4		LN DC	66	6	
LN DC	69	6		LN DC	39	2		LN DC	83	10	
LN DC	79	6		LN DC	35	2		LN DC	70	6	
LN DC	73	6		MT SC	75	6		LN DC	48	4	
LN DC	74	65		MT SC	73	8		LN DC	77	6	
LN DC	51	4		MT SC	90	12		LN DC	86	8	
LN DC	51	4		MT SC	89	14		LN DC	80	8	
LN DC	66	6		MT SC	87	12		LN DC	66	8	
LN DC	48	4		MT SC	80	8		LN DC	74	6	
LN DC	48	4		MT SC	71	6		LN DC	71	6	
LN DC	49	4		RBT	290	196	Footbridge 2006	LN DC	49	4	
LN DC	36	2		RBT	285	230	none	MT SC	83	8	
LN DC	65	6		RBT	259	176	none	MT SC	88	10	
LN DC	48	2		RBT	304	300	none	MT SC	61	4	
LN DC	40	2		RBT	356	482	none	MT SC	62	4	
MT SC	77	12		RBT	294	216	Footbridge 2006	MT SC	102	14	
MT SC	57	4		RD SH	97	16		MT SC	89	8	
MT SC	64	8		RD SH	90	12		MT SC	56	4	
MT SC	63	6		RD SH	65	6		MT SC	94	10	
MT SC	53	6		RD SH	101	16		MT SC	103	14	
MT SC	47	4		RD SH	60	6		MT SC	83	10	
MT SC	59	4		RD SH	65	2		MT SC	76	6	
MT SC	53	4		UT SU	165	52		MT SC	71	6	
MT SC	55	4						MT SC	75	6	
MT SC	62	4						MT SC	53	4	
MT SC	60	4						MT SC	89	12	

Fish Survey Data
Reach 4,
Sample Years 2005-2007

Reach 4 2005				Reach 4 2006				Reach 4 2007			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
MT SC	90	18						MT SC	84	8	
MT SC	86	10						MT SC	87	8	
MT SC	50	6						MT SC	87	10	
MT SC	53	4						MT SC	77	8	
MT SC	60	4						MT SC	66	6	
MT SC	62	4						MT SC	79	8	
MT SC	63	4						MT SC	79	8	
MT SC	93	14						MT SC	78	8	
MT SC	62	4						MT SC	75	8	
MT SC	95	12						MT SC	90	12	
MT SC	101	18						MT SC	77	10	
MT SC	64	4						MT SC	76	6	
MT SC	54	4						MT SC	77	8	
MT SC	58	6						MT SC	100	16	
MT SC	60	4						MT SC	81	8	
MT SC	54	4						RBT	351	410	none
RBT	268	214	Footbridge 2005					RBT	302	206	none
RBT	238	152	Footbridge 2005					RBT	299	278	none
RBT	304	310	Footbridge 2005					RBT	336	392	Footbridge 2007
RBT	323	460	none					RBT	263	174	none
RBT	283	276	Footbridge 2005					RD SH	97	6	
RBT	133	34	none					RD SH	100	12	
RBT	201	114	none					RD SH	96	10	
RBT	269	268	Footbridge 2005					RD SH	95	12	
RBT	326	442	none					RD SH	94	12	
RBT	297	282	Footbridge 2005					RD SH	93	10	
RBT	264	218	Footbridge 2005					RD SH	102	14	
RBT	329	446	none					RD SH	77	6	
RBT	249	196	none					RD SH	86	8	

Fish Survey Data
 Reach 4,
 Sample Years 2005-2007

Reach 4 2005				Reach 4 2006				Reach 4 2007			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
RBT	266	214	none					RD SH	91	10	
RBT	302	372	Footbridge 2005					RD SH	86	8	
RBT	298	306	Footbridge 2005					RD SH	86	8	
RBT	260	230	none					RD SH	96	12	
RBT	297	326	Footbridge 2005					RD SH	94	10	
RBT	286	316	Footbridge 2005					RD SH	100	14	
RBT	337	590	none					RD SH	70	6	
RBT	299	306	Footbridge 2005					RD SH	97	14	
RBT	271	236	Footbridge 2005					RD SH	62	6	
RD SH	80	6						RD SH	89	10	
RD SH	70	10						RD SH	92	12	
RD SH	88	16						RD SH	96	12	
RD SH	65	10						RD SH	70	6	
RD SH	81	12						RD SH	97	12	
RD SH	79	10						RD SH	83	8	
RD SH	63	10									
RD SH	70	6									
RD SH	83	8									
RD SH	67	4									
UT SU	129	32									
UT SU	125	26									

Fish Species Abbreviations	
Carp:	Common Carp
LN DC:	Longnose Dace
MOT SC:	Mottled Sculpin
SMB:	Smallmouth Bass
RD SH:	Redside Shiner
RBT:	Rainbow Trout
UT SU:	Utah Sucker

**Fish Survey Data
2008 - 2010**

	Reach 1 2008	Reach 1 2009	Reach 1 2010
Date	10/7/2008	10/7/2009	10/5/2010
Location	Reach 1	Reach 1	Reach 1
Field Staff	Drake Burford	Drake Burford	Drake Burford
	Ben Sudduth	Trevor McGregor	Trevor McGregor
	Levia Shoutis	Ben Sudduth	Scott Konley
H2O Temp (°C)	1/8/1900	1/5/1900	1/12/1900
Air Temp (°C)	1/3/1900	1/7/1900	1/12/1900
Start Time	1/0/1900	1/0/1900	1/0/1900
End Time	1/0/1900	1/0/1900	1/0/1900
Electrofishing Unit	Halltech HT-2000	Halltech HT-2000	Halltech HT-2000
E-Fishing Method	2 consecutive upstream passess	2 consecutive upstream passess	2 consecutive upstream passess
Settings	80/250	80/350	80/350
Effort (time in seconds)	1/8/1903	2/25/1903	2/14/1903

Reach 1 2008				Reach 1 2009				Reach 1 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
BCT	369	568		RD SH	49	2		LN DC	37	2	
LN DC	75	6		MOT SC	92	20		LN DC	46	2	
LN DC	57	4		LN DC	70	4		LN DC	61	4	
LN DC	51	4		LN DC	51	2		LN DC	45	2	
LN DC	47	2		MOT SC	84	8		LN DC	47	2	
LN DC	48	2						LN DC	40	2	
LN DC	44	2						LN DC	50	2	
LN DC	45	2						LN DC	71	4	
LN DC	99	16						LN DC	66	4	
LN DC	46	2						LN DC	65	4	
MOT SC	97	16						LN DC	63	4	
MOT SC	92	12						LN DC	69	4	
MOT SC	83	10						LN DC	36	2	
RBT	276	250	2008 Alexander					LN DC	61	4	
SMB	46	2						LN DC	59	2	
SMB	62	4						LN DC	45	2	
								LN DC	62	4	
								LN DC	40	2	
								LN DC	36	2	
								LN DC	45	2	
								LN DC	83	6	
								LN DC	60	4	
								LN DC	73	6	
								LN DC	50	2	
								LN DC	82	8	
								LN DC	71	4	
								LN DC	56	4	
								LN DC	29	2	
								LN DC	62	4	
								LN DC	49	2	
								LN DC	39	2	
								LN DC	74	4	
								LN DC	66	4	
								LN DC	81	6	
								LN DC	67	4	
								LN DC	60	4	
								LN DC	41	2	
								LN DC	71	4	
								LN DC	67	4	
								LN DC	46	2	
								LN DC	36	2	

**Fish Survey Data
2008 - 2010**

Reach 1 2008				Reach 1 2009				Reach 1 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
								LN DC	27	2	
								LN DC	60	4	
								LN DC	68	4	
								LN DC	41	2	
								LN DC	35	2	
								LN DC	37	2	
								LN DC	62	4	
								LN DC	67	4	
								LN DC	44	2	
								LN DC	43	2	
								LN DC	61	4	
								LN DC	70	4	
								LN DC	72	6	
								LN DC	95	8	
								LN DC	83	6	
								LN DC	65	4	
								MOT SC	116	24	
								MOT SC	102	16	
								CARP	94	14	
								CARP	66	4	
								CARP	58	4	
								CARP	76	8	
								SMB	74	8	
								SMB	53	4	
								YEL PR	77	6	
								YEL PR	91	6	
								YEL PR	69	4	
								YEL PR	81	8	
								YEL PR	80	6	
								YEL PR	69	4	
								YEL PR	74	6	
								YEL PR	65	4	
								YEL PR	76	4	
								YEL PR	63	4	
								YEL PR	65	4	
								YEL PR	65	4	
								YEL PR	71	4	
								UT SU	119	24	
								UT SU	102	14	
								UT SU	76	6	

**Fish Survey Data
2008 - 2010**

	Reach 2 2008	Reach 2 2009	Reach 2 2010
Date	10/6/2008	10/6/2009	10/4/2010
Location	Reach 2	Reach 2	Reach 2
Field Staff	Drake Burford	Drake Burford	Drake Burford
	Ben Sudduth	Trevor McGregor	Trevor McGregor
	Levia Shoutis	Ben Sudduth	Scott Konley
H2O Temp (°C)	1/13/1900	1/10/1900	1/15/1900
Air Temp (°C)	1/12/1900	1/14/1900	1/19/1900
Start Time	1/0/1900	1/0/1900	1/0/1900
End Time	1/0/1900	1/0/1900	1/0/1900
Electrofishing Unit	Halltech HT-2000	Halltech HT-2000	Halltech HT-2000
E-Fishing Method	2 consecutive upstream passess	2 consecutive upstream passess	2 consecutive upstream passess
Settings	80/250	80/250	80/350
Effort (time in seconds)	4/12/1903	8/12/1903	8/4/1903

Reach 2 2008				Reach 2 2009				Reach 2 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
CARP	57	6		LN DC	62	4		LN DC	67	2	
CARP	117	30		LN DC	83	12		LN DC	60	2	
CARP	61	6		LN DC	47	2		LN DC	40	2	
CARP	64	8		LN DC	60	2		LN DC	61	4	
CARP	57	6		LN DC	58	2		LN DC	56	2	
CARP	70	8		LN DC	49	2		LN DC	48	2	
CARP	67	6		LN DC	47	2		LN DC	54	4	
CARP	73	8		LN DC	40	2		LN DC	51	4	
CARP	70	6		RD SH	55	2		LN DC	37	2	
CARP	56	6		RD SH	48	2		LN DC	50	2	
CARP	47	2		RD SH	55	2		LN DC	49	2	
CARP	72	8		RD SH	57	2		LN DC	66	4	
CARP	70	8		RD SH	53	2		LN DC	62	4	
CARP	64	4		RD SH	50	2		LN DC	108	10	
CARP	99	18		SMB	75	10		LN DC	52	2	
CARP	77	8		SMB	133	38		LN DC	55	4	
LN DC	46	2						LN DC	53	4	
LN DC	57	4						LN DC	63	4	
LN DC	59	4						LN DC	64	6	
LN DC	50	4						LN DC	88	8	
LN DC	47	4						LN DC	55	4	
LN DC	92	14						LN DC	51	2	
LN DC	60	6						LN DC	56	4	
LN DC	56	4						LN DC	53	2	
LN DC	57	2						LN DC	56	4	
LN DC	98	12						LN DC	50	2	
LN DC	50	2						LN DC	57	4	
LN DC	90	10						LN DC	52	2	
LN DC	91	10						LN DC	46	2	
LN DC	89	8						LN DC	59	4	
LN DC	84	8						LN DC	61	4	
LN DC	101	12						LN DC	60	4	
LN DC	114	22						LN DC	60	4	
LN DC	101	12						LN DC	61	4	
LN DC	92	10						LN DC	62	4	
RD SH	52	4						LN DC	55	4	
RD SH	59	4						LN DC	55	4	
RD SH	49	2						LN DC	44	2	
RD SH	45	2						LN DC	57	4	
RD SH	54	4						LN DC	79	6	
RD SH	49	2						LN DC	72	6	
RD SH	56	4						LN DC	48	2	
RD SH	52	4						LN DC	60	4	

**Fish Survey Data
2008 - 2010**

Reach 2 2008				Reach 2 2009				Reach 2 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
RD SH	55	4						LN DC	66	4	
RD SH	42	4						LN DC	54	4	
RD SH	48	4						LN DC	81	6	
RD SH	46	4						LN DC	64	4	
RD SH	60	6						LN DC	82	6	
RD SH	49	4						LN DC	67	4	
RD SH	55	6						LN DC	83	6	
RD SH	53	2						LN DC	55	4	
RD SH	57	2						LN DC	81	6	
RD SH	48	2						LN DC	92	8	
RD SH	50	2						LN DC	62	4	
RD SH	49	2						LN DC	60	4	
RD SH	59	4						LN DC	56	4	
RD SH	51	2						LN DC	58	4	
RD SH	54	4						LN DC	57	4	
RD SH	53	2						LN DC	55	4	
RD SH	56	4						LN DC	58	4	
RD SH	53	4						LN DC	54	4	
RD SH	47	2						LN DC	57	4	
RD SH	54	4						LN DC	60	4	
RD SH	63	4						LN DC	50	2	
RD SH	57	4						LN DC	62	4	
RD SH	47	2						LN DC	63	4	
RD SH	49	2						LN DC	55	4	
RD SH	46	2						LN DC	54	4	
SMB	86	12						LN DC	55	4	
SMB	86	16						SMB	64	8	
SMB	66	6						SMB	87	16	
SMB	73	8						SMB	86	12	
SMB	84	12						SMB	67	4	
SMB	73	10						SMB	72	6	
								SMB	67	4	
								SMB	76	6	
								SMB	70	4	
								CARP	64	4	

**Fish Survey Data
2008 - 2010**

	Reach 3 2008	Reach 3 2009	Reach 3 2010
Date	10/8/2008	10/7/2009	10/5/2010
Location	Reach 3	Reach 3	Reach 3
Field Staff	Drake Burford	Drake Burford	Drake Burford
	Ben Sudduth	Trevor McGregor	Trevor McGregor
	Levia Shoutis	Ben Sudduth	Scott Konley
H2O Temp (°C)	1/10/1900	1/10/1900	1/14/1900
Air Temp (°C)	1/12/1900	1/8/1900	1/21/1900
Start Time	1/0/1900	1/0/1900	1/0/1900
End Time	1/0/1900	1/0/1900	1/0/1900
Electrofishing Unit	Halltech HT-2000	Halltech HT-2000	Halltech HT-2000
E-Fishing Method	2 consecutive upstream passess	2 consecutive upstream passess	2 consecutive upstream passess
Settings	80/450	80/450	80/350
Effort (time in seconds)	7/6/1902	7/12/1902	12/15/1902

Reach 3 2008				Reach 3 2009				Reach 3 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
CARP	89	14		MOT SC	103	22		SMB	119	24	
CARP	60	6		RBT	376	608	none	SMB	56	4	
MOT SC	96	14		SMB	41	2		SMB	77	8	
RD SH	76	8		SMB	50	2		SMB	72	6	
RD SH	53	4		SMB	60	4		SMB	64	4	
RD SH	73	8		SMB	51	4		SMB	63	6	
RD SH	75	4		SMB	59	4		SMB	67	6	
RD SH	78	6		SMB	123	28		SMB	66	4	
RD SH	53	4		SMB	127	30		SMB	58	4	
RD SH	51	4		SMB	62	4		SMB	54	4	
RD SH	52	4		SMB	61	4		SMB	55	4	
RD SH	66	6		SMB	35	2		SMB	65	4	
RD SH	58	4		UT SU	555	1872		SMB	65	4	
RD SH	51	4						SMB	71	6	
RD SH	54	4						SMB	64	4	
RD SH	55	4						SMB	57	4	
RD SH	48	4						SMB	111	18	
RD SH	44	2						SMB	35	2	
RD SH	47	2						SMB	60	4	
RD SH	41	2						SMB	66	6	
RD SH	75	8						SMB	68	6	
RD SH	54	4						MOT SC	74	4	
RD SH	51	4						MOT SC	69	4	
RD SH	50	4						MOT SC	105	18	
RD SH	47	4						UT SU	149	36	
RD SH	44	2						UT SU	149	38	
RD SH	49	4									
RD SH	51	4									
RD SH	59	4									
RD SH	83	8									
RD SH	47	2									
RD SH	52	2									
RD SH	55	4									
RD SH	54	4									
RD SH	53	4									
RD SH	53	4									
RD SH	56	4									
RD SH	44	2									
SMB	43	2									
SMB	58	4									
SMB	67	6									
SMB	45	2									
SMB	63	10									

**Fish Survey Data
2008 - 2010**

Reach 3 2008				Reach 3 2009				Reach 3 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
SMB	65	10									
SMB	62	8									
SMB	59	8									
SMB	71	8									
SMB	66	6									
UT SU	570	1852									
UT SU	535	1478									

**Fish Survey Data
2008 - 2010**

	Reach 4 2008	Reach 4 2009	Reach 4 2010
Date	10/7/2008	10/8/2009	10/6/2010
Location	Reach 4	Reach 4	Reach 4
Field Staff	Drake Burford	Drake Burford	Drake Burford
	Ben Sudduth	Trevor McGregor	Trevor McGregor
	Levia Shoutis	Ben Sudduth	Scott Konley
H2O Temp (°C)	1/11/1900	1/7/1900	1/13/1900
Air Temp (°C)	1/12/1900	1/4/1900	1/19/1900
Start Time	1/0/1900	1/0/1900	1/0/1900
End Time	1/0/1900	1/0/1900	1/0/1900
Electrofishing Unit	Halltech HT-2000	Halltech HT-2000	Halltech HT-2000
E-Fishing Method	2 consecutive upstream passess	2 consecutive upstream passess	2 consecutive upstream passess
Settings	80/350	80/450	80/350
Effort (time in seconds)	10/30/1902	10/31/1902	10/18/1903

Reach 4 2008				Reach 4 2009				Reach 4 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
LN DC	92	6		LN DC	101	12		RBT	236	138	none
LN DC	93	10		LN DC	81	6		RBT	291	234	none
LN DC	83	6		MOT SC	101	8		RBT	199	70	none
LN DC	87	8		MOT SC	91	8		RBT	229	154	none
LN DC	95	14		MOT SC	95	10		RBT	355	480	none
LN DC	74	6		MOT SC	56	4		RBT	269	184	none
LN DC	88	8		MOT SC	62	4		LN DC	112	18	
LN DC	83	8		MOT SC	66	4		LN DC	112	16	
LN DC	89	8		MOT SC	93	8		LN DC	85	8	
LN DC	91	10		MOT SC	80	8		LN DC	112	14	
LN DC	90	12		MOT SC	76	8		LN DC	102	14	
LN DC	95	12		MOT SC	59	4		MOT SC	66	4	
LN DC	96	10		MOT SC	66	4		MOT SC	58	4	
LN DC	84	8		MOT SC	55	2		MOT SC	64	4	
LN DC	92	8		MOT SC	63	2		MOT SC	67	4	
LN DC	99	10		MOT SC	68	4		MOT SC	66	4	
LN DC	109	16		MOT SC	94	6		MOT SC	89	10	
LN DC	64	4		MOT SC	70	4		MOT SC	65	4	
MOT SC	109	20		MOT SC	65	4		MOT SC	58	4	
MOT SC	92	12		MOT SC	63	4		MOT SC	56	2	
MOT SC	66	6		MOT SC	69	4		MOT SC	61	4	
MOT SC	61	4		RBT	267	170	none	MOT SC	63	4	
MOT SC	52	2		RBT	258	182	none	MOT SC	69	4	
MOT SC	61	4		RBT	233	118	none	MOT SC	56	2	
MOT SC	71	4		RBT	239	166	none	MOT SC	51	2	
MOT SC	75	8		RBT	231	122	none	MOT SC	65	4	
MOT SC	85	8		RD SH	90	10		MOT SC	60	4	
MOT SC	80	8		RD SH	103	12		MOT SC	61	4	
MOT SC	76	6		RD SH	91	10		MOT SC	72	6	
MOT SC	86	8		RD SH	100	8		MOT SC	65	4	
MOT SC	70	4		RD SH	103	12		MOT SC	58	4	
MOT SC	58	2		RD SH	110	14		MOT SC	64	4	
MOT SC	66	4		RD SH	96	6		MOT SC	65	4	
MOT SC	60	2						MOT SC	64	4	
MOT SC	57	2						MOT SC	52	2	
MOT SC	49	2						MOT SC	64	4	
RBT	307	342	none					MOT SC	58	4	
RBT	260	214	Footbridge 2008					MOT SC	61	4	
RBT	263	186	Footbridge 2008					MOT SC	59	4	
RBT	213	104	Footbridge 2008					MOT SC	62	4	

**Fish Survey Data
2008 - 2010**

Reach 4 2008				Reach 4 2009				Reach 4 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
RBT	352	502	none					MOT SC	113	18	
RBT	242	162	Footbridge 2008					MOT SC	92	12	
RBT	269	226	none					MOT SC	42	2	
RBT	271	208	Footbridge 2008					MOT SC	65	4	
RBT	274	254	none					MOT SC	61	4	
RD SH	106	14						MOT SC	56	4	
RD SH	103	12						MOT SC	47	2	
								MOT SC	57	4	
								MOT SC	55	4	
								MOT SC	46	2	
								MOT SC	49	2	
								MOT SC	60	4	
								MOT SC	60	6	
								MOT SC	65	4	
								MOT SC	65	6	
								MOT SC	61	4	
								MOT SC	94	12	
								MOT SC	92	12	
								MOT SC	102	12	
								MOT SC	100	12	
								MOT SC	54	4	
								MOT SC	71	6	
								MOT SC	73	6	
								MOT SC	62	4	
								MOT SC	58	4	
								MOT SC	68	4	
								MOT SC	76	6	
								MOT SC	60	4	
								MOT SC	70	4	
								MOT SC	61	4	
								MOT SC	61	4	
								MOT SC	62	4	
								MOT SC	58	2	
								MOT SC	63	4	
								MOT SC	68	4	
								MOT SC	63	4	
								MOT SC	91	10	
								MOT SC	93	12	
								MOT SC	65	4	
								MOT SC	72	4	
								MOT SC	62	4	
								MOT SC	52	2	
								MOT SC	80	6	
								MOT SC	63	4	
								MOT SC	100	16	
								MOT SC	66	4	
								MOT SC	70	4	
								MOT SC	66	4	
								MOT SC	74	6	
								MOT SC	53	2	
								MOT SC	79	8	
								MOT SC	69	4	
								MOT SC	55	2	
								MOT SC	60	2	
								MOT SC	52	2	
								MOT SC	70	4	
								MOT SC	81	8	
								MOT SC	57	2	
								MOT SC	67	4	

**Fish Survey Data
2008 - 2010**

Reach 4 2008				Reach 4 2009				Reach 4 2010			
Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand	Species	Length (mm)	Weight (g)	Freeze Brand
								MOT SC	99	14	
								MOT SC	49	2	
								MOT SC	59	4	
								MOT SC	56	2	
								MOT SC	68	4	
								MOT SC	53	2	
								MOT SC	55	2	
								MOT SC	50	2	
								MOT SC	43	2	
								SMB	56	4	

(This page intentionally blank)

APPENDIX E

BENTHIC MACROINVERTEBRATE DATA

(This page intentionally blank)

Taxa Density (orgs/m²)
 Reach 1, Bear River, ID

2005-2007 Master Taxa List		Reach 1 Composite Above Soda Reservoir								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Ephemeroptera	Asiopanax sp.	-	-	-	6	14	10	13	26	19
	Baetis sp.	-	-	-	1,576	966	711	-	-	-
	Baetis tricaudatus	1,967	1,013	745	431	568	418	1,414	985	725
	Ephemerella inermis/infrequens	3,885	3,310	2,435	861	1,506	1,108	-	-	-
	Ephemerella sp.	270	604	444	1,897	858	631	293	130	96
	Fallceon quilleri	-	-	-	-	-	-	-	-	-
	Heptageniidae	41	39	29	119	46	34	-	-	-
	Heptagenia sp.	-	-	-	-	-	-	37	31	23
	Heterocloeon sp.	-	-	-	-	-	-	-	-	-
	Leptohyphidae	-	-	-	913	480	353	-	-	-
	Maccaffertium terminatum	-	-	-	-	-	-	213	198	146
	Plautidius sp.	-	-	-	-	-	-	6	13	10
	Stenonema terminatum	568	348	256	63	141	104	-	-	-
	Tricorythodes sp.	2,776	2,216	1,630	677	285	210	805	295	217
Odonata	Argia sp.	-	-	-	-	-	-	-	-	-
	Coenagrion/Enallagma sp.	-	-	-	-	-	-	-	-	-
	Coenagrionidae	-	-	-	-	-	-	-	-	-
	Gomphidae	-	-	-	6	13	10	-	-	-
	Ophiogomphus sp.	3	6	4	-	-	-	-	-	-
Plecoptera	Perlidae	-	-	-	54	61	45	-	-	-
	Perlodidae	354	175	129	27	60	44	47	56	41
	Zapada cinctipes	-	-	-	-	-	-	-	-	-
Hemiptera	Sigara sp.	-	-	-	-	-	-	-	-	-
Coleoptera	Agabus sp.	-	-	-	-	-	-	-	-	-
	Cleptelmis addenda	-	-	-	9	20	15	-	-	-
	Dubiraphia sp.	-	-	-	-	-	-	-	-	-
	Heterolimnius sp.	-	-	-	-	-	-	-	-	-
	Microcylloepus sp.	31	33	24	29	17	13	88	47	34
	Optioservus sp.	21	29	21	35	35	26	26	22	16
	Stictotarsus sp.	-	-	-	-	-	-	-	-	-
Diptera-	Cardiocladius sp.	-	-	-	39	59	44	9	18	14
	Chironomini	-	-	-	-	-	-	-	-	-
	Cladopelma sp.	-	-	-	-	-	-	-	-	-
	Cladotanytarsus sp.	190	195	143	8	18	13	43	8	6
	Chironomidae	-	-	-	-	-	-	-	-	-
	Cricotopus bicinctus gr.	10	23	17	-	-	-	-	-	-
	Cricotopus sp.	-	-	-	43	30	22	-	-	-
	Cricotopus trifascia gr.	1,032	576	424	1,828	197	145	2,044	1,479	1,088
	Cryptochironomus sp.	20	45	33	-	-	-	-	-	-
	Derotanyptus sp.	-	-	-	-	-	-	-	-	-
	Diamesa sp.	32	72	53	50	35	25	-	-	-
	Dicortendipes sp.	-	-	-	-	-	-	-	-	-
	Eukiefferiella brehmi gr.	-	-	-	6	14	10	-	-	-
	Eukiefferiella coerulescens gr.	-	-	-	-	-	-	-	-	-
	Eukiefferiella devonica gr.	15	34	25	23	22	16	42	39	29
	Eukiefferiella gracei gr.	-	-	-	-	-	-	-	-	-
	Lopescladius (Cordiella) sp.	13	23	17	-	-	-	12	23	17
	Micropsectra sp.	-	-	-	-	-	-	-	-	-
	Micropsectra/Tanytarsus sp.	-	-	-	-	-	-	-	-	-

Taxa Density (orgs/m²)
 Reach 1, Bear River, ID

2005-2007 Master Taxa List		Reach 1 Composite Above Soda Reservoir								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Chironomidae	Microtendipes pedellus gr.	1,075	766	563	773	233	172	398	132	97
	Nanocladius sp.	10	23	17	-	-	-	-	-	-
	Orthocladiinae	-	-	-	16	35	26	-	-	-
	Orthocladius (Euortho.) rivicola gr.	462	325	239	27	41	30	-	-	-
	Orthocladius (Euortho.) rivulorum	-	-	-	-	-	-	-	-	-
	Orthocladius (Euortho.) rivulorum gr.	-	-	-	-	-	-	-	-	-
	Orthocladius (Euorthocladius) sp.	-	-	-	458	240	176	79	66	49
	Orthocladius Complex	404	358	263	157	225	165	-	-	-
	Orthocladius sp.	521	398	293	203	73	53	130	70	51
	Parakiefferiella sp.	-	-	-	-	-	-	-	-	-
	Parametriochnemus sp.	-	-	-	-	-	-	9	18	14
	Paratanytarsus sp.	-	-	-	-	-	-	-	-	-
	Paratendipes sp.	-	-	-	-	-	-	-	-	-
	Pentaneura sp.	30	68	50	-	-	-	-	-	-
	Pentaneurini	-	-	-	-	-	-	-	-	-
	Phaenopsectra sp.	-	-	-	-	-	-	-	-	-
	Polypedilum sp.	339	305	225	79	123	90	29	37	27
	Potthastia longimana gr.	-	-	-	-	-	-	-	-	-
	Pseudochironomus sp.	-	-	-	-	-	-	-	-	-
	Rheocricotopus sp.	15	34	25	8	18	13	13	26	19
	Rheotanytarsus sp.	381	296	218	83	68	50	-	-	-
	Sublettea sp.	-	-	-	-	-	-	-	-	-
	Tanytarsini	-	-	-	-	-	-	-	-	-
	Tanytarsus sp.	-	-	-	-	-	-	-	-	-
	Thienemanniella sp.	71	56	41	100	107	78	28	55	41
	Thienemannimyia gr. sp.	1,338	1,407	1,035	265	60	44	88	73	54
	Tvetenia bavarica gr.	-	-	-	-	-	-	-	-	-
	Tvetenia discoloripes gr.	980	827	608	272	169	124	136	109	80
	Xenochironomus xenolabis	-	-	-	-	-	-	-	-	-
Diptera	Bezzia/Palpomyia sp.	-	-	-	-	-	-	-	-	-
	Caloparyphus sp.	-	-	-	-	-	-	-	-	-
	Ceratopogoninae	-	-	-	-	-	-	-	-	-
	Diptera	-	-	-	-	-	-	-	-	-
	Empididae	11	24	18	-	-	-	-	-	-
	Ephydriidae	-	-	-	-	-	-	-	-	-
	Hemerodromia sp.	134	187	138	35	35	26	283	108	79
	Muscidae	-	-	-	-	-	-	-	-	-
	Neoplasta sp.	-	-	-	-	-	-	-	-	-
	Probezzia sp.	-	-	-	-	-	-	-	-	-
	Simuliidae	-	-	-	392	565	415	-	-	-
	Simulium sp.	1,619	1,883	1,385	2,411	1,571	1,155	399	162	119
	Stratiomyidae	-	-	-	-	-	-	-	-	-
	Tipula sp.	-	-	-	-	-	-	-	-	-
	Tipulidae	5	12	9	-	-	-	-	-	-
	Amiocentrus aspilus	-	-	-	-	-	-	-	-	-
	Brachycentrus occidentalis	677	360	265	968	655	481	513	125	92
	Cheumatopsyche sp.	811	494	364	1,309	1,115	820	1,500	330	243
	Chimarra sp.	-	-	-	-	-	-	-	-	-
	Culoptila sp.	170	108	79	228	137	101	2,624	1,249	919

Taxa Density (orgs/m²)
Reach 1, Bear River, ID

2005-2007 Master Taxa List		Reach 1 Composite Above Soda Reservoir								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Trichoptera	Glossosomatidae	-	-	-	-	-	-	-	-	-
	Helicopsyche sp.	244	217	159	93	75	55	154	140	103
	Hydropsyche sp.	2,061	1,172	862	2,952	2,897	2,131	1,388	465	342
	Hydropsychidae	-	-	-	32	37	27	-	-	-
	Hydroptila sp.	101	74	54	24	36	26	37	74	54
	Hydroptilidae	-	-	-	16	22	16	-	-	-
	Leptoceridae	-	-	-	16	22	16	-	-	-
	Limnephilidae	11	24	18	-	-	-	-	-	-
	Mayatrichia sp.	-	-	-	-	-	-	-	-	-
	Nectopsyche sp.	-	-	-	15	21	15	4	9	7
	Neotrichia sp.	-	-	-	12	26	19	-	-	-
	Oecetis avara	326	160	118	218	39	29	29	31	23
	Oecetis sp.	-	-	-	-	-	-	-	-	-
	Oxyethira sp.	-	-	-	-	-	-	-	-	-
	Polycentropus sp.	-	-	-	-	-	-	-	-	-
	Protophila sp.	561	733	539	916	612	450	2,034	938	690
Lepidoptera	Petrophila sp.	266	155	114	83	79	58	182	100	74
Gastropoda	Fluminicola sp.	-	-	-	-	-	-	-	-	-
	Gyraulus sp.	-	-	-	-	-	-	-	-	-
	Hydrobiidae	-	-	-	-	-	-	-	-	-
	Lymnaeidae	-	-	-	-	-	-	-	-	-
	Physa sp.	5	12	9	-	-	-	-	-	-
	Planorbidae	-	-	-	-	-	-	-	-	-
	Potamopyrgus antipodarum	-	-	-	-	-	-	-	-	-
	Pyrgulopsis sp.	-	-	-	-	-	-	-	-	-
	Valvata sp.	-	-	-	-	-	-	-	-	-
Bivalvia	Anodonta sp.	-	-	-	-	-	-	-	-	-
	Pisidium sp.	145	106	78	77	59	43	-	-	-
	Sphaeriidae	-	-	-	14	19	14	9	18	14
	Sphaerium sp.	-	-	-	-	-	-	9	18	13
Annelida	Aulodrilus pigueti	-	-	-	-	-	-	-	-	-
	Eclipidrilus sp.	-	-	-	-	-	-	-	-	-
	Enchytraeidae	3	6	4	-	-	-	-	-	-
	Erpobdellidae	13	23	17	-	-	-	-	-	-
	Helobdella sp.	-	-	-	-	-	-	-	-	-
	Limnodrilus hoffmeisteri	-	-	-	-	-	-	-	-	-
	Lumbricina	11	24	18	-	-	-	-	-	-
	Lumbriculidae	-	-	-	-	-	-	-	-	-
	Nais behningi	289	348	256	8	18	13	-	-	-
	Nais bretscheri	-	-	-	-	-	-	-	-	-
	Nais communis	-	-	-	-	-	-	-	-	-
	Nais elinguis	-	-	-	-	-	-	-	-	-
	Nais variabilis	521	499	367	61	68	50	-	-	-
	Ophidonais serpentina	68	89	65	6	13	10	-	-	-
	Rhynchelmis rostrata	-	-	-	-	-	-	-	-	-
	Quistradrilus multisetosus	-	-	-	-	-	-	-	-	-
	Spirosperma ferox	-	-	-	-	-	-	-	-	-
	Spirosperma sp.	-	-	-	-	-	-	-	-	-
	Tubificidae w/ cap setae	76	60	44	52	47	35	-	-	-

Taxa Density (orgs/m²)
 Reach 1, Bear River, ID

2005-2007 Master Taxa List		Reach 1 Composite Above Soda Reservoir								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Tubificidae w/o cap setae	62	51	38	32	30	22	-	-	-
Acari	Acari	-	-	-	6	14	10	-	-	-
	Atractides sp.	11	24	18	18	41	30	-	-	-
	Aturus sp.	-	-	-	-	-	-	-	-	-
	Corticacarus	-	-	-	-	-	-	-	-	-
	Hygrobates sp.	-	-	-	-	-	-	-	-	-
	Lebertia sp.	11	24	18	-	-	-	-	-	-
	Limnesiidae	-	-	-	-	-	-	-	-	-
	Oribatei	-	-	-	-	-	-	-	-	-
	Sperchon sp.	26	31	23	47	56	41	6	13	10
	Testudacarus sp.	-	-	-	-	-	-	-	-	-
	Torrenticola sp.	-	-	-	-	-	-	-	-	-
Crustacea	Hyalella sp.	20	33	24	14	19	14	16	19	14
	Ostracoda	11	24	18	-	-	-	-	-	-
Other Organisms	Hydra sp.	-	-	-	-	-	-	-	-	-
	Nematoda	-	-	-	8	18	13	9	18	14
	Prostoma sp.	-	-	-	-	-	-	-	-	-
	Turbellaria	-	-	-	-	-	-	-	-	-
TOTAL		25,123	14,081	10,358	21,202	6,628	4,876	15,199	4,386	3,226

Taxa Density (orgs/m²)
 Reach 2, Bear River, ID

2005-2007 Master Taxa List		Reach 2 Composite Below Grace Dam								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Ephemeroptera	Asioplax sp.	-	-	-	-	-	-	-	-	-
	Baetis sp.	-	-	-	29	51	38	-	-	-
	Baetis tricaudatus	-	-	-	-	-	-	9	19	14
	Ephemerella inermis/infrequens	-	-	-	-	-	-	-	-	-
	Ephemerella sp.	-	-	-	-	-	-	-	-	-
	Fallceon quilleri	-	-	-	64	74	55	7	13	10
	Heptageniidae	-	-	-	-	-	-	-	-	-
	Heptagenia sp.	-	-	-	-	-	-	-	-	-
	Heterocloeon sp.	-	-	-	-	-	-	-	-	-
	Leptohyphidae	-	-	-	12	26	19	-	-	-
	Maccaffertium terminatum	-	-	-	-	-	-	-	-	-
	Plauditus sp.	-	-	-	-	-	-	-	-	-
	Stenonema terminatum	-	-	-	-	-	-	-	-	-
	Tricorythodes sp.	11	24	18	10	23	17	-	-	-
Odonata	Argia sp.	-	-	-	-	-	-	3	6	5
	Coenagrion/Enallagma sp.	68	77	57	12	26	19	-	-	-
	Coenagrionidae	27	47	34	71	97	72	77	129	95
	Gomphidae	-	-	-	-	-	-	-	-	-
	Ophiogomphus sp.	-	-	-	-	-	-	-	-	-
Plecoptera	Perlidae	-	-	-	-	-	-	-	-	-
	Perlodidae	-	-	-	-	-	-	-	-	-
	Zapada cinctipes	-	-	-	-	-	-	-	-	-
Hemiptera	Sigara sp.	-	-	-	-	-	-	-	-	-
Coleoptera	Agabus sp.	-	-	-	-	-	-	-	-	-
	Cleptelmis addenda	-	-	-	-	-	-	5	9	7
	Dubiraphia sp.	-	-	-	-	-	-	-	-	-
	Heterlimnius sp.	-	-	-	-	-	-	-	-	-
	Microcylloepus sp.	58	63	46	68	88	64	46	83	61
	Optioservus sp.	-	-	-	5	12	9	-	-	-
	Stictotarsus sp.	-	-	-	-	-	-	-	-	-
Diptera-	Cardiocladius sp.	-	-	-	63	74	54	9	19	14
	Chironomini	-	-	-	-	-	-	-	-	-
	Cladopelma sp.	1	3	2	-	-	-	-	-	-
	Cladotanytarsus sp.	5	12	9	-	-	-	5	9	7
	Chironomidae	-	-	-	-	-	-	-	-	-
	Cricotopus bicinctus gr.	200	206	152	474	558	411	68	79	58
	Cricotopus sp.	331	198	146	242	192	141	51	54	39
	Cricotopus trifascia gr.	364	298	219	3,283	2,923	2,150	870	749	551
	Cryptochironomus sp.	45	48	35	-	-	-	-	-	-
	Derotanypus sp.	-	-	-	-	-	-	-	-	-
	Diamesa sp.	12	24	17	-	-	-	-	-	-
	Dicrotendipes sp.	631	750	552	203	196	144	53	65	48
	Eukiefferiella brehmi gr.	-	-	-	-	-	-	-	-	-
	Eukiefferiella coerulescens gr.	3	6	4	29	37	27	-	-	-
	Eukiefferiella devonica gr.	40	45	33	326	371	273	49	63	47
	Eukiefferiella gracei gr.	-	-	-	-	-	-	-	-	-
	Lopescladius (Cordiella) sp.	-	-	-	-	-	-	-	-	-
	Micropsectra sp.	5	12	9	42	44	32	5	9	7
	Micropsectra/Tanytarsus sp.	32	72	53	-	-	-	-	-	-

Taxa Density (orgs/m²)
 Reach 2, Bear River, ID

2005-2007 Master Taxa List		Reach 2 Composite Below Grace Dam								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Chironomidae	Microtendipes pedellus gr.	267	546	402	990	1,435	1,055	-	-	-
	Nanocladius sp.	-	-	-	-	-	-	-	-	-
	Orthocladiinae	-	-	-	22	48	35	-	-	-
	Orthocladius (Euortho.) rivicola gr.	-	-	-	55	73	54	-	-	-
	Orthocladius (Euortho.) rivulorum	-	-	-	-	-	-	-	-	-
	Orthocladius (Euortho.) rivulorum gr.	-	-	-	-	-	-	-	-	-
	Orthocladius (Euorthocladius) sp.	122	70	52	516	707	520	14	28	21
	Orthocladius Complex	1,187	1,166	858	1,763	1,562	1,149	-	-	-
	Orthocladius sp.	299	193	142	1,477	2,254	1,658	460	342	252
	Parakiefferiella sp.	899	928	682	804	808	594	58	39	29
	Parametriochnemus sp.	-	-	-	-	-	-	-	-	-
	Paratanytarsus sp.	-	-	-	21	29	22	-	-	-
	Paratendipes sp.	-	-	-	-	-	-	-	-	-
	Pentaneura sp.	12	24	17	20	27	20	-	-	-
	Pentaneurini	-	-	-	-	-	-	-	-	-
	Phaenopsectra sp.	9	13	9	-	-	-	-	-	-
	Polypedilum sp.	69	143	105	87	126	93	-	-	-
	Potthastia longimana gr.	66	75	55	-	-	-	-	-	-
	Pseudochironomus sp.	1,650	2,020	1,486	374	257	189	48	72	53
	Rheocricotopus sp.	7	16	12	64	70	52	-	-	-
	Rheotanytarsus sp.	23	23	17	422	648	476	9	19	14
	Sublettea sp.	-	-	-	-	-	-	-	-	-
	Tanytarsini	-	-	-	-	-	-	-	-	-
	Tanytarsus sp.	-	-	-	9	21	15	-	-	-
	Thienemanniella sp.	-	-	-	24	53	39	-	-	-
	Thienemannimyia gr. sp.	78	168	123	21	46	34	-	-	-
	Tvetenia bavarica gr.	-	-	-	-	-	-	-	-	-
	Tvetenia discoloripes gr.	67	74	55	114	202	149	-	-	-
	Xenochironomus xenolabis	-	-	-	-	-	-	-	-	-
Diptera	Bezzia/Palpomyia sp.	149	192	141	63	74	54	9	19	14
	Caloparyphus sp.	-	-	-	-	-	-	-	-	-
	Ceratopogoninae	-	-	-	-	-	-	3	7	5
	Diptera	-	-	-	-	-	-	-	-	-
	Empididae	-	-	-	-	-	-	-	-	-
	Ephydridae	-	-	-	-	-	-	-	-	-
	Hemerodromia sp.	110	83	61	120	146	108	7	13	10
	Muscidae	-	-	-	12	26	19	-	-	-
	Neoplasta sp.	-	-	-	-	-	-	-	-	-
	Probezzia sp.	-	-	-	-	-	-	6	13	9
	Simuliidae	-	-	-	36	79	58	-	-	-
	Simulium sp.	408	366	269	1,930	2,344	1,724	427	732	538
	Stratiomyidae	3	6	4	10	23	17	-	-	-
	Tipula sp.	1	3	2	-	-	-	-	-	-
	Tipulidae	-	-	-	-	-	-	-	-	-
	Amiocentrus aspilus	-	-	-	-	-	-	-	-	-
	Brachycentrus occidentalis	-	-	-	-	-	-	-	-	-
	Cheumatopsyche sp.	38	27	20	169	244	179	8	10	7
	Chimarra sp.	-	-	-	-	-	-	9	19	14
	Culoptila sp.	-	-	-	-	-	-	-	-	-

Taxa Density (orgs/m²)
 Reach 2, Bear River, ID

2005-2007 Master Taxa List		Reach 2 Composite Below Grace Dam								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Trichoptera	Glossosomatidae	-	-	-	-	-	-	-	-	-
	Helicopsyche sp.	29	41	30	93	208	153	5	9	7
	Hydropsyche sp.	84	61	45	167	189	139	33	66	49
	Hydropsychidae	-	-	-	31	69	51	-	-	-
	Hydroptila sp.	111	70	52	72	162	119	14	28	21
	Hydroptilidae	-	-	-	33	37	27	5	9	7
	Leptoceridae	12	24	17	34	52	38	-	-	-
	Limnephilidae	-	-	-	-	-	-	-	-	-
	Mayatrichia sp.	-	-	-	-	-	-	-	-	-
	Nectopsyche sp.	8	17	13	-	-	-	-	-	-
	Neotrichia sp.	-	-	-	-	-	-	-	-	-
	Oecetis avara	295	507	373	529	940	692	-	-	-
	Oecetis sp.	-	-	-	-	-	-	-	-	-
	Oxyethira sp.	7	16	12	-	-	-	-	-	-
	Polycentropus sp.	-	-	-	-	-	-	-	-	-
	Protoptila sp.	-	-	-	-	-	-	-	-	-
Lepidoptera	Petrophila sp.	9	13	9	24	53	39	-	-	-
Gastropoda	Fluminicola sp.	-	-	-	-	-	-	-	-	-
	Gyraulus sp.	-	-	-	-	-	-	-	-	-
	Hydrobiidae	-	-	-	-	-	-	-	-	-
	Lymnaeidae	1	3	2	17	38	28	-	-	-
	Physa sp.	-	-	-	-	-	-	-	-	-
	Planorbidae	-	-	-	-	-	-	-	-	-
	Potamopyrgus antipodarum	-	-	-	-	-	-	-	-	-
	Pyrgulopsis sp.	-	-	-	-	-	-	-	-	-
	Valvata sp.	-	-	-	-	-	-	-	-	-
Bivalvia	Anodonta sp.	-	-	-	-	-	-	-	-	-
	Pisidium sp.	86	193	142	710	582	428	-	-	-
	Sphaeriidae	21	29	21	385	314	231	99	58	43
	Sphaerium sp.	-	-	-	-	-	-	-	-	-
Annelida	Aulodrilus pigueti	-	-	-	-	-	-	-	-	-
	Eclipidrilus sp.	-	-	-	49	44	32	-	-	-
	Enchytraeidae	1	3	2	88	145	107	5	9	7
	Erpobdellidae	-	-	-	21	29	22	-	-	-
	Helobdella sp.	-	-	-	-	-	-	-	-	-
	Limnodrilus hoffmeisteri	-	-	-	-	-	-	-	-	-
	Lumbricina	8	12	9	12	26	19	-	-	-
	Lumbriculidae	-	-	-	-	-	-	28	38	28
	Nais behningi	-	-	-	-	-	-	-	-	-
	Nais bretscheri	-	-	-	34	77	57	-	-	-
	Nais communis	-	-	-	-	-	-	-	-	-
	Nais elinguis	-	-	-	-	-	-	-	-	-
	Nais variabilis	-	-	-	-	-	-	-	-	-
	Ophidonais serpentina	-	-	-	-	-	-	-	-	-
	Rhynchelmis rostrata	-	-	-	170	180	133	-	-	-
	Quistradrilus multisetosus	-	-	-	-	-	-	344	545	401
	Spirosperma ferox	-	-	-	452	963	708	-	-	-
	Spirosperma sp.	128	123	91	-	-	-	-	-	-
	Tubificidae w/ cap setae	18	25	19	95	181	133	57	114	84

Taxa Density (orgs/m²)
 Reach 2, Bear River, ID

2005-2007 Master Taxa List		Reach 2 Composite Below Grace Dam								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Tubificidae w/o cap setae	146	156	114	762	1,319	970	257	425	312
Acari	Acari	11	24	18	3	6	4	-	-	-
	Atractides sp.	-	-	-	-	-	-	-	-	-
	Aturus sp.	-	-	-	-	-	-	-	-	-
	Corticacarus	62	60	44	-	-	-	-	-	-
	Hygrobates sp.	1,593	1,699	1,250	5,470	5,989	4,406	3,418	4,627	3,404
	Lebertia sp.	1	3	2	63	67	49	111	77	56
	Limnesiidae	-	-	-	23	37	27	-	-	-
	Oribatei	3	6	4	-	-	-	-	-	-
	Sperchon sp.	202	178	131	207	180	132	54	50	37
	Testudacarus sp.	-	-	-	-	-	-	-	-	-
	Torrenticola sp.	156	158	116	737	859	632	1,324	1,940	1,427
Crustacea	Hyalella sp.	29	35	26	34	52	38	-	-	-
	Ostracoda	4,192	3,481	2,560	3,349	3,272	2,407	3,303	2,617	1,925
Other Organisms	Hydra sp.	-	-	-	-	-	-	-	-	-
	Nematoda	181	156	114	488	499	367	298	410	301
	Prostoma sp.	29	64	47	361	808	594	16	16	12
	Turbellaria	1,679	1,721	1,266	3,358	2,027	1,491	221	270	199
TOTAL		16,400	11,197	8,236	31,927	17,585	12,935	11,909	11,587	8,524

Taxa Density (orgs/m²)
 Reach 3, Bear River, ID

2005-2007 Master Taxa List		Reach 3 Composite Black Canyon								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Ephemeroptera	Asioplax sp.	-	-	-	-	-	-	-	-	-
	Baetis sp.	29	29	22	7	16	12	-	-	-
	Baetis tricaudatus	-	-	-	175	239	176	43	80	59
	Ephemerella inermis/infrequens	-	-	-	-	-	-	-	-	-
	Ephemerella sp.	-	-	-	-	1	1	-	-	-
	Fallceon quilleri	53	70	52	90	104	76	57	100	73
	Heptageniidae	-	-	-	-	-	-	-	-	-
	Heptagenia sp.	-	-	-	-	-	-	-	-	-
	Heterocloeon sp.	-	-	-	-	-	-	-	-	-
	Leptohyphidae	-	-	-	14	14	10	-	-	-
	Maccaffertium terminatum	-	-	-	-	-	-	-	-	-
	Plauditus sp.	-	-	-	-	-	-	-	-	-
	Stenonema terminatum	-	-	-	-	-	-	-	-	-
	Tricorythodes sp.	134	193	142	9	19	14	6	7	5
Odonata	Argia sp.	28	17	12	1	3	2	1	2	1
	Coenagrion/Enallagma sp.	-	-	-	-	-	-	-	-	-
	Coenagrionidae	3	7	5	-	1	1	4	7	5
	Gomphidae	-	-	-	-	-	-	-	-	-
	Ophiogomphus sp.	-	-	-	-	-	-	-	-	-
Plecoptera	Perlidae	-	-	-	-	-	-	-	-	-
	Perlodidae	-	-	-	-	-	-	-	-	-
	Zapada cinctipes	3	6	4	2	5	4	-	-	-
Hemiptera	Sigara sp.	2	5	4	-	-	-	1	1	1
Coleoptera	Agabus sp.	-	-	-	-	-	-	1	1	1
	Cleptelmis addenda	-	-	-	-	-	-	-	-	-
	Dubiraphia sp.	4	7	5	1	1	1	1	1	1
	Heterlimnius sp.	-	-	-	-	-	-	1	2	2
	Microcylloepus sp.	149	136	100	464	597	439	121	109	80
	Optioservus sp.	435	306	225	621	496	365	151	100	74
	Stictotarsus sp.	-	-	-	-	-	-	-	-	-
Diptera-	Cardiocladius sp.	1	2	2	38	49	36	8	14	11
	Chironomini	0	1	1	-	-	-	-	-	-
	Cladopelma sp.	-	-	-	-	-	-	-	-	-
	Cladotanytarsus sp.	17	19	14	-	-	-	1	2	2
	Chironomidae	-	-	-	-	-	-	-	-	-
	Cricotopus bicinctus gr.	2	5	4	7	15	11	-	-	-
	Cricotopus sp.	10	19	14	56	53	39	34	20	15
	Cricotopus trifascia gr.	46	43	32	60	58	43	13	21	16
	Cryptochironomus sp.	11	15	11	-	-	-	-	-	-
	Derotanypus sp.	-	-	-	-	-	-	-	-	-
	Diamesa sp.	4	6	4	8	18	13	1	2	1
	Dicrotendipes sp.	6	8	6	1	2	2	1	1	1
	Eukiefferiella brehmi gr.	-	-	-	-	-	-	-	-	-
	Eukiefferiella coerulescens gr.	3	7	5	30	33	24	5	7	5
	Eukiefferiella devonica gr.	9	8	6	97	118	87	26	42	31
	Eukiefferiella gracei gr.	-	-	-	-	-	-	-	-	-
	Lopescladius (Cordiella) sp.	-	-	-	-	-	-	-	-	-
	Micropsectra sp.	16	35	26	-	1	1	-	-	-
	Micropsectra/Tanytarsus sp.	5	6	5	-	1	1	-	-	-

Taxa Density (orgs/m²)
 Reach 3, Bear River, ID

2005-2007 Master Taxa List		Reach 3 Composite Black Canyon								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Chironomidae	Microtendipes pedellus gr.	24	23	17	1	2	2	1	1	1
	Nanocladius sp.	-	-	-	-	-	-	-	-	-
	Orthocladiinae	-	-	-	17	19	14	-	-	-
	Orthocladius (Euortho.) rivicola gr.	9	21	15	1	2	2	-	-	-
	Orthocladius (Euortho.) rivulorum	196	151	111	564	644	474	174	270	198
	Orthocladius (Euortho.) rivulorum gr.	-	-	-	10	14	10	-	-	-
	Orthocladius (Euorthocladius) sp.	2	5	4	15	20	15	-	-	-
	Orthocladius Complex	83	63	46	156	158	116	-	-	-
	Orthocladius sp.	574	504	371	567	584	429	441	444	327
	Parakiefferiella sp.	35	30	22	7	6	5	13	12	9
	Parametriochnemus sp.	-	-	-	-	-	-	-	-	-
	Paratanytarsus sp.	-	-	-	-	-	-	-	-	-
	Paratendipes sp.	3	7	5	-	-	-	-	-	-
	Pentaneura sp.	-	-	-	-	-	-	-	-	-
	Pentaneurini	-	-	-	-	-	-	-	-	-
	Phaenopsectra sp.	-	-	-	-	-	-	-	-	-
	Polypedilum sp.	3	7	5	7	15	11	4	7	5
	Potthastia longimana gr.	-	-	-	-	-	-	-	-	-
	Pseudochironomus sp.	226	196	144	775	699	514	61	60	44
	Rheocricotopus sp.	-	-	-	8	18	13	-	-	-
	Rheotanytarsus sp.	8	7	6	28	50	37	24	34	25
	Sublettea sp.	-	-	-	-	-	-	-	-	-
	Tanytarsini	-	-	-	-	-	-	-	-	-
	Tanytarsus sp.	3	7	5	0	1	1	-	-	-
	Thienemanniella sp.	2	5	4	-	-	-	1	1	1
	Thienemannimyia gr. sp.	10	13	10	1	1	1	11	13	9
	Tvetenia bavarica gr.	-	-	-	-	-	-	-	-	-
	Tvetenia discoloripes gr.	-	-	-	-	-	-	4	7	5
	Xenochironomus xenolabis	-	-	-	-	-	-	-	-	-
Diptera	Bezzia/Palpomyia sp.	150	138	102	14	17	12	25	42	31
	Caloparyphus sp.	-	-	-	-	-	-	-	-	-
	Ceratopogoninae	-	-	-	-	-	-	-	-	-
	Diptera	-	-	-	-	-	-	-	-	-
	Empididae	-	-	-	-	-	-	-	-	-
	Ephydriidae	-	-	-	-	-	-	-	-	-
	Hemerodromia sp.	97	67	49	89	67	49	40	38	28
	Muscidae	-	-	-	-	-	-	1	2	1
	Neoplasta sp.	-	-	-	-	-	-	-	-	-
	Probezzia sp.	-	-	-	-	-	-	2	4	3
	Simuliidae	-	-	-	-	-	-	-	-	-
	Simulium sp.	125	154	113	221	288	212	76	127	93
	Stratiomyidae	-	-	-	-	-	-	-	-	-
	Tipula sp.	2	5	4	-	-	-	4	7	5
	Tipulidae	-	-	-	-	-	-	-	-	-
	Amiocentrus aspilus	-	-	-	-	-	-	-	-	-
	Brachycentrus occidentalis	-	-	-	-	-	-	-	-	-
	Cheumatopsyche sp.	88	87	64	272	307	226	147	165	121
	Chimarra sp.	59	65	48	327	464	341	85	117	86
	Culoptila sp.	-	-	-	-	-	-	-	-	-

Taxa Density (orgs/m²)
 Reach 3, Bear River, ID

2005-2007 Master Taxa List		Reach 3 Composite Black Canyon								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Trichoptera	Glossosomatidae	-	-	-	-	-	-	-	-	-
	Helicopsyche sp.	67	69	51	156	169	125	36	11	8
	Hydropsyche sp.	21	20	15	740	936	689	118	152	112
	Hydropsychidae	-	-	-	19	34	25	-	-	-
	Hydroptila sp.	52	43	32	12	16	12	22	25	18
	Hydroptilidae	-	-	-	4	7	5	-	-	-
	Leptoceridae	-	-	-	1	2	2	-	-	-
	Limnephilidae	-	-	-	-	-	-	-	-	-
	Mayatrichia sp.	10	19	14	-	-	-	-	-	-
	Nectopsyche sp.	41	44	32	2	4	3	4	7	5
	Neotrichia sp.	13	17	12	7	15	11	-	-	-
	Oecetis avara	230	184	135	192	179	131	38	20	14
	Oecetis sp.	-	-	-	-	-	-	-	-	-
	Oxyethira sp.	-	-	-	-	-	-	-	-	-
	Polycentropus sp.	-	-	-	-	-	-	1	1	1
	Protophila sp.	26	38	28	94	153	113	7	6	5
Lepidoptera	Petrophila sp.	267	188	138	767	722	531	340	246	181
Gastropoda	Fluminicola sp.	4	10	7	-	-	-	-	-	-
	Gyraulus sp.	-	-	-	-	-	-	-	-	-
	Hydrobiidae	-	-	-	-	-	-	-	-	-
	Lymnaeidae	7	8	6	-	1	1	-	-	-
	Physa sp.	-	-	-	-	-	-	-	-	-
	Planorbidae	-	-	-	-	-	-	-	-	-
	Potamopyrgus antipodarum	-	-	-	-	-	-	1	2	2
	Pyrgulopsis sp.	-	-	-	-	-	-	-	-	-
	Valvata sp.	-	-	-	-	-	-	-	-	-
Bivalvia	Anodonta sp.	-	-	-	-	-	-	-	-	-
	Pisidium sp.	0	1	1	2	5	4	-	-	-
	Sphaeriidae	-	-	-	-	-	-	1	2	2
	Sphaerium sp.	-	-	-	-	-	-	18	37	27
Annelida	Aulodrilus pigueti	-	-	-	-	-	-	-	-	-
	Eclipidrilus sp.	30	56	41	3	5	4	-	-	-
	Enchytraeidae	3	6	4	24	53	39	-	-	-
	Erpobdellidae	30	27	20	-	-	-	-	-	-
	Helobdella sp.	12	22	16	-	-	-	-	-	-
	Limnodrilus hoffmeisteri	-	-	-	-	-	-	-	-	-
	Lumbricina	4	6	4	1	2	2	-	-	-
	Lumbriculidae	-	-	-	-	-	-	-	-	-
	Nais behningi	2	5	4	-	-	-	-	-	-
	Nais bretscheri	4	10	7	9	15	11	-	-	-
	Nais communis	-	-	-	-	-	-	-	-	-
	Nais elinguis	-	-	-	-	-	-	-	-	-
	Nais variabilis	-	-	-	-	-	-	-	-	-
	Ophidonais serpentina	-	-	-	-	-	-	-	-	-
	Rhynchelmis rostrata	-	-	-	-	-	-	-	-	-
	Quistradrilus multisetosus	-	-	-	-	-	-	7	15	11
	Spirosperma ferox	-	-	-	3	7	5	-	-	-
	Spirosperma sp.	19	26	19	-	-	-	-	-	-
	Tubificidae w/ cap setae	12	20	15	-	-	-	2	4	3

Taxa Density (orgs/m²)
 Reach 3, Bear River, ID

2005-2007 Master Taxa List		Reach 3 Composite Black Canyon								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Tubificidae w/o cap setae	6	14	10	1	2	2	2	4	3
Acari	Acari	-	-	-	-	-	-	-	-	-
	Atractides sp.	-	-	-	-	-	-	-	-	-
	Aturus sp.	-	-	-	-	-	-	-	-	-
	Corticacarus	25	14	10	-	-	-	-	-	-
	Hygrobates sp.	1,026	715	526	867	1,002	737	401	369	271
	Lebertia sp.	11	9	6	1	3	2	2	4	3
	Limnesiidae	-	-	-	25	24	17	-	-	-
	Oribatei	-	-	-	-	-	-	-	-	-
	Sperchon sp.	162	125	92	296	352	259	142	156	115
	Testudacarus sp.	-	-	-	-	-	-	-	-	-
	Torrenticola sp.	202	107	78	242	238	175	131	129	95
Crustacea	Hyalella sp.	-	-	-	-	-	-	-	-	-
	Ostracoda	136	159	117	36	39	28	234	220	162
Other Organisms	Hydra sp.	-	-	-	8	18	13	-	-	-
	Nematoda	45	33	24	28	32	23	51	66	48
	Prostoma sp.	58	65	47	123	132	97	10	17	12
	Turbellaria	196	124	92	192	196	144	5	7	5
TOTAL		5,391	3,391	2,494	8,618	8,306	6,110	3,644	2,698	1,985

Taxa Density (orgs/m²)
 Reach 4, Bear River, ID

2005-2007 Master Taxa List		Reach 4 Composite Above Grace Power Plant								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Ephemeroptera	Asiopanax sp.	-	-	-	-	-	-	-	-	-
	Baetis sp.	-	-	-	490	595	438	-	-	-
	Baetis tricaudatus	132	181	133	631	764	562	129	86	63
	Ephemerella inermis/infrequens	-	-	-	-	-	-	-	-	-
	Ephemerella sp.	-	-	-	30	41	30	-	-	-
	Fallceon quilleri	-	-	-	37	51	37	-	-	-
	Heptageniidae	-	-	-	-	-	-	-	-	-
	Heptagenia sp.	-	-	-	-	-	-	-	-	-
	Heterocloeon sp.	-	-	-	-	-	-	-	-	-
	Leptohyphidae	-	-	-	-	-	-	-	-	-
	Maccaffertium terminatum	-	-	-	-	-	-	-	-	-
	Plauditus sp.	-	-	-	-	-	-	-	-	-
	Stenonema terminatum	-	-	-	-	-	-	-	-	-
	Tricorythodes sp.	79	139	102	-	-	-	21	43	32
Odonata	Argia sp.	-	-	-	-	-	-	-	-	-
	Coenagrion/Enallagma sp.	19	43	32	-	-	-	-	-	-
	Coenagrionidae	-	-	-	59	132	97	-	-	-
	Gomphidae	-	-	-	-	-	-	-	-	-
	Ophiogomphus sp.	-	-	-	-	-	-	-	-	-
Plecoptera	Perlidae	-	-	-	-	-	-	-	-	-
	Perlodidae	-	-	-	-	-	-	-	-	-
	Zapada cinctipes	-	-	-	-	-	-	-	-	-
Hemiptera	Sigara sp.	-	-	-	-	-	-	-	-	-
Coleoptera	Agabus sp.	-	-	-	-	-	-	-	-	-
	Cleptelmis addenda	-	-	-	-	-	-	-	-	-
	Dubiraphia sp.	-	-	-	-	-	-	-	-	-
	Heterolimnius sp.	-	-	-	-	-	-	-	-	-
	Microcylloepus sp.	317	425	313	936	1,159	852	65	83	61
	Optioservus sp.	162	191	140	104	121	89	-	-	-
	Stictotarsus sp.	-	-	-	-	-	-	-	-	-
Diptera-	Cardiocladius sp.	462	430	316	292	314	231	86	99	73
	Chironomini	-	-	-	-	-	-	-	-	-
	Cladopelma sp.	-	-	-	-	-	-	-	-	-
	Cladotanytarsus sp.	35	77	57	-	-	-	-	-	-
	Chironomidae	-	-	-	-	-	-	-	-	-
	Cricotopus bicinctus gr.	-	-	-	93	150	110	-	-	-
	Cricotopus sp.	-	-	-	160	151	111	107	215	158
	Cricotopus trifascia gr.	621	241	177	880	593	436	1,013	1,042	767
	Cryptochironomus sp.	-	-	-	-	-	-	-	-	-
	Derotanypus sp.	-	-	-	17	38	28	-	-	-
	Diamesa sp.	15	33	24	-	-	-	-	-	-
	Dicrotendipes sp.	-	-	-	-	-	-	-	-	-
	Eukiefferiella brehmi gr.	23	51	37	206	335	246	-	-	-
	Eukiefferiella coerulescens gr.	64	144	106	261	501	369	-	-	-
	Eukiefferiella devonica gr.	99	102	75	2,069	2,724	2,004	194	177	130
	Eukiefferiella gracei gr.	-	-	-	34	77	57	-	-	-
	Lopescladius (Cordiella) sp.	-	-	-	-	-	-	-	-	-
	Micropsectra sp.	-	-	-	17	38	28	-	-	-
	Micropsectra/Tanytarsus sp.	-	-	-	17	38	28	-	-	-

Taxa Density (orgs/m²)
 Reach 4, Bear River, ID

2005-2007 Master Taxa List		Reach 4 Composite Above Grace Power Plant								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Chironomidae	Microtendipes pedellus gr.	54	79	58	12	28	20	-	-	-
	Nanocladius sp.	-	-	-	-	-	-	-	-	-
	Orthocladiinae	-	-	-	-	-	-	-	-	-
	Orthocladius (Euortho.) rivicola gr.	30	66	49	12	28	20	-	-	-
	Orthocladius (Euortho.) rivulorum	380	369	272	935	905	666	906	1,371	1,008
	Orthocladius (Euortho.) rivulorum gr.	-	-	-	-	-	-	-	-	-
	Orthocladius (Euorthocladius) sp.	354	446	328	621	599	440	43	86	64
	Orthocladius Complex	746	465	342	1,012	1,214	893	-	-	-
	Orthocladius sp.	3,327	2,870	2,111	910	801	589	604	698	514
	Parakiefferiella sp.	129	287	211	107	160	118	43	86	64
	Parametriochnemus sp.	-	-	-	-	-	-	-	-	-
	Paratanytarsus sp.	-	-	-	-	-	-	-	-	-
	Paratendipes sp.	-	-	-	-	-	-	-	-	-
	Pentaneura sp.	-	-	-	-	-	-	-	-	-
	Pentaneurini	-	-	-	12	28	20	-	-	-
	Phaenopsectra sp.	-	-	-	-	-	-	-	-	-
	Polypedilum sp.	-	-	-	94	167	123	-	-	-
	Potthastia longimana gr.	-	-	-	-	-	-	-	-	-
	Pseudochironomus sp.	420	256	188	3,280	4,723	3,474	280	341	251
	Rheocricotopus sp.	-	-	-	195	278	204	-	-	-
	Rheotanytarsus sp.	23	51	37	394	431	317	258	187	137
	Sublettea sp.	-	-	-	-	-	-	-	-	-
	Tanytarsini	-	-	-	20	44	32	-	-	-
	Tanytarsus sp.	-	-	-	-	-	-	-	-	-
	Thienemanniella sp.	-	-	-	17	38	28	-	-	-
	Thienemannimyia gr. sp.	35	77	57	-	-	-	-	-	-
	Tvetenia bavarica gr.	-	-	-	-	-	-	-	-	-
	Tvetenia discoloripes gr.	-	-	-	76	128	94	43	86	64
	Xenochironomus xenolabis	15	33	24	-	-	-	-	-	-
Diptera	Bezzia/Palpomyia sp.	64	88	65	52	115	85	43	86	64
	Caloparyphus sp.	271	289	212	-	-	-	-	-	-
	Ceratopogoninae	-	-	-	-	-	-	-	-	-
	Diptera	-	-	-	34	77	57	-	-	-
	Empididae	-	-	-	-	-	-	-	-	-
	Ephydridae	-	-	-	-	-	-	-	-	-
	Hemerodromia sp.	178	268	197	365	283	208	21	43	32
	Muscidae	-	-	-	59	132	97	-	-	-
	Neoplasta sp.	-	-	-	-	-	-	-	-	-
	Probezzia sp.	-	-	-	-	-	-	-	-	-
	Simuliidae	-	-	-	17	38	28	-	-	-
	Simulium sp.	514	518	381	2,791	1,956	1,439	820	652	480
	Stratiomyidae	-	-	-	165	249	183	215	111	82
	Tipula sp.	-	-	-	-	-	-	-	-	-
	Tipulidae	-	-	-	-	-	-	-	-	-
	Amiocentrus aspilus	34	48	35	20	44	32	-	-	-
	Brachycentrus occidentalis	-	-	-	-	-	-	-	-	-
	Cheumatopsyche sp.	-	-	-	-	-	-	-	-	-
	Chimarra sp.	-	-	-	400	772	568	-	-	-
	Culoptila sp.	-	-	-	-	-	-	-	-	-

Taxa Density (orgs/m²)
Reach 4, Bear River, ID

2005-2007 Master Taxa List		Reach 4 Composite Above Grace Power Plant								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Trichoptera	Glossosomatidae	-	-	-	17	38	28	-	-	-
	Helicopsyche sp.	-	-	-	-	-	-	-	-	-
	Hydropsyche sp.	-	-	-	-	-	-	-	-	-
	Hydropsychidae	-	-	-	-	-	-	-	-	-
	Hydroptila sp.	-	-	-	148	251	185	-	-	-
	Hydroptilidae	142	196	144	437	467	344	-	-	-
	Leptoceridae	-	-	-	-	-	-	-	-	-
	Limnephilidae	-	-	-	-	-	-	-	-	-
	Mayatrichia sp.	-	-	-	-	-	-	-	-	-
	Nectopsyche sp.	23	51	37	-	-	-	43	86	64
	Neotrichia sp.	-	-	-	94	167	123	-	-	-
	Oecetis avara	-	-	-	-	-	-	43	86	64
	Oecetis sp.	-	-	-	-	-	-	-	-	-
	Oxyethira sp.	-	-	-	-	-	-	-	-	-
	Polycentropus sp.	-	-	-	-	-	-	-	-	-
	Protoptila sp.	-	-	-	-	-	-	-	-	-
Lepidoptera	Petrophila sp.	-	-	-	-	-	-	-	-	-
Gastropoda	Fluminicola sp.	2,253	1,349	992	57	83	61	1,010	552	406
	Gyraulus sp.	361	533	392	-	-	-	-	-	-
	Hydrobiidae	-	-	-	75,322	62,314	45,838	-	-	-
	Lymnaeidae	-	-	-	-	-	-	-	-	-
	Physa sp.	424	676	497	-	-	-	-	-	-
	Planorbidae	-	-	-	-	-	-	-	-	-
	Potamopyrgus antipodarum	69,803	47,665	35,063	4,511	5,183	3,813	80,929	37,310	27,445
	Pyrgulopsis sp.	-	-	-	-	-	-	1,846	1,704	1,253
	Valvata sp.	-	-	-	-	-	-	-	-	-
Bivalvia	Anodonta sp.	-	-	-	-	-	-	-	-	-
	Pisidium sp.	206	296	218	269	420	309	-	-	-
	Sphaeriidae	15	33	24	72	128	94	366	203	149
	Sphaerium sp.	-	-	-	-	-	-	-	-	-
Annelida	Aulodrilus pigueti	-	-	-	-	-	-	-	-	-
	Eclipidrilus sp.	414	420	309	210	382	281	-	-	-
	Enchytraeidae	-	-	-	17	38	28	-	-	-
	Erpobdellidae	39	87	64	-	-	-	-	-	-
	Helobdella sp.	-	-	-	-	-	-	-	-	-
	Limnodrilus hoffmeisteri	-	-	-	-	-	-	-	-	-
	Lumbricina	-	-	-	-	-	-	-	-	-
	Lumbriculidae	-	-	-	-	-	-	64	128	94
	Nais behningi	-	-	-	-	-	-	-	-	-
	Nais bretscheri	-	-	-	-	-	-	-	-	-
	Nais communis	-	-	-	-	-	-	-	-	-
	Nais elinguis	-	-	-	-	-	-	-	-	-
	Nais variabilis	19	43	32	-	-	-	-	-	-
	Ophidonais serpentina	-	-	-	-	-	-	-	-	-
	Rhynchelmis rostrata	-	-	-	-	-	-	-	-	-
	Quistradrilus multisetosus	-	-	-	-	-	-	-	-	-
	Spirosperma ferox	-	-	-	-	-	-	-	-	-
	Spirosperma sp.	19	43	32	-	-	-	-	-	-
	Tubificidae w/ cap setae	-	-	-	-	-	-	-	-	-

Taxa Density (orgs/m²)
 Reach 4, Bear River, ID

2005-2007 Master Taxa List		Reach 4 Composite Above Grace Power Plant								
		2005			2006			2007		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Tubificidae w/o cap setae	-	-	-	-	-	-	-	-	-
Acari	Acari	23	51	37	-	-	-	-	-	-
	Atractides sp.	35	77	57	76	128	94	-	-	-
	Aturus sp.	-	-	-	-	-	-	-	-	-
	Corticacarus	65	100	73	-	-	-	-	-	-
	Hygrobates sp.	2,350	1,274	937	368	245	180	388	207	152
	Lebertia sp.	-	-	-	-	-	-	-	-	-
	Limnesiidae	-	-	-	20	44	32	-	-	-
	Oribatei	-	-	-	-	-	-	-	-	-
	Sperchon sp.	157	206	151	1,035	1,279	941	775	413	304
	Testudacarus sp.	35	77	57	-	-	-	-	-	-
	Torrenticola sp.	-	-	-	54	79	58	65	83	61
Crustacea	Hyalella sp.	-	-	-	-	-	-	-	-	-
	Ostracoda	225	246	181	497	365	268	474	502	369
Other Organisms	Hydra sp.	-	-	-	-	-	-	-	-	-
	Nematoda	171	215	159	-	-	-	-	-	-
	Prostoma sp.	79	139	102	20	44	32	-	-	-
	Turbellaria	744	816	601	2,971	3,111	2,288	1,358	1,131	832
TOTAL		86,201	54,547	40,125	104,131	80,545	59,249	92,254	41,822	30,764

2008 Taxa Density (orgs/m²) Bear River, ID

2008 BMI Taxa List		Reach 1 - 2008			Reach 2 - 2008		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Ephemeroptera	Asioplax sp.	10	23	17	0	0	-
	Baetis sp.	0	0	-	4	9	6
	Baetis tricaudatus	2,077	1,247	917	41	93	68
	Ephemerella sp.	1,365	781	575	0	0	-
	Ephoron sp.	10	23	17	0	0	-
	Fallceon quilleri	0	0	-	232	286	210
	Heptageniidae	63	67	49	0	0	-
	Heterocloeon sp.	15	23	17	0	0	-
	Maccaffertium terminatum	205	151	111	0	0	-
	Tricorythodes sp.	1,059	711	523	4	9	6
Odonata	Argia sp.	0	0	-	0	0	-
	Coenagrion/Enallagma sp.	0	0	-	225	439	323
	Coenagrionidae	0	0	-	18	30	22
	Gomphidae	0	0	-	0	0	-
Plecoptera	Perlodidae	50	53	39	0	0	-
Coleoptera	Dubiraphia sp.	5	10	7	0	0	-
	Microcyloepus sp.	39	47	34	49	45	33
	Optioservus sp.	22	20	14	0	0	-
	Cardiocladius sp.	7	16	12	0	0	-
	Cladotanytarsus sp.	85	53	39	0	0	-
	Cricotopus bicinctus gr.	0	0	-	231	312	230
	Cricotopus sp.	9	20	15	507	370	272
	Cricotopus trifascia gr.	1,305	1,048	771	1,514	1,268	932
	Cryptochironomus sp.	0	0	-	41	73	54
	Diamesa sp.	0	0	-	14	31	23
	Dicrotendipes sp.	0	0	-	5,002	4,325	3,182
	Eukiefferiella brevicar gr.	0	0	-	87	183	135
	Eukiefferiella claripennis gr.	0	0	-	0	0	-
	Eukiefferiella devonica gr.	9	13	10	95	88	65
	Lopescladius sp.	10	23	17	0	0	-
	Micropsectra sp.	0	0	-	17	38	28
	Microtendipes pedellus gr.	77	47	35	852	1,215	894
	Nanocladius sp.	10	23	17	0	0	-
	Orthoclaadiinae	2	4	3	0	0	-

2008 Taxa Density (orgs/m²) Bear River, ID

2008 BMI Taxa List		Reach 1 - 2008			Reach 2 - 2008		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Diptera-Chironomidae	Orthocladius (Euortho.) rivicola gr.	243	340	250	0	0	-
	Orthocladius (Euortho.) rivulorum	0	0	-	0	0	-
	Orthocladius (Euorthocladius) sp.	174	192	141	300	196	145
	Orthocladius Complex	0	0	-	971	1,425	1,049
	Orthocladius sp.	647	392	288	835	668	491
	Parakiefferiella sp.	0	0	-	700	598	440
	Parametriochnemus sp.	0	0	-	14	31	23
	Pentaneura sp.	0	0	-	22	31	23
	Phaenopsectra sp.	0	0	-	34	35	26
	Polypedium sp.	81	131	96	170	189	139
	Potthastia longimana gr.	0	0	-	17	38	28
	Pseudochironomus sp.	0	0	-	1,169	740	544
	Rheocricotopus sp.	0	0	-	0	0	-
	Rheotanytarsus sp.	9	13	10	368	499	367
	Sublettea sp.	0	0	-	0	0	-
	Synorthocladius sp.	0	0	-	0	0	-
	Tanytarsus sp.	0	0	-	62	109	80
	Thienemanniella sp.	60	111	82	224	353	260
	Thienemannimyia gr. sp.	44	39	29	108	65	48
	Tvetenia discoloripes gr.	202	91	67	443	948	697
Diptera	Bezzia/Palpomyia sp.	0	0	-	93	74	54
	Caloparyphus sp.	0	0	-	0	0	-
	Hemerodromia sp.	99	62	45	48	57	42
	Muscidae	0	0	-	0	0	-
	Simulium sp.	2,666	1,951	1,435	1,152	783	576
	Stratiomyidae	0	0	-	0	0	-
	Tipula sp.	0	0	-	0	0	-
Trichoptera	Amiocentrus aspilus	0	0	-	0	0	-
	Brachycentrus occidentalis	929	683	502	0	0	-
	Cheumatopsyche sp.	1,061	813	598	224	204	150
	Chimarra sp.	0	0	-	0	0	-
	Culoptila sp.	749	773	569	4	9	6
	Helicopsyche sp.	51	57	42	4	9	6
	Hydropsyche sp.	1,215	654	481	512	691	508

2008 Taxa Density (orgs/m²) Bear River, ID

2008 BMI Taxa List		Reach 1 - 2008			Reach 2 - 2008		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Hydroptila sp.	69	108	79	77	151	111
	Hydroptilidae	0	0	-	39	73	54
	Nectopsyche sp.	0	0	-	22	31	23
	Neotrichia sp.	25	35	26	0	0	-
	Oecetis avara	75	68	50	0	0	-
	Protophila sp.	629	525	387	0	0	-
Lepidoptera	Petrophila sp.	136	157	115	4	9	6
Gastropoda	Fluminicola sp.	0	0	-	0	0	-
	Gyraulus sp.	0	0	-	0	0	-
	Hydrobiidae	0	0	-	0	0	-
	Potamopyrgus antipodarum	0	0	-	0	0	-
Bivalvia	Sphaeriidae	10	23	17	9	20	15
Annelida	Erpobdellidae	5	11	8	0	0	-
	Helobdella sp.	0	0	-	0	0	-
	Limnodrilus hoffmeisteri	0	0	-	0	0	-
	Lumbriculidae	0	0	-	45	101	74
	Naididae	0	0	-	26	38	28
	Nais behningi	7	16	12	0	0	-
	Nais sp.	0	0	-	0	0	-
	Quistradrilus multisetosus	0	0	-	191	364	268
	Tubificidae w/ cap setae	33	42	31	67	150	111
	Tubificidae w/o cap setae	0	0	-	260	560	412
Acari	Atractides sp.	0	0	-	0	0	-
	Corticacarus	0	0	-	26	38	28
	Hygrobates sp.	0	0	-	4,372	2,779	2,044
	Lebertia sp.	0	0	-	47	74	54
	Oribatei	0	0	-	31	42	31
	Sperchon sp.	9	20	15	147	118	87
	Torrenticola sp.	0	0	-	732	588	432
Crustacea	Hyalella sp.	15	23	17	0	0	-
	Ostracoda	0	0	-	1,412	2,210	1,626
Other Organisms	Nematoda	5	11	8	125	125	92
	Prostoma sp.	0	0	-	146	146	108
	Turbellaria	0	0	-	1,547	1,879	1,382

2008 Taxa Density (orgs/m²) Bear River, ID

2008 BMI Taxa List		Reach 1 - 2008			Reach 2 - 2008		
		Ave./l(m ²)	STDEV	CI (0.10)	Ave./l(m ²)	STDEV	CI (0.10)
	TOTAL	15,685	8,835	6,499	25,730	14,448	10,628

2008 Taxa Density (orgs/m²) Bear River, ID

2008 BMI Taxa List		Reach 3 - 2008			Reach 4 - 2008		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Ephemeroptera	Asioplax sp.	0	0	-	0	0	-
	Baetis sp.	1	1	1	0	0	-
	Baetis tricaudatus	319	400	294	1,092	1,140	839
	Ephemerella sp.	0	0	-	0	0	-
	Ephoron sp.	0	0	-	0	0	-
	Fallceon quilleri	2,175	2,519	1,853	350	167	123
	Heptageniidae	0	0	-	0	0	-
	Heterocloeon sp.	0	0	-	0	0	-
	Maccaffertium terminatum	0	0	-	0	0	-
	Tricorythodes sp.	91	68	50	309	286	210
Odonata	Argia sp.	11	16	11	0	0	-
	Coenagrion/Enallagma sp.	13	14	10	0	0	-
	Coenagrionidae	1	1	1	0	0	-
	Gomphidae	2	5	3	0	0	-
Plecoptera	Perlodidae	0	0	-	0	0	-
Coleoptera	Dubiraphia sp.	1	2	2	0	0	-
	Microcyloepus sp.	163	288	212	160	152	112
	Optioservus sp.	142	192	142	74	151	111
	Cardiocladius sp.	0	0	-	0	0	-
	Cladotanytarsus sp.	35	68	50	50	76	56
	Cricotopus bicinctus gr.	3	7	5	0	0	-
	Cricotopus sp.	1	2	2	0	0	-
	Cricotopus trifascia gr.	52	43	32	921	757	557
	Cryptochironomus sp.	5	7	5	44	99	73
	Diamesa sp.	0	0	-	0	0	-
	Dicrotendipes sp.	20	26	19	0	0	-
	Eukiefferiella brevicar gr.	0	0	-	12	26	19
	Eukiefferiella claripennis gr.	1	2	1	0	0	-
	Eukiefferiella devonica gr.	13	23	17	174	299	220
	Lopescladius sp.	0	0	-	0	0	-
	Micropsectra sp.	2	4	3	56	96	71
	Microtendipes pedellus gr.	60	110	81	202	280	206
	Nanocladius sp.	0	0	-	35	77	57
	Orthocladiinae	0	0	-	0	0	-

2008 Taxa Density (orgs/m²) Bear River, ID

2008 BMI Taxa List		Reach 3 - 2008			Reach 4 - 2008		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Diptera-Chironomidae	Orthocladius (Euortho.) rivicola gr.	0	0	-	0	0	-
	Orthocladius (Euortho.) rivulorum	0	0	-	557	458	337
	Orthocladius (Euorthocladius) sp.	0	0	-	5	11	8
	Orthocladius Complex	17	23	17	886	1,095	805
	Orthocladius sp.	24	30	22	244	178	131
	Parakiefferiella sp.	5	11	8	17	38	28
	Parametriochnemus sp.	0	0	-	69	155	114
	Pentaneura sp.	12	23	17	64	88	65
	Phaenopsectra sp.	4	9	7	49	76	56
	Polypedium sp.	47	90	66	64	72	53
	Potthastia longimana gr.	0	0	-	0	0	-
	Pseudochironomus sp.	4	7	5	4,452	6,356	4,675
	Rheocricotopus sp.	0	0	-	895	883	649
	Rheotanytarsus sp.	295	430	316	6,851	7,908	5,817
	Sublettea sp.	25	45	33	0	0	-
	Synorthocladius sp.	6	7	5	30	66	49
	Tanytarsus sp.	23	46	34	115	147	108
	Thienemanniella sp.	11	13	10	35	77	57
	Thienemannimyia gr. sp.	8	13	9	17	38	28
	Tvetenia discoloripes gr.	1	2	1	15	33	24
Diptera	Bezzia/Palpomyia sp.	32	44	32	827	762	561
	Caloparyphus sp.	0	0	-	30	66	49
	Hemerodromia sp.	29	43	32	318	246	181
	Muscidae	5	9	6	0	0	-
	Simulium sp.	220	185	136	2,026	1,927	1,418
	Stratiomyidae	0	0	-	43	60	44
	Tipula sp.	1	2	1	0	0	-
Trichoptera	Amiocentrus aspilus	3	7	5	0	0	-
	Brachycentrus occidentalis	0	0	-	0	0	-
	Cheumatopsyche sp.	158	234	172	0	0	-
	Chimarra sp.	1	3	2	0	0	-
	Culoptila sp.	4	7	5	0	0	-
	Helicopsyche sp.	18	23	17	0	0	-
	Hydropsyche sp.	68	63	46	0	0	-

2008 Taxa Density (orgs/m²) Bear River, ID

2008 BMI Taxa List		Reach 3 - 2008			Reach 4 - 2008		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Hydroptila sp.	508	742	546	157	48	35
	Hydroptilidae	2	5	3	0	0	-
	Nectopsyche sp.	147	144	106	98	143	105
	Neotrichia sp.	1	2	1	167	110	81
	Oecetis avara	37	39	28	0	0	-
	Protophila sp.	1	1	1	0	0	-
Lepidoptera	Petrophila sp.	79	53	39	0	0	-
Gastropoda	Fluminicola sp.	0	0	-	1,252	812	597
	Gyraulus sp.	0	0	-	35	77	57
	Hydrobiidae	0	0	-	895	463	340
	Potamopyrgus antipodarum	0	0	-	14,602	6,891	5,069
Bivalvia	Sphaeriidae	14	22	16	32	34	25
Annelida	Erpobdellidae	0	0	-	0	0	-
	Helobdella sp.	1	1	1	0	0	-
	Limnodrilus hoffmeisteri	10	23	17	24	53	39
	Lumbriculidae	20	24	18	58	82	60
	Naididae	0	0	-	0	0	-
	Nais behningi	0	0	-	0	0	-
	Nais sp.	0	0	-	27	37	27
	Quistradrilus multisetosus	2	4	3	15	33	24
	Tubificidae w/ cap setae	0	0	-	0	0	-
	Tubificidae w/o cap setae	3	5	3	15	33	24
Acari	Atractides sp.	12	27	20	25	35	26
	Corticacarus	15	21	15	762	493	363
	Hygrobates sp.	2,252	3,435	2,527	1,867	815	599
	Lebertia sp.	1	2	2	0	0	-
	Oribatei	0	0	-	0	0	-
	Sperchon sp.	439	544	400	1,406	1,395	1,026
	Torrenticola sp.	207	193	142	153	144	106
Crustacea	Hyalella sp.	12	22	16	0	0	-
	Ostracoda	309	386	284	630	494	363
Other Organisms	Nematoda	3	7	5	158	214	157
	Prostoma sp.	67	87	64	20	32	24
	Turbellaria	482	895	659	587	257	189

2008 Taxa Density (orgs/m²) Bear River, ID

2008 BMI Taxa List		Reach 3 - 2008			Reach 4 - 2008		
		Ave./l(m ²)	STDEV	CI (0.10)	Ave./l(m ²)	STDEV	CI (0.10)
	TOTAL	8,754	10,711	7,879	44,068	30,001	22,069

2009 Taxa Density (orgs/m²)
Bear River, ID

2009 BMI Taxa List		Reach 1 - 2009			Reach 2 - 2009		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Ephemeroptera	Baetidae	0	0	-	10	22	16
	Baetis sp.	2,771	2,403	1,768	0	0	-
	Baetis tricaudatus	0	0	-	0	0	-
	Ephemerella inermis/infrequens	2,483	951	700	0	0	-
	Ephoron album	7	16	12	0	0	-
	Fallceon quilleri	7	16	12	69	101	74
	Heptageniidae	63	72	53	0	0	-
	Maccaffertium sp.	55	61	45	0	0	-
	Tricorythodes sp.	1,917	873	642	0	0	-
Odonata	Argia sp.	0	0	-	0	0	-
	Coenagrion/Enallagma sp.	0	0	-	39	64	47
	Coenagrionidae	0	0	-	64	64	47
Plecoptera	Perlodidae	310	169	124	0	0	-
Coleoptera	Dubiraphia sp.	0	0	-	0	0	-
	Microcylloepus sp.	47	48	35	20	27	20
	Optioservus sp.	18	32	24	0	0	-
Diptera-Chironomidae	Cladotanytarsus sp.	77	59	43	0	0	-
	Cricotopus bicinctus gr.	124	241	177	668	757	557
	Cricotopus sp.	15	27	20	953	1,245	916
	Cricotopus trifascia gr.	760	425	312	3,630	2,555	1,880
	Cryptochironomus sp.	37	49	36	5	10	8
	Diamesa sp.	18	17	13	29	66	48
	Dicrotendipes sp.	0	0	-	1,548	2,342	1,723
	Eukiefferiella claripennis gr.	0	0	-	0	0	-
	Eukiefferiella coerulescens gr.	0	0	-	9	21	15
	Eukiefferiella devonica gr.	26	27	20	74	70	51
	Eukiefferiella sp.	0	0	-	5	10	8
	Lopescladius sp.	51	60	44	0	0	-
	Micropsectra sp.	21	23	17	25	35	26
	Microtendipes pedellus gr.	713	461	339	617	741	545
	Nanocladius sp.	0	0	-	5	10	8
	Orthocladiinae	0	0	-	0	0	-
	Orthocladius (Euorthocladius) sp.	62	57	42	51	45	33

2009 Taxa Density (orgs/m²)
Bear River, ID

2009 BMI Taxa List		Reach 1 - 2009			Reach 2 - 2009		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Orthocladius Complex	0	0	-	471	290	213
	Orthocladius sp.	400	369	271	781	559	411
	Parakiefferiella sp.	0	0	-	1,608	2,070	1,523
	Parametriocnemus sp.	3	7	5	15	33	24
	Pentaneura sp.	0	0	-	9	21	15
	Phaenopsectra sp.	0	0	-	34	64	47
	Polypedilum sp.	60	18	13	121	121	89
	Potthastia longimana gr.	0	0	-	34	64	47
	Pseudochironomus sp.	0	0	-	759	717	527
	Rheotanytarsus sp.	209	244	179	305	167	123
	Synorthocladius sp.	0	0	-	0	0	-
	Tanytarsus sp.	0	0	-	30	66	49
	Thienemanniella sp.	40	47	35	15	33	24
	Thienemannimyia gr. sp.	526	449	330	62	86	63
	Tvetenia discoloripes gr.	517	514	378	39	64	47
Diptera	Bezzia/Palpomyia sp.	4	10	7	39	56	41
	Hemerodromia sp.	123	134	99	82	78	58
	Muscidae	0	0	-	0	0	-
	Simulium sp.	2,748	4,767	3,506	621	542	399
	Stratiomyidae	0	0	-	15	22	16
Trichoptera	Brachycentridae	0	0	-	0	0	-
	Brachycentrus occidentalis	688	372	274	0	0	-
	Cheumatopsyche sp.	484	214	157	328	206	152
	Chimarra sp.	0	0	-	34	54	40
	Culoptila sp.	228	146	108	0	0	-
	Helicopsyche sp.	89	98	72	19	32	24
	Hydropsyche sp.	808	421	310	134	87	64
	Hydroptila sp.	108	117	86	30	66	49
	Hydroptilidae	0	0	-	20	44	32
	Mayatrichia sp.	4	10	7	0	0	-
	Nectopsyche sp.	60	68	50	48	50	37
	Neotrichia sp.	80	71	52	0	0	-
	Ochrotrichia sp.	0	0	-	0	0	-

2009 Taxa Density (orgs/m²)
Bear River, ID

2009 BMI Taxa List		Reach 1 - 2009			Reach 2 - 2009		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Oecetis avara	290	190	140	19	32	24
	Oecetis sp.	0	0	-	10	22	16
	Polycentropodidae	5	12	9	0	0	-
	Polycentropus sp.	0	0	-	0	0	-
	Protoptila sp.	168	85	62	0	0	-
Lepidoptera	Petrophila sp.	151	114	84	5	11	8
Gastropoda	Fluminicola sp.	0	0	-	0	0	-
	Hydrobiidae	0	0	-	0	0	-
	Potamopyrgus antipodarum	0	0	-	0	0	-
Bivalvia	Pisidium sp.	0	0	-	135	125	92
	Sphaeriidae	0	0	-	27	43	32
	Sphaerium sp.	7	16	12	0	0	-
Annelida	Enchytraeidae	0	0	-	0	0	-
	Erpobdella sp.	0	0	-	15	33	24
	Lumbriculidae	0	0	-	74	92	68
	Nais behningi	7	10	8	0	0	-
	Ophidonais serpentina	20	28	21	0	0	-
	Rhynchelmis sp.	0	0	-	5	10	8
	Spirosperma ferox	0	0	-	126	261	192
	Tubificidae w/ cap setae	0	0	-	25	35	26
	Tubificidae w/o cap setae	0	0	-	278	467	344
Acari	Acari	0	0	-	22	49	36
	Atractides sp.	13	18	13	0	0	-
	Hygrobates sp.	0	0	-	2,366	2,140	1,574
	Lebertia sp.	0	0	-	66	57	42
	Oribatei	0	0	-	15	33	24
	Sperchon sp.	3	7	5	59	62	45
	Testudacarus sp.	0	0	-	0	0	-
	Torrenticola sp.	0	0	-	833	1,404	1,033
Crustacea	Hyalella sp.	15	27	20	39	45	33
	Orconectes immunis	7	16	12	0	0	-
	Orconectes sp.	5	12	9	0	0	-
	Ostracoda	0	0	-	2,185	2,136	1,571

2009 Taxa Density (orgs/m²)
Bear River, ID

2009 BMI Taxa List		Reach 1 - 2009			Reach 2 - 2009		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Other Organisms	Nematoda	0	0	-	109	101	74
	Prostoma sp.	0	0	-	105	89	66
	Turbellaria	0	0	-	1,814	1,531	1,126
TOTAL		17,455	9,924	7,300	21,803	10,948	8,053

2009 Taxa Density (orgs/m²)
Bear River, ID

2009 BMI Taxa List		Reach 3 - 2009			Reach 4 - 2009		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Ephemeroptera	Baetidae	0	0	-	0	0	-
	Baetis sp.	2	5	3	670	689	507
	Baetis tricaudatus	249	337	248	120	224	165
	Ephemerella inermis/infrequens	0	0	-	0	0	-
	Ephoron album	0	0	-	0	0	-
	Fallceon quilleri	420	319	235	104	169	124
	Heptageniidae	0	0	-	0	0	-
	Maccaffertium sp.	0	0	-	0	0	-
	Tricorythodes sp.	59	111	82	78	174	128
Odonata	Argia sp.	14	23	17	0	0	-
	Coenagrion/Enallagma sp.	2	4	3	0	0	-
	Coenagrionidae	0	0	-	0	0	-
Plecoptera	Perlodidae	0	0	-	0	0	-
Coleoptera	Dubiraphia sp.	2	5	3	0	0	-
	Microcylloepus sp.	182	103	76	39	87	64
	Optioservus sp.	182	60	44	0	0	-
Diptera-Chironomidae	Cladotanytarsus sp.	6	9	7	0	0	-
	Cricotopus bicinctus gr.	4	9	7	0	0	-
	Cricotopus sp.	34	64	47	0	0	-
	Cricotopus trifascia gr.	321	280	206	718	409	301
	Cryptochironomus sp.	0	0	-	0	0	-
	Diamesa sp.	0	0	-	0	0	-
	Dicrotendipes sp.	23	29	21	0	0	-
	Eukiefferiella claripennis gr.	2	5	3	0	0	-
	Eukiefferiella coerulescens gr.	2	5	3	0	0	-
	Eukiefferiella devonica gr.	6	9	6	193	115	84
	Eukiefferiella sp.	2	4	3	112	172	126
	Lopescladius sp.	0	0	-	0	0	-
	Micropsectra sp.	16	22	16	17	38	28
	Microtendipes pedellus gr.	33	59	43	0	0	-
	Nanocladius sp.	0	0	-	0	0	-
	Orthocladiinae	0	0	-	154	344	253
	Orthocladius (Euorthocladius) sp.	0	0	-	0	0	-

2009 Taxa Density (orgs/m²)
Bear River, ID

2009 BMI Taxa List		Reach 3 - 2009			Reach 4 - 2009		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Orthocladius Complex	4	8	6	0	0	-
	Orthocladius sp.	51	60	44	0	0	-
	Parakiefferiella sp.	74	95	70	0	0	-
	Parametriocnemus sp.	2	5	3	0	0	-
	Pentaneura sp.	4	5	4	0	0	-
	Phaenopsectra sp.	0	0	-	0	0	-
	Polypedilum sp.	2	5	3	0	0	-
	Potthastia longimana gr.	0	0	-	0	0	-
	Pseudochironomus sp.	9	6	4	197	325	239
	Rheotanytarsus sp.	112	76	56	1,018	612	450
	Synorthocladius sp.	4	5	4	0	0	-
	Tanytarsus sp.	2	5	3	0	0	-
	Thienemanniella sp.	7	17	12	0	0	-
	Thienemannimyia gr. sp.	35	44	33	0	0	-
	Tvetenia discoloripes gr.	0	0	-	0	0	-
Diptera	Bezzia/Palpomyia sp.	4	5	4	0	0	-
	Hemerodromia sp.	27	24	17	0	0	-
	Muscidae	2	4	3	0	0	-
	Simulium sp.	340	229	168	804	426	313
	Stratiomyidae	3	4	3	0	0	-
Trichoptera	Brachycentridae	2	4	3	17	38	28
	Brachycentrus occidentalis	0	0	-	0	0	-
	Cheumatopsyche sp.	162	158	116	0	0	-
	Chimarra sp.	233	208	153	0	0	-
	Culoptila sp.	8	10	7	0	0	-
	Helicopsyche sp.	39	27	20	0	0	-
	Hydropsyche sp.	110	83	61	0	0	-
	Hydroptila sp.	51	69	51	419	645	475
	Hydroptilidae	4	5	4	0	0	-
	Mayatrichia sp.	9	9	6	0	0	-
	Nectopsyche sp.	75	53	39	34	77	57
	Neotrichia sp.	0	0	-	0	0	-
	Ochrotrichia sp.	6	14	11	0	0	-

2009 Taxa Density (orgs/m²)
Bear River, ID

2009 BMI Taxa List		Reach 3 - 2009			Reach 4 - 2009		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
	Oecetis avara	182	186	137	0	0	-
	Oecetis sp.	0	0	-	0	0	-
	Polycentropodidae	0	0	-	0	0	-
	Polycentropus sp.	4	9	7	0	0	-
	Protoptila sp.	6	8	6	0	0	-
Lepidoptera	Petrophila sp.	276	161	119	0	0	-
Gastropoda	Fluminicola sp.	0	0	-	2,153	2,069	1,522
	Hydrobiidae	0	0	-	1,251	687	505
	Potamopyrgus antipodarum	0	0	-	85,053	60,433	44,455
Bivalvia	Pisidium sp.	0	0	-	43	61	45
	Sphaeriidae	2	4	3	39	87	64
	Sphaerium sp.	0	0	-	0	0	-
Annelida	Enchytraeidae	0	0	-	17	38	28
	Erpobdella sp.	2	5	3	0	0	-
	Lumbriculidae	56	86	63	0	0	-
	Nais behningi	0	0	-	0	0	-
	Ophidonais serpentina	0	0	-	0	0	-
	Rhynchelmis sp.	0	0	-	0	0	-
	Spirosperma ferox	0	0	-	0	0	-
	Tubificidae w/ cap setae	0	0	-	0	0	-
	Tubificidae w/o cap setae	0	0	-	0	0	-
Acari	Acari	2	5	3	17	38	28
	Atractides sp.	4	5	4	0	0	-
	Hygrobates sp.	1,396	1,330	979	679	636	468
	Lebertia sp.	3	7	5	0	0	-
	Oribatei	2	4	3	0	0	-
	Sperchon sp.	194	97	71	318	283	208
	Testudacarus sp.	0	0	-	39	87	64
	Torrenticola sp.	223	113	83	91	126	93
Crustacea	Hyalella sp.	2	4	3	0	0	-
	Orconectes immunis	0	0	-	0	0	-
	Orconectes sp.	0	0	-	0	0	-
	Ostracoda	181	253	186	150	160	118

2009 Taxa Density (orgs/m²)
Bear River, ID

2009 BMI Taxa List		Reach 3 - 2009			Reach 4 - 2009		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Other Organisms	Nematoda	18	31	23	34	77	57
	Prostoma sp.	30	47	35	77	172	126
	Turbellaria	356	428	315	980	721	530
TOTAL		5,884	2,540	1,868	95,637	67,199	49,432

2010 Taxa Density (orgs/m²)
Bear River, ID

2010 BMI Taxa List		Reach 1 - 2010			Reach 2 - 2010		
		Ave./(m ²)	STDEV	CI (0.10)	Ave./(m ²)	STDEV	CI (0.10)
Ephemeroptera	Asioplax sp.	7	10	7	0	0	-
	Baetidae	3	7	5	0	0	-
	Baetis sp.	59	132	97	23	23	17
	Baetis tricaudatus	522	614	451	206	461	339
	Ephemerella sp.	625	489	360	0	0	-
	Ephoron sp.	5	11	8	0	0	-
	Fallceon quilleri	0	0	-	522	387	284
	Heptageniidae	29	44	32	0	0	-
	Heterocloeon sp.	0	0	-	0	0	-
	Maccaffertium terminatum	74	60	44	0	0	-
	Tricorythodes sp.	1,063	770	566	0	0	-
Odonata	Argia sp.	0	0	-	0	0	-
	Coenagrionidae	0	0	-	83	110	81
	Ophiogomphus sp.	3	7	5	0	0	-
Plecoptera	Perlodidae	73	53	39	0	0	-
Coleoptera	Dubiraphia sp.	0	0	-	0	0	-
	Microcylloepus sp.	53	55	40	212	170	125
	Optioservus sp.	33	34	25	123	151	111
	Zaitzevia sp.	2	5	4	0	0	-
Diptera- Chironomidae	Cladotanytarsus sp.	43	42	31	34	77	57
	Cricotopus bicinctus gr.	3	7	5	157	205	151
	Cricotopus sp.	0	0	-	274	394	290
	Cricotopus trifascia gr.	93	91	67	947	519	382
	Cryptochironomus sp.	0	0	-	19	42	31
	Dicrotendipes sp.	0	0	-	951	1,140	838
	Eukiefferiella devonica gr.	0	0	-	217	254	187
	Eukiefferiella sp.	0	0	-	9	19	14
	Lopescladius sp.	12	21	16	0	0	-
	Micropsectra sp.	0	0	-	0	0	-
	Microtendipes pedellus gr.	109	86	63	798	1,163	855
	Orthocladius (Euorthocladius) sp.	8	11	8	0	0	-
	Orthocladius Complex	6	13	10	367	545	401
	Orthocladius sp.	103	100	73	1,302	987	726
	Parakiefferiella sp.	0	0	-	1,247	1,029	757
	Parametriochnemus sp.	0	0	-	0	0	-

2010 Taxa Density (orgs/m²)
Bear River, ID

2010 BMI Taxa List		Reach 1 - 2010			Reach 2 - 2010		
		Ave./(m ²)	STDEV	CI (0.10)	Ave./(m ²)	STDEV	CI (0.10)
	Pentaneura sp.	0	0	-	10	22	16
	Polypedilum sp.	12	12	9	88	113	83
	Potthastia longimana gr.	0	0	-	24	25	18
	Pseudochironomus sp.	0	0	-	366	437	321
	Rheocricotopus sp.	5	11	8	19	42	31
	Rheotanytarsus sp.	0	0	-	1,283	2,588	1,904
	Thienemanniella sp.	0	0	-	17	39	28
	Thienemannimyia gr. sp.	30	48	35	168	192	141
	Tvetenia bavarica gr.	3	7	5	0	0	-
	Tvetenia discoloripes gr.	37	34	25	539	1,017	748
Diptera	Bezzia/Palpomyia sp.	0	0	-	4	10	7
	Hemerodromia sp.	108	55	41	217	297	219
	Muscidae	0	0	-	0	0	-
	Neoplasta sp.	0	0	-	0	0	-
	Probezzia sp.	0	0	-	13	19	14
	Simulium sp.	319	281	207	2,594	3,550	2,612
	Stratiomyidae	0	0	-	0	0	-
	Tipula sp.	3	7	5	0	0	-
Trichoptera	Brachycentrus occidentalis	2,089	1,061	781	27	42	31
	Cheumatopsyche sp.	795	453	333	3,761	3,663	2,694
	Chimarra sp.	0	0	-	372	498	366
	Culoptila sp.	33	64	47	0	0	-
	Helicopsyche sp.	12	16	12	70	113	83
	Hydropsyche sp.	1,673	1,179	868	1,202	1,406	1,035
	Hydroptila sp.	17	20	15	360	374	275
	Hydroptilidae	0	0	-	4	10	7
	Micrasema sp.	0	0	-	0	0	-
	Nectopsyche sp.	28	32	23	436	662	487
	Neotrichia sp.	51	37	27	9	19	14
	Ochrotrichia sp.	0	0	-	0	0	-
	Oecetis avara	84	69	51	291	294	216
	Polycentropodidae	0	0	-	0	0	-
	Protophila sp.	69	97	72	0	0	-
Lepidoptera	Petrophila sp.	170	61	45	175	198	146
Gastropoda	Fluminicola sp.	0	0	-	0	0	-

2010 Taxa Density (orgs/m²)
Bear River, ID

2010 BMI Taxa List		Reach 1 - 2010			Reach 2 - 2010		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Gastropoda	Potamopyrgus antipodarum	0	0	-	0	0	-
Bivalvia	Pisidium sp.	7	10	7	406	441	324
	Sphaeriidae	0	0	-	9	19	14
Annelida	Erpobdella sp.	0	0	-	47	48	35
	Limnodrilus hoffmeisteri	0	0	-	69	154	113
	Lumbriculidae	13	28	21	70	89	65
	Naididae	0	0	-	0	0	-
	Quistadrilus multisetosus	0	0	-	60	135	99
	Tubificidae w/ cap setae	0	0	-	9	19	14
	Tubificidae w/o cap setae	0	0	-	56	126	93
Acari	Acari	0	0	-	13	29	21
	Atractides sp.	11	18	13	9	19	14
	Hygrobates sp.	0	0	-	2,895	2,968	2,184
	Lebertia sp.	0	0	-	625	620	456
	Sperchon sp.	8	19	14	371	313	231
	Torrenticola sp.	0	0	-	452	382	281
Crustacea	Hyalella sp.	0	0	-	711	758	558
	Orconectes sp.	2	5	4	0	0	-
	Ostracoda	0	0	-	1,996	3,186	2,344
Other Organisms	Nematoda	1	2	1	340	185	136
	Prostoma sp.	0	0	-	62	112	82
	Turbellaria	0	0	-	1,113	1,253	922
TOTAL		8,509	4,440	3,266	28,853	15,306	11,259

2010 Taxa Density (orgs/m²)
Bear River, ID

2010 BMI Taxa List		Reach 3 - 2010			Reach 4 - 2010		
		Ave./(m ²)	STDEV	CI (0.10)	Ave./(m ²)	STDEV	CI (0.10)
Ephemeroptera	Asioplax sp.	0	0	-	0	0	-
	Baetidae	0	0	-	0	0	-
	Baetis sp.	188	421	310	0	0	-
	Baetis tricaudatus	252	428	315	1,032	1,611	1,185
	Ephemerella sp.	0	0	-	103	229	169
	Ephoron sp.	0	0	-	0	0	-
	Fallceon quilleri	624	505	372	1,640	3,388	2,493
	Heptageniidae	0	0	-	0	0	-
	Heterocloeon sp.	4	8	6	0	0	-
	Maccaffertium terminatum	0	0	-	0	0	-
	Tricorythodes sp.	44	41	30	801	1,703	1,252
Odonata	Argia sp.	9	7	5	0	0	-
	Coenagrionidae	20	6	4	0	0	-
	Ophiogomphus sp.	0	0	-	0	0	-
Plecoptera	Perlodidae	0	0	-	0	0	-
Coleoptera	Dubiraphia sp.	5	8	6	0	0	-
	Microcylloepus sp.	307	282	207	65	145	106
	Optioservus sp.	203	108	80	0	0	-
	Zaitzevia sp.	0	0	-	0	0	-
Diptera- Chironomidae	Cladotanytarsus sp.	2	4	3	0	0	-
	Cricotopus bicinctus gr.	0	0	-	0	0	-
	Cricotopus sp.	0	0	-	0	0	-
	Cricotopus trifascia gr.	42	16	12	1,673	1,449	1,066
	Cryptochironomus sp.	2	4	3	103	229	169
	Dicrotendipes sp.	5	8	6	0	0	-
	Eukiefferiella devonica gr.	58	53	39	0	0	-
	Eukiefferiella sp.	2	4	3	0	0	-
	Lopescladius sp.	0	0	-	0	0	-
	Micropsectra sp.	6	9	7	769	1,719	1,265
	Microtendipes pedellus gr.	39	40	30	0	0	-
	Orthocladius (Euorthocladius) sp.	0	0	-	0	0	-
	Orthocladius Complex	5	8	6	0	0	-
	Orthocladius sp.	353	202	149	769	1,719	1,265
	Parakiefferiella sp.	13	14	10	0	0	-
	Parametriochnemus sp.	6	8	6	0	0	-

2010 Taxa Density (orgs/m²)
Bear River, ID

2010 BMI Taxa List		Reach 3 - 2010			Reach 4 - 2010		
		Ave./(m ²)	STDEV	CI (0.10)	Ave./(m ²)	STDEV	CI (0.10)
	Pentaneura sp.	2	4	3	0	0	-
	Polypedilum sp.	17	17	12	0	0	-
	Potthastia longimana gr.	0	0	-	0	0	-
	Pseudochironomus sp.	6	8	6	0	0	-
	Rheocricotopus sp.	4	8	6	0	0	-
	Rheotanytarsus sp.	24	24	18	0	0	-
	Thienemanniella sp.	0	0	-	0	0	-
	Thienemannimyia gr. sp.	38	36	27	0	0	-
	Tvetenia bavarica gr.	0	0	-	0	0	-
	Tvetenia discoloripes gr.	2	4	3	0	0	-
Diptera	Bezzia/Palpomyia sp.	5	8	6	769	1,719	1,265
	Hemerodromia sp.	92	37	27	0	0	-
	Muscidae	14	8	6	0	0	-
	Neoplasta sp.	2	4	3	0	0	-
	Probezzia sp.	0	0	-	0	0	-
	Simulium sp.	103	137	101	481	519	382
	Stratiomyidae	10	12	9	0	0	-
	Tipula sp.	1	2	1	0	0	-
Trichoptera	Brachycentrus occidentalis	0	0	-	0	0	-
	Cheumatopsyche sp.	131	127	94	0	0	-
	Chimarra sp.	151	138	102	0	0	-
	Culoptila sp.	0	0	-	0	0	-
	Helicopsyche sp.	26	20	15	0	0	-
	Hydropsyche sp.	16	19	14	0	0	-
	Hydroptila sp.	599	350	258	2,640	4,980	3,664
	Hydroptilidae	0	0	-	205	458	337
	Micrasema sp.	1	2	1	0	0	-
	Nectopsyche sp.	600	319	234	218	237	174
	Neotrichia sp.	0	0	-	0	0	-
	Ochrotrichia sp.	5	11	8	0	0	-
	Oecetis avara	778	715	526	0	0	-
	Polycentropodidae	1	2	1	0	0	-
	Protophila sp.	6	13	9	0	0	-
Lepidoptera	Petrophila sp.	76	112	83	0	0	-
Gastropoda	Fluminicola sp.	0	0	-	74,605	141,135	103,819

2010 Taxa Density (orgs/m²)
Bear River, ID

2010 BMI Taxa List		Reach 3 - 2010			Reach 4 - 2010		
		Ave./ (m ²)	STDEV	CI (0.10)	Ave./ (m ²)	STDEV	CI (0.10)
Gastropoda	Potamopyrgus antipodarum	0	0	-	706,088	878,695	646,368
Bivalvia	Pisidium sp.	7	17	12	0	0	-
	Sphaeriidae	5	12	9	871	1,677	1,233
Annelida	Erpobdella sp.	0	0	-	0	0	-
	Limnodrilus hoffmeisteri	0	0	-	0	0	-
	Lumbriculidae	18	19	14	103	229	169
	Naididae	0	0	-	83	186	137
	Quistadrilus multisetosus	0	0	-	0	0	-
	Tubificidae w/ cap setae	0	0	-	0	0	-
	Tubificidae w/o cap setae	0	0	-	0	0	-
	Acari	8	11	8	0	0	-
Acari	Atractides sp.	8	16	12	32	72	53
	Hygrobates sp.	1,752	1,260	927	2,789	4,906	3,609
	Lebertia sp.	2	4	3	0	0	-
	Sperchon sp.	240	200	147	277	428	315
	Torrenticola sp.	84	93	68	871	1,677	1,233
	Hyaella sp.	22	23	17	0	0	-
Crustacea	Orconectes sp.	0	0	-	0	0	-
	Ostracoda	188	137	101	1,640	3,388	2,493
	Nematoda	22	23	17	0	0	-
Other Organisms	Prostoma sp.	16	21	15	218	237	174
	Turbellaria	97	36	26	4,392	2,922	2,149
TOTAL		7,362	3,677	2,704	803,237	1,044,356	768,230