APPENDIX B

UNMINED CHANNEL AND DRAINAGE BASIN DATA

ROCK SPRINGS AND HANNA STUDY SITES

Table B-1. Natural Channel and Basin Characteristics, Rock Springs Study Site

					10-year, 1-hour Event								100-year, 1-hour Event							
Basin	Drainage Area (acres)	Mean Basin Slope	Area Gradient Index	Channel Slope	Peak Discharge (cfs)	Velocity (fps)	Depth (ft)	Flow Area (ft2)	WP (ft)	TW (ft)	Hydr. Radius (ft)	Hydr. Depth (ft)	Peak Discharge (cfs)	Velocity (fps)	Depth (ft)	Flow Area (ft2)	WP (ft)	TW (ft)	Hydr. Radius (ft)	Hydr. Depth (ft)
3	6.6	0.16	1.06	0.07	2.81	4.03	0.36	0.70	3.31	3.30	0.21	0.21	10.33	3.70	0.66	2.79	14.60	14.00	0.19	0.20
4	46.5	0.10	4.51	0.08	16.81	6.97	0.79	2.41	5.29	4.92	0.46	0.49	56.11	9.85	1.34	5.70	7.52	6.72	0.76	0.85
5	21.4	0.13	2.78	0.13	8.36	7.60	0.68	1.10	3.21	2.60	0.34	0.42	28.96	10.90	1.18	2.66	4.65	3.42	0.57	0.78
6	77.8	0.08	6.30	0.04	22.99	6.16	0.99	3.73	5.79	5.21	0.64	0.72	74.95	8.53	1.82	8.79	8.40	7.12	1.05	1.23
7	59.3	0.12	6.82	0.05	22.51	6.64	0.90	3.39	5.88	5.08	0.58	0.67	74.30	9.64	1.70	7.71	7.62	5.78	1.01	1.33
7a	4.8	0.07	0.33	0.07	2.15	3.86	0.35	0.56	2.77	2.55	0.20	0.22	8.04	5.87	0.63	1.37	3.62	3.19	0.38	0.43
7'	16.6	0.15	2.42	0.05	6.82	4.83	0.82	1.41	3.76	3.33	0.38	0.42	23.92	6.95	1.32	3.44	5.42	4.62	0.63	0.74
12a	3.3	0.13	0.43	0.13	1.42	4.56	0.24	0.31	1.89	1.65	0.16	0.19	5.42	6.72	0.48	0.81	2.72	2.48	0.30	0.33
12b	0.5	0.15	0.07	0.13	0.30	2.99	0.14	0.10	1.17	1.16	0.09	0.09	1.28	4.42	0.28	0.29	1.88	1.57	0.15	0.18
13	14.2	0.12	1.70	0.09	5.42	5.86	0.55	0.92	2.89	2.58	0.32	0.36	19.16	8.36	1.00	2.29	4.20	3.44	0.55	0.67
15	46.5	0.07	3.16	0.05	13.67	5.84	0.77	2.34	4.76	4.34	0.49	0.54	45.63	8.21	1.39	5.55	6.61	5.99	0.81	0.93
16	56.5	0.09	4.92	0.03	17.60	4.68	1.26	3.76	6.83	5.72	0.55	0.66	58.22	5.36	2.08	10.9	14.94	13.51	0.73	0.80
16a	8.1	0.27	2.16	0.06	3.74	4.05	0.47	0.92	3.68	3.50	0.25	0.26	13.60	5.92	0.79	2.30	5.22	4.89	0.44	0.47
24	19.9	0.12	2.39	0.05	8.24	4.84	0.65	1.70	4.60	4.31	0.37	0.39	28.64	7.27	1.12	3.94	5.92	5.28	0.67	0.75
25	9.0	0.11	0.99	0.10	3.70	5.47	0.39	0.68	2.59	2.23	0.26	0.30	13.38	8.04	0.78	1.66	3.58	2.91	0.46	0.57
28	12.8	0.11	1.41	0.08	5.13	4.66	0.23	1.10	6.53	6.20	0.17	0.18	18.23	6.38	0.50	2.86	7.16	6.70	0.40	0.43
31	3.3	0.16	0.52	0.08	1.37	3.66	0.36	0.37	2.12	1.88	0.17	0.20	5.23	5.37	0.61	0.97	3.11	2.68	0.31	0.36

Note: WP = Wetted Perimeter
TW = Top Width
Hydraulic Radius = Flow Area/Wetted Perimeter
Hydraulic Depth = Flow Area/Top Width

Table B-2. Natural Channel and Basin Characteristics, Hanna Study Site

					10-year, 1-hour Event								100-year, 1-hour Event							
Basin	Drainage Area (acres)	Mean Basin Slope	Area Gradient Index	Channel Slope	Peak Discharge (cfs)	Velocity (fps)	Depth (ft)	Flow Area (ft2)	WP (ft)	TW (ft)	Hydr. Radius (ft)	Hydr. Depth (ft)	Peak Discharge (cfs)	Velocity (fps)	Depth (ft)	Flow Area (ft2)	WP (ft)	TW (ft)	Hydr. Radius (ft)	Hydr. Depth (ft)
1	44.3	0.12	5.30	0.02	12.94	3.91	0.90	3.31	6.65	6.44	0.50	0.51	46.38	5.11	1.58	9.46	12.37	11.48	0.76	0.82
1a	4.6	0.18	0.84	0.11	1.78	5.26	0.33	0.34	1.82	1.63	0.19	0.21	5.75	7.20	0.56	0.80	2.68	2.13	0.30	0.38
2	101.0	0.09	9.18	0.05	22.84	6.80	1.07	3.36	7.94	4.58	0.42	0.73	92.26	9.56	1.78	9.65	11.35	9.89	0.85	0.98
3	33.3	0.10	3.46	0.08	10.26	6.24	0.45	1.64	5.63	5.49	0.29	0.30	37.57	9.31	0.82	4.04	7.58	7.14	0.53	0.57
4	19.4	0.11	2.14	0.11	6.75	6.17	0.42	1.09	4.72	7.80	0.23	0.14	23.40	7.29	0.70	3.21	10.78	10.42	0.30	0.31
5	53.9	0.07	3.71	0.06	13.14	6.30	0.63	2.09	5.32	5.00	0.39	0.42	52.02	9.60	1.18	5.42	7.57	6.71	0.72	0.81
6	14.2	0.12	1.73	0.20	4.92	6.40	0.27	0.77	4.90	3.33	0.16	0.23	17.12	9.75	0.45	1.76	5.95	4.00	0.30	0.44
7	30.3	0.11	3.45	0.09	9.81	5.28	0.38	1.86	8.77	6.43	0.21	0.29	35.14	7.58	0.63	4.63	12.67	12.47	0.37	0.37
8	2.7	0.08	0.19	0.05	1.00	3.11	0.23	0.32	2.26	2.22	0.14	0.15	3.30	4.40	0.40	0.75	3.12	3.00	0.24	0.25
9	2.7	0.07	0.18	0.10	1.02	4.46	0.27	0.23	1.46	1.27	0.16	0.18	3.25	6.20	0.46	0.52	2.05	1.66	0.25	0.31

Note: WP = Wetted Perimeter
TW = Top Width
Hydraulic Radius = Flow Area/Wetted Perimeter
Hydraulic Depth = Flow Area/Top Width

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