

Appendix 1. Location of the sediment fences and rain gages for each fire.

Appendix 1. Location of the sediment fences and rain gages for each fire.

Fire	Site number	North latitude	West longitude	Elevation (m)
Bear Tracks	hbeart1	39°36'16.1"	105°32'20.5"	2786
	hbeart2	39°36'14.3"	105°32'21.1"	2772
	hbeart3	39°36'14.1"	105°32'28.2"	2811
	hbeart4	39°36'11.2"	105°32'29.9"	2811
	hbeart5	39°36'10.1"	105°32'31.8"	2798
Bobcat	hbcat1	40°27'39.6"	105°20'49.0"	2413
	hbcat2	40°27'38.9"	105°20'51.0"	2435
	hbcat3	40°27'39.6"	105°20'52.5"	2430
	hbcat4	40°27'40.0"	105°20'54.9"	2456
	hbcat5	40°29'00.7"	105°18'54.4"	2086
	hbcat6	40°28'56.9"	105°18'56.7"	2108
	hbcat7	40°28'46.2"	105°18'32.0"	2068
	hbcat8	40°28'39.9"	105°18'24.0"	2067
	hbcat9	40°28'39.9"	105°18'22.5"	2068
	hbcat10	40°28'40.1"	105°18'13.3"	2055
	hbcat11	40°28'29.1"	105°18'09.6"	2045
	hbcat12	40°28'43.2"	105°16'19.8"	1975
	hbcat13	40°28'46.4"	105°16'17.0"	1965
	hbcat14	40°28'48.9"	105°16'02.7"	2048
	hbcat15	40°28'47.0"	105°16'03.1"	2048
	hbcat16	40°28'51.9"	105°15'56.9"	2050
	Galuchie rain gage	40°27'18.0"	105°21'21.2"	2427
	Snowtop rain gage	40° 28' 27.5"	105 17'59.9"	2065
	Middle Jug Gulch rain gage	41° 29'45.1"	106 18'50.8"	2120
	Green Ridge rain gage	40°29' 00.1"	105°15'26.6"	2015
Crosier Mountain	hcroz1	40°25'44.4"	105°22'55.8"	2289
	hcroz2	40°25'41.6"	105°22'58.4"	2319
	hcroz3	40°25'42.4"	105°22'51.1"	2303
	hcroz4	40°25'41.8"	105°22'48.1"	2300
	hcroz5	40°25'42.2"	105°22'47.6"	2299
	Crosier Mountain rain gage	40°25'41.5"	105°22'55.9"	2302
Dadd Bennett	hdadben1	40°39'46.0"	105°32'26.3"	2401
	hdadben2	40°39'47.7"	105°32'25.4"	2402
	hmomg1	40°41'24.8"	105°31'22.6"	2201
	hmomg2	40°41'22.0"	105°31'24.9"	2206
	hmomg3	40°41'20.3"	105°31'30.7"	2250
	Mom Gulch rain gage	40°41'04.9"	105°31'30.2"	2246
Hayman	usg4	39°17'50.7"	105°17'48.7"	2344
	usg8	39°17'10.6"	105°17'55.7"	2408
	usg12	39°18'09.0"	105°13'48.3"	2221
	usg15	39°18'03.9"	105°13'45.8"	2200
	usg17	39°18'04.4"	105°13'52.4"	2215
	usg18	39°17'56.3"	105°13'55.1"	2208
	usg20	39°17'54.5"	105°13'59.8"	2214
	usg22	39°17'58.4"	105°14'20.6"	2265
	usg24	39°17'54.9"	105°13'54.0"	2200
	usg26	39°17'36.9"	105°14'50.1"	2389
	usg29	39°17'39.5"	105°14'51.6"	2375
	usg30	39°17'27.5"	105°14'53.6"	2405
	usg33	39°17'57.7"	105°14'19.0"	2266
	esg1	39°18'04.9"	105°13'53.2"	2221
	esg2	39°18'05.3"	105°13'53.3"	2226
	esg3	39°18'06.4"	105°13'53.2"	2230
	msg1	39°18'00.4"	105°14'01.9"	2234
	msg2	39°18'00.7"	105°14'01.9"	2234
	msg3	39°18'01.2"	105°14'02.1"	2232
	msg4	39°17'59.3"	105°14'01.3"	2237
	msg5	39°18'02.0"	105°14'02.8"	2242
	msg6	39°18'01.9"	105°14'03.4"	2245
	nbcl	39°17'00.8"	105°14'44.8"	2326
	nbcl	39°16'59.9"	105°14'44.6"	2322
	nbcl	39°16'59.3"	105°14'42.5"	2321
	psgl	39°17'54.2"	105°13'58.9"	2220
	psg2	39°17'53.9"	105°13'59.3"	2213
	psg3	39°17'53.7"	105°13'59.8"	2210
	bc1	39°17'00.2"	105°15'41.3"	2347

Appendix 1. Location of the sediment fences and rain gages for each fire (continued).

Fire	Site number	North latitude	West longitude	Elevation (m)
Hayman (cont'd)	bc2	39°16'59.6"	105°14'41.6"	2343
	bc3	39°16'59.5"	105°14'41.8"	2338
	bc4	39°16'59.2"	105°14'42.2"	2337
	bc5	39°16'59.0"	105°14'42.5"	2328
	USG north rain gage	39°18'2.5"	105°13'48.5"	7282
	USG north2 rain gage	39°18'2.6"	105°13'48.6"	7283
	USG south rain gage	39°17'32.7"	105°14'53.1"	7284
	UBC rain gage	39°17'3.0"	105°14'50.1"	7285
Hewlett Gulch	hew1	40°42'21.8"	105°18'37.97"	1873
	hew2	40°42'20.3"	105°18'32.7"	1946
	hew3	40°42'19.9"	105°18'30.4"	1951
	Hewlett Gulch rain gage	40°42'26.3"	105°18'38.7"	1855
Hourglass	hpingp1	40°34'20.0"	105°34'56.7"	2757
	hpingp2	40°34'17.3"	105°34'55.8"	2768
	hpingp3	40°34'9.6"	105°34'21.2"	2691
	hpingp4	40°34'11.6"	105°34'20.9"	2687
	hpingp5	40°34'10.6"	105°34'34.7"	2717
	hpingp6	40°34'10.6"	105°34'36.1"	2714
	hpingp7	40°34'11.9"	105°34'37.3"	2724
	Hourglass rain gage	40°34'21.7"	105°34'53.5"	2750
Lower Flowers	holdf1	40°39'33.3"	105°34'59.1"	2632
	holdf2	40°39'30.5"	105°35'24.2"	2641
	holdf3	40°39'15.8"	105°36'04.2"	2825
	holdf4	40°39'16.8"	105°36'02.7"	2815
	holdf5	40°39'19.3"	105°35'59.9"	2797
	holdf6	40°39'33.2"	105°35'11.1"	2637
	holdf7	40°39'31.6"	105°34'56.9"	2627
	holdf8	40°39'28.7"	105°35'01.4"	2581
	holdf9	40°39'30.1"	105°35'02.4"	2591
	holdf10	40°39'36.4"	105°34'39.7"	2552
Lower Flowers rain gage	40°39'28.3"	105°35'20.4"	2622	
Schoonover	sch1	39°15'11.2"	105°11'44.9"	2213
	sch2	39°15'10.5"	105°11'41.6"	2226
	sch3	39°15'12.0"	105°11'40.8"	2228
	sch4	39°15'05.5"	105°11'43.4"	2206
	sch5	39°15'08.8"	105°11'43.2"	2219
	sch6	39°15'09.2"	105°11'50.6"	2167
	Schoonover rain gage	39°15'06.5"	105°11'50.6"	2164

Appendix 2. Plot characteristics and annual sediment production.

Fire	Site number	Fire severity	Hillslope position	Slope (%)	Aspect (°)	Contributing area (m ²)	Sediment production				Notes
							2000 (kg)	2001 (kg)	2002 (kg)	2003 (kg)	
Bear Tracks	hbeat1	high	planar	27	140	713	24	124	19	1	Overtopped 2000, 2001
	hbeat2	high	swale	42	110	1281	337	696	50	1	
	hbeat3	high	swale	27	48	737	225	706	89	7	
	hbeat4	low	planar	35	144	672	6	5	6	2	
	hbeat5	low	planar	37	144	1885	1	2	1	1	
	Mean*	High		32	99	910	195	508	53	3	
	Moderate		--	--	--	--	--	--	--		
	Low		36	144	1279	4	4	4	1		
Big Elk	bigelk1	moderate	swale	25	100	2657	--	--	--	283	Overtopped 2003
	bigelk2	high	swale	31	90	3765	--	--	--	6528	
	bigelk3	high	swale	25	90	1401	--	--	--	3108	
	bigelk4	high	swale	27	10	3039	--	--	--	2731	
	bigelk5	low	swale	17	200	5658	--	--	--	7	
	bigelk6	moderate	swale	32	200	11237	--	--	--	483	
Mean*	High		28	63	2735	--	--	--	4122		
	Moderate		29	150	6947	--	--	--	383		
	Low		17	200	5658	--	--	--	7		
Bobcat	hbcat1	high	swale	27	74	1257	2193	2243	12	5	Overtopped 2000, 2001
	hbcat2	high	planar	25	54	1569	211	766	1	5	
	hbcat3	high	planar	30	60	1750	648	770	13	6	Overtopped 2000, 2001
	hbcat4	high	swale	28	84	1794	1526	998	16	3	
	hbcat5	moderate	swale	27	235	2439	3	73	1	1	
	hbcat6	high	planar	28	60	1430	680	599	1	1	
	hbcat7	low	planar	26	28	284	2	6	1	1	Overtopped 2000, 2001
	hbcat8	high	swale	30	20	3836	3843	3342	3	1	
	hbcat9	high	planar	42	360	1943	578	965	3	1	
	hbcat10	high	planar	39	12	1244	707	758	2	1	
	hbcat11	moderate	planar	29	360	586	6	3	1	1	Overtopped 2000, 2001
	hbcat12	high	swale	32	108	1090	1620	1013	409	75	
	hbcat13	high	planar	27	212	522	180	238	9	1	
	hbcat14	high	planar	28	316	688	421	209	90	2363	
	hbcat15	high	swale	33	232	494	1276	723	172	251	
	hbcat16	high	planar	43	330	194	444	197	263	217	
Mean*	High		32	148	1370	1102	986	77	225		
	Moderate		28	298	1513	4	38	1	1		
	Low		26	28	284	2	6	1	1		
Crosier Mountain	hcroz1	high	swale	32	12	1601	2	21	1	40	
	hcroz2	high	planar	32	16	519	4	10	1	4	
	hcroz3	moderate	swale	26	338	1784	1	1	1	5	
	hcroz4	high	planar	43	35	559	5	28	1	3	
	hcroz5	high	planar	44	22	879	5	16	1	1	
Mean*	High		38	21	889	4	19	1	12		
	Moderate		26	338	1784	1	1	1	5		
	Low		--	--	--	--	--	--	--		
Dadd Bennett	hdadben1	low	planar	55	238	450	30	5	1	9	Overtopped 2000
	hdadben2	low	planar	37	278	593	40	6	1	1	
	hmomg1	moderate	swale	22	60	6629	374	3	1	1	
	hmomg2	moderate	planar	33	82	726	92	4	1	1	
	hmomg3	moderate	swale	42	86	2537	365	112	2	149	
Mean*	High		--	--	--	--	--	--	--		
	Moderate		32	76	3297	277	40	1	50		
	Low		46	258	522	35	6	1	5		
Hayman	usg4	high	swale	28	60	1752	--	--	--	1968	Overtopped 2002
	usg8	high	swale	26	98	8760	--	--	7054	--	
	usg12	high	swale	26	50	2438	--	--	1180	3094	
	usg15	moderate	swale	20	20	2550	--	--	921	1317	
	usg17	high	swale	29	104	1898	--	--	1287	3889	
	usg18	high	swale	30	100	1712	--	--	1912	1825	
	usg20	high	swale	12	15	4852	--	--	3975	5274	
	usg22	high	swale	19	90	4185	--	--	3092	8301	
	usg24	high	swale	32	120	1024	--	--	912	1352	
	usg26	high	swale	27	20	6540	--	--	2503	2045	
	usg29	high	swale	20	55	2359	--	--	1640	2644	
	usg30	high	swale	20	72	3023	--	--	--	741	
	usg33	high	swale	20	33	2412	--	--	--	2579	
	esg1	high	swale	24	104	354	--	--	--	685	
	esg2	high	swale	24	104	702	--	--	--	1106	
	esg3	high	swale	16	104	616	--	--	--	620	
	msg1	high	swale	24	300	463	--	--	--	400	
	msg2	high	swale	27	300	262	--	--	--	461	
	msg3	high	swale	29	300	256	--	--	--	657	
	msg4	high	swale	20	340	271	--	--	--	106	

Fire	Site number	Fire severity	Hillslope position	Slope (%)	Aspect (°)	Contributing area (m ²)	Sediment production				Notes
							2000 (kg)	2001 (kg)	2002 (kg)	2003 (kg)	
Hayman (cont'd)	msg5	high	swale	22	200	108	--	--	--	186	
	msg6	high	swale	21	200	295	--	--	--	632	
	nb1	high	planar	35	12	51	--	--	--	3	
	nb2	high	planar	41	12	100	--	--	--	2	
	nb3	high	planar	37	12	102	--	--	--	2	
	psg1	high	planar	24	160	35	--	--	--	9	
	psg2	high	planar	34	160	73	--	--	--	80	
	psg3	high	planar	39	160	121	--	--	--	113	
	bc1	high	planar	25	90	35	--	--	--	2	
	bc2	high	planar	33	90	73	--	--	--	3	
	bc3	high	planar	38	90	78	--	--	--	3	
	bc4	high	planar	40	90	114	--	--	--	2	
	bc5	high	planar	45	90	221	--	--	--	3	
	Mean*	High		28	117	1415	--	--	2617	1251	
		Moderate		20	20	2550	--	--	921	1317	
	Low		--	--	--	--	--	--	--		
Hewlett Gulch	hew1	high	swale	68	350	970	--	--	1936	11	
	hew2	high	swale	72	338	1080	--	--	2878	24	
	hew3	high	swale	82	329	1000	--	--	2640	19	
	Mean*	High		74	339	1017	--	--	2485	18	
	Moderate		--	--	--	--	--	--	--		
	Low		--	--	--	--	--	--	--		
Hourglass	hpingp1	high	swale	13	360	1875	3	6	1	1	
	hpingp2	high	planar	15	12	3522	3	2	1	1	
	hpingp3	high	swale	30	332	878	4	2	1	1	
	hpingp4	high	swale	45	330	954	3	1	1	1	
	hpingp5	high	swale	32	43	1607	2	1	1	1	
	hpingp6	moderate	swale	33	48	1053	4	2	1	1	
	hpingp7	low	planar	34	55	399	1	1	1	1	
	Mean*	High		27	215	1767	3	2	1	1	
	Moderate		33	48	1053	4	2	1	1		
	Low		34	55	399	1	1	1	1		
Lower Flowers	holdf1	high	planar	28	128	1009	220	497	3	1	Overtopped 2001
	holdf2	high	planar	32	145	942	40	47	1	1	
	holdf3	moderate	planar	36	154	388	3	36	1	1	
	holdf4	moderate	planar	26	156	318	1	4	1	1	
	holdf5	moderate	planar	27	122	385	9	111	5	1	
	holdf6	high	planar	30	146	713	20	373	11	10	
	holdf7	low	planar	26	148	601	36	431	4	2	
	holdf8	high	planar	18	156	1152	41	467	6	2	
	holdf9	moderate	planar	24	150	1068	18	501	7	2	
	holdf10	low	planar	18	106	355	5	1	1	1	
	Mean*	High		27	144	954	80	346	5	3	
	Moderate		28	146	540	8	163	4	1		
	Low		22	127	478	21	216	3	1		
Schoonover	sch1	high	swale	38	315	2469	--	--	400	3673	
	sch2	high	swale	37	315	1190	--	--	215	3430	
	sch3	high	swale	40	315	2371	--	--	293	2223	
	sch4	high	swale	30	180	2833	--	--	1123	4927	
	sch5	high	swale	37	270	1473	--	--	407	2874	
	sch6	high	swale	35	270	1283	--	--	401	2295	
	Mean*	High		36	278	1936	--	--	473	3237	
	Moderate		--	--	--	--	--	--	--		
	Low		--	--	--	--	--	--	--		

*Means are plot averages

Appendix 3. Cover count data. Fires are listed in alphabetical order.

Appendix 3. Cover count data: Bear Tracks fire (wildfire, June 1998).

Spring 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	6	41	55	16	26	0	0	144	38
2	20	32	51	25	10	0	1	139	37
3	18	18	55	29	18	2	3	143	38
4	7	55	25	14	19	1	0	121	21
5	9	58	31	12	13	1	0	124	25

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	8	27	33	11	32	0	1	112	29
2	19	27	32	14	13	1	0	106	30
3	28	21	27	20	20	1	4	121	22
4	10	48	10	24	13	4	1	110	9
5	13	63	14	16	12	0	1	119	12

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	5	46	30	13	18	0	1	113	27
2	17	37	26	13	9	1	0	103	25
3	20	25	18	13	11	5	3	95	19
4	24	61	11	24	7	3	0	130	8
5	8	57	13	14	9	1	0	102	13

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	8	36	27	12	27	0	0	110	25
2	9	48	19	14	18	1	0	109	17
3	16	30	26	10	23	3	1	109	24
4	7	59	14	8	12	1	0	101	14
5	2	66	12	5	18	1	1	105	11

Appendix 3. Cover count data: Big Elk fire (wildfire, August 2002).

Spring 2002

No spring 2002 cover data

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	6	0	78	3	8	0	0	95	82
2	16	0	83	1	0	0	0	100	83
3	8	0	101	1	0	0	0	110	92
4	7	0	112	1	0	0	6	126	89
5	7	12	33	11	44	0	1	108	31
6	19	2	87	2	12	17	1	140	62

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	2	24	61	1	16	0	1	105	58
2	16	4	80	3	1	0	0	104	77
3	14	5	82	0	0	0	0	101	81
4	8	0	92	2	1	0	3	106	87
5	4	48	28	1	28	0	0	109	26
6	11	12	42	1	36	0	1	103	41

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	4	16	73	1	14	0	0	108	68
2	16	0	84	1	0	0	0	101	83
3	12	0	91	1	0	0	0	104	88
4	11	0	93	1	0	0	0	105	89
5	11	30	33	3	40	0	0	117	28
6	7	13	39	0	53	0	2	114	34

Appendix 3. Cover count data: Bobcat fire (wildfire, June 2000).

Spring 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	5	47	66	26	1	0	2	147	45
2	0	41	52	36	6	0	2	137	38
3	0	32	58	28	7	0	1	126	46
4	36	48	60	13	2	0	5	164	37
5	12	77	10	4	37	0	2	142	7.0
6	1	93	4	6	36	2	5	147	2.7
7	1	40	5	13	63	1	4	127	3.9
8	26	53	40	4	8	0	1	132	30
9	9	54	55	5	8	3	3	137	40
10	8	62	55	7	3	0	3	138	40
11	4	50	12	12	52	0	3	133	9.0
12	12	46	79	3	15	0	0	155	51
13	6	44	56	4	37	0	1	148	38
14	5	44	82	2	5	0	1	139	59
15	23	26	94	6	5	0	0	154	61
16	23	26	87	5	1	0	1	143	61

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	8	37	29	10	14	0	0	98	30
2	7	45	25	10	17	0	0	104	24
3	13	42	35	9	12	0	1	112	31
4	8	47	34	7	14	0	0	110	31
5	6	40	14	3	38	0	2	103	14
6	4	53	2	4	36	6	2	107	1.9
7	4	28	4	10	50	5	1	102	3.9
8	21	36	23	8	8	9	1	106	22
9	19	45	18	1	7	19	0	109	17
10	8	54	29	7	6	1	2	107	27
11	8	35	10	7	39	0	0	99	10
12	15	58	75	10	26	0	0	184	41
13	7	36	30	7	23	0	0	103	29
14	12	26	52	5	4	0	2	101	51
15	23	15	64	0	0	0	0	102	63
16	28	6	63	2	1	0	0	100	63

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	12	43	24	10	7	4	1	101	24
2	7	51	18	14	9	6	0	105	17
3	4	45	28	5	9	3	1	95	29
4	15	38	22	8	8	4	3	98	22
5	5	52	6	1	34	1	0	99	6.1
6	4	45	1	5	40	2	0	97	1.0
7	0	48	1	9	41	1	0	100	1.0
8	10	53	9	6	12	6	1	97	9.3
9	11	59	13	6	14	5	0	108	12
10	2	73	2	8	9	4	1	99	2.0
11	1	61	4	6	26	0	2	100	4.0
12	5	72	32	12	10	0	0	131	24
13	1	58	17	10	19	0	1	106	16
14	19	37	58	3	4	0	1	122	48
15	2	53	40	2	4	0	0	101	40
16	22	26	38	8	2	0	3	99	38

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	8	69	18	2	16	0	1	114	16
2	4	68	14	11	10	0	3	110	13
3	7	60	18	3	13	3	1	105	17
4	8	62	14	5	13	1	0	103	14
5	10	66	9	0	27	0	0	112	8.0
6	4	54	2	8	28	4	0	100	2.0
7	0	52	4	3	43	0	2	104	3.8
8	12	54	4	5	12	13	0	100	4.0
9	5	60	3	1	12	12	2	95	3.2
10	2	70	4	9	15	2	0	102	3.9
11	1	68	4	2	26	0	0	101	4.0
12	4	60	27	11	3	0	0	105	26
13	1	65	13	7	20	0	0	106	12
14	4	29	49	5	5	0	0	92	53
15	4	40	58	2	5	0	2	111	52
16	20	30	40	10	3	0	0	103	39

Appendix 3. Cover count data: Crosier Mountain fire (prescribed fire, September 1998).

Spring 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	28	61	23	24	21	1	2	160	14
2	10	46	6	35	25	31	1	154	3.9
3	12	39	13	23	34	15	2	138	9.4
4	14	40	21	22	21	7	4	129	16
5	22	47	29	22	3	11	0	134	22

Fall 2002

No fall 2002 cover data

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	16	48	25	15	2	0	0	107	23
2	14	41	18	7	10	17	0	109	17
3	10	48	6	8	20	8	0	103	5.8
4	20	46	11	11	8	12	0	112	10
5	11	47	10	6	6	21	1	107	9.3

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	15	39	26	5	17	2	0	104	25
2	10	45	10	12	9	17	1	104	10
3	13	39	11	2	31	11	2	109	10
4	14	51	11	5	7	11	2	101	11
5	14	48	10	9	10	13	0	104	10

Appendix 3. Cover count data: Dadd Bennett fire (prescribed fire, January 2000).

Spring 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	21	56	24	13	48	1	3	166	14
2	7	64	23	10	27	0	0	131	18
3	17	59	45	5	14	0	0	140	32
4	21	13	34	14	50	0	5	137	25
5	9	17	33	2	77	0	4	142	23

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	16	35	9	4	40	0	6	110	8.2
2	12	46	12	4	26	0	1	101	12
3	12	47	22	3	24	0	0	108	20
4	22	9	15	7	49	0	0	102	15
5	7	8	11	2	60	0	1	89	12

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	13	39	9	1	44	1	5	112	8.0
2	10	45	13	3	30	0	0	101	13
3	15	40	17	0	23	0	1	96	18
4	15	17	10	6	52	0	1	101	10
5	13	7	13	2	67	0	1	103	13

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	12	46	5	3	32	1	1	100	5.0
2	11	47	12	0	30	0	1	101	12
3	4	47	32	5	19	0	0	107	30
4	18	16	23	5	39	0	2	103	22
5	9	5	25	3	60	0	1	103	24

Appendix 3. Cover count data: Hayman fire (wildfire, June 2002).

Spring 2002

No spring 2002 cover data

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
usg9	0	3	97	--	0	0	--	100	97
usg12	0	2	94	--	4	0	--	100	94
usg15	0	4	88	--	8	0	--	100	88
usg17	1	0	91	--	8	0	--	100	91
usg18	0	0	92	--	8	0	--	100	92
usg20	3	2	85	--	10	0	--	100	85
usg22	0	0	97	--	3	0	--	100	97
usg24	0	0	100	--	0	0	--	100	100
usg26	12	1	80	--	7	0	--	100	80
usg28	0	0	98	--	2	0	--	100	98

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
usg4	0	1	99	1	5	0	0	106	93
usg12	0	2	119	2	13	0	1	137	87
usg15	1	13	71	12	40	0	0	137	52
usg17	1	10	100	1	16	0	0	128	78
usg18	0	0	86	1	33	0	0	120	72
usg20	1	4	75	1	20	0	1	102	74
usg22	1	4	86	4	18	0	0	113	76
usg24	0	1	98	0	10	0	0	109	90
usg26	11	0	96	0	17	0	0	124	77
usg29	2	0	101	0	0	0	0	103	98
usg30	4	1	97	0	0	0	0	102	95
usg33	1	0	100	5	0	0	0	106	94
bc1	0	0	50	0	0	0	0	50	100
bc2	0	0	76	0	3	0	0	79	96
bc3	0	1	60	0	2	0	0	63	95
bc4	2	0	55	0	2	0	1	60	92
bc5	1	0	80	0	3	0	0	84	95
bbc1	2	0	53	2	0	0	0	57	93
bbc2	0	1	49	0	0	0	2	52	94
bbc3	2	2	55	0	0	0	0	59	93
psg1	1	2	48	3	0	0	0	54	89
psg2	2	4	55	0	0	0	0	61	90
psg3	0	0	71	0	0	0	2	73	97
msg1	1	2	81	1	11	0	1	97	84
msg2	0	0	78	2	0	0	0	80	98
msg3	0	2	89	7	0	0	2	100	89

Spring 2003. Continued

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
msg4	0	1	64	2	6	0	0	73	88
msg5	0	2	100	0	5	0	0	107	93
msg6	0	11	159	5	17	0	1	193	82
esg1	0	11	84	1	6	0	4	106	79
esg2	0	16	85	0	14	0	2	117	73
esg3	0	17	84	1	2	0	1	105	80

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
usg4	0	24	86	2	3	13	2	130	66
usg12	0	28	82	0	1	0	1	112	73
usg15	0	46	60	3	41	1	1	152	39
usg17	3	19	84	3	6	2	0	117	72
usg18	0	15	80	2	19	5	2	123	65
usg20	0	40	128	3	40	6	0	217	59
usg22	0	13	77	2	8	7	1	108	71
usg24	0	26	80	2	5	10	0	123	65
usg26	22	16	97	5	33	11	1	185	52
usg29	3	10	79	6	2	8	2	110	72
usg30	8	34	106	2	2	3	1	156	68
usg33	0	4	91	4	0	12	1	112	81
bc1	0	2	13	0	0	0	0	15	87
bc2	0	2	17	0	0	0	0	19	89
bc3	0	3	25	0	0	0	0	28	89
bc4	0	5	26	0	1	0	1	33	79
bc5	1	4	42	0	1	0	0	48	88
nbc1	0	5	20	0	0	0	0	25	80
nbc2	0	3	35	0	0	0	0	38	92
nbc3	1	4	40	0	0	0	0	45	89
esg1	0	15	54	0	0	0	0	69	78
esg2	0	26	70	0	3	0	0	99	71
esg3	0	12	71	0	6	0	0	89	80
msg1	0	10	65	0	18	0	0	93	70
msg2	0	2	60	0	1	0	0	63	95
msg3	0	10	60	5	2	0	0	77	78
msg4	0	8	65	1	5	0	0	79	82
msg5	0	6	44	1	3	0	0	54	81
msg6	0	20	66	0	5	0	0	91	73
peg1	0	4	19	0	1	0	0	24	79
psg2	0	9	39	0	0	0	0	48	81
psg3	4	10	42	0	2	0	0	58	72

Appendix 3. Cover count data: Hewlett Gulch fire (wildfire, April 2002).

Spring 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	43	3	121	7	1	0	1	176	69
2	37	2	111	4	0	0	0	154	72
3	73	2	93	6	0	0	5	179	52

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	23	6	71	5	8	0	1	114	62
2	31	1	68	2	6	0	2	110	62
3	39	3	53	9	2	0	1	107	50

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	19	14	57	6	7	0	1	104	55
2	18	3	60	3	7	0	1	92	65
3	35	5	53	8	4	0	4	109	49

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	20	33	40	4	7	0	0	104	38
2	27	29	40	2	2	0	0	100	40
3	30	30	32	5	3	0	5	105	30

Appendix 3. Cover count data: Hourglass fire (wildfire, July 1994).

Spring 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	19	29	53	25	16	5	0	147	36
2	50	27	27	20	19	8	0	151	18
3	15	25	23	28	21	18	3	133	17
4	25	41	17	21	14	32	5	155	11
5	4	49	27	21	18	27	1	147	18
6	4	59	27	10	16	8	2	126	21
7	17	53	7	43	13	1	0	134	5.2

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	21	32	25	14	14	4	4	114	22
2	31	24	16	14	12	8	1	106	15
3	11	27	21	18	12	13	2	104	20
4	6	28	12	11	8	30	7	102	12
5	5	32	17	7	15	12	16	104	16
6	10	37	9	10	22	6	18	112	8.0
7	8	41	3	23	17	5	8	105	2.9

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	15	19	13	20	21	11	5	104	13
2	23	21	12	12	15	12	6	101	12
3	7	20	10	19	10	25	7	98	10
4	12	31	6	11	14	23	7	104	5.8
5	6	28	11	12	13	22	18	110	10
6	8	22	9	10	16	8	20	93	10
7	19	14	2	22	26	5	15	103	1.9

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	16	21	17	12	24	8	9	91	19
2	15	29	16	5	20	6	9	85	19
3	10	23	13	12	25	16	4	93	14
4	17	22	4	8	21	23	8	86	4.7
5	3	26	7	11	28	14	17	103	6.8
6	5	31	10	4	28	5	23	101	10
7	9	24	1	20	24	4	20	93	1.1

Appendix 3. Cover count data: Lower Flowers fire (prescribed fire, November 1999).

Spring 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	5	50	25	8	54	0	3	145	17
2	0	50	12	11	63	0	2	138	8.7
3	38	15	33	1	40	0	4	131	25
4	16	25	18	3	61	0	7	130	14
5	7	36	48	3	42	0	4	140	34
6	7	6	55	10	60	0	5	143	38
7	1	21	23	15	82	0	6	148	16
8	1	14	56	4	59	0	3	137	41
9	0	61	34	6	51	0	1	153	22
10	3	19	4	21	76	0	5	128	3.1

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	13	52	13	9	42	0	1	130	10
2	5	48	12	12	30	0	3	110	11
3	11	14	18	7	51	0	2	103	17
4	9	26	13	9	54	0	4	115	11
5	10	32	17	3	48	0	2	112	15
6	14	14	12	8	52	0	1	101	12
7	15	29	15	7	55	0	1	122	12
8	4	21	17	18	56	0	5	121	14
9	4	27	13	12	62	0	3	121	11
10	5	23	3	35	47	0	2	115	2.6

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	7	34	15	3	39	1	0	99	15
2	4	58	11	10	38	0	1	122	9.0
3	13	16	30	9	51	0	2	121	25
4	10	35	15	4	67	0	7	138	11
5	5	25	19	6	39	0	2	96	20
6	15	14	21	2	58	0	1	111	19
7	8	24	18	4	48	0	0	102	18
8	1	12	25	4	60	0	0	102	25
9	2	31	19	1	49	0	0	102	19
10	3	23	5	15	56	0	2	104	4.8

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	9	29	20	16	35	0	0	109	18
2	0	34	14	6	53	0	1	108	13
3	17	21	24	2	40	0	0	104	23
4	10	32	16	4	51	0	0	113	14
5	5	32	18	3	53	0	1	112	16
6	15	5	24	5	54	0	0	103	23
7	11	26	24	3	41	0	1	106	23
8	4	10	26	1	61	0	1	103	25
9	3	24	24	0	53	0	1	105	23
10	2	17	9	5	68	1	1	103	8.7

Appendix 3. Cover count data: Schoonover fire (wildfire, May 2002).

Spring 2002

No spring 2002 cover data

Fall 2002

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	0	0	115	2	1	0	2	120	96
2	2	1	97	2	0	0	2	104	93
3	3	1	117	2	3	0	2	128	91
4	2	2	108	2	2	0	0	116	93
5	1	1	103	1	1	0	0	107	96
6	2	0	116	2	4	0	2	126	92

Spring 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	0	0	107	2	3	0	1	113	95
2	1	2	138	1	0	0	3	145	95
3	3	2	104	2	2	0	2	115	90
4	1	1	121	0	3	0	0	126	96
5	0	1	121	1	8	0	2	133	91
6	1	2	110	3	1	0	3	120	92

Fall 2003

Site	Number of points							Total	Percent bare
	Rock	Veg	Bare	Woody	Litter	Moss	Tree		
1	0	5	95	2	3	0	1	106	90
2	0	10	113	2	0	0	5	130	87
3	2	4	89	0	8	0	1	104	86
4	0	8	101	2	8	0	0	119	85
5	0	6	88	0	8	0	0	102	86
6	0	3	93	3	2	0	1	102	91

Appendix 4. Storm rainfall, duration, maximum I_{30} , and rainfall erosivity for each rain gage, 2002-2003. Rainfall erosivities are only listed for storms with at least 5 mm of rainfall.

Appendix 4. Big Elk fire, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
4-Jun-03	12:45	0:17	1.2	2.4	
4-Jun-03	14:15	0:00	1	2	
4-Jun-03	3:31	0:00	0.2	0.4	
7-Jun-03	13:51	0:00	0.4	0.8	
7-Jun-03	19:58	0:00	0.8	1.6	
8-Jun-03	10:38	0:00	0.2	4	
12-Jun-03	12:08	0:00	0.2	0.4	
13-Jun-03	14:15	0:07	0.8	1.6	
13-Jun-03	18:42	10:04	30.8	23.2	120.9
16-Jun-03	20:09	0:50	0.8	1.6	
17-Jun-03	14:51	0:00	0.2	0.4	
17-Jun-03	3:08	0:23	1	2	
18-Jun-03	13:18	0:05	0.4	0.8	
19-Jun-03	14:56	0:00	0.2	0.4	
19-Jun-03	13:24	0:29	1	2	
19-Jun-03	17:04	0:00	0.4	0.8	
20-Jun-03	1:16	0:13	1	2	
20-Jun-03	3:08	0:13	1	2	
25-Jun-03	5:01	0:00	0.2	0.4	
25-Jun-03	17:43	0:43	1	1.6	
25-Jun-03	16:29	0:00	0.2	0.4	
25-Jun-03	5:31	0:21	0.6	1.2	
28-Jun-03	5:19	0:00	0.4	0.8	
29-Jun-03	16:53	1:00	0.6	0.8	
30-Jun-03	15:09	0:00	0.2	0.4	
6-Jul-03	14:34	0:00	0.2	0.4	
15-Jul-03	16:09	0:47	1.6	2.4	
18-Jul-03	21:32	0:09	3.6	7.2	
18-Jul-03	13:08	0:00	0.2	0.4	
18-Jul-03	12:54	0:00	0.4	0.8	
19-Jul-03	20:39	1:37	3.2	5.2	
20-Jul-03	12:37	1:12	0.6	0.8	
21-Jul-03	13:49	0:09	0.6	1.2	
23-Jul-03	16:13	0:00	0.2	0.4	
23-Jul-03	18:10	0:00	0.4	0.8	
25-Jul-03	15:26	0:37	5.6	10.8	13.5
25-Jul-03	17:17	0:03	0.4	0.8	
26-Jul-03	13:03	0:09	2.8	5.6	
26-Jul-03	12:47	0:00	0.2	0.4	
27-Jul-03	4:39	2:03	16	18	57.9
28-Jul-03	13:08	0:42	5	9.6	10.0
29-Jul-03	12:07	0:00	0.2	0.4	
29-Jul-03	15:31	0:46	13.2	24.8	81.5
30-Jul-03	14:24	0:06	1.2	2.4	
30-Jul-03	14:56	0:00	0.2	0.4	
31-Jul-03	13:12	0:27	0.4	0.8	
1-Aug-03	21:28	0:22	3	6	

Appendix 4. Big Elk fire, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
3-Aug-03	8:13	0:00	0.2	0.4	
3-Aug-03	15:38	0:00	0.2	0.4	
4-Aug-03	17:52	0:00	0.2	0.4	
7-Aug-03	20:16	1:08	2	2.8	
7-Aug-03	13:29	0:25	0.4	0.8	
7-Aug-03	17:09	0:00	0.4	0.8	
8-Aug-03	11:09	0:20	4	8	
8-Aug-03	13:06	1:32	7.4	11.6	16.4
9-Aug-03	14:09	0:41	1.8	3.2	
9-Aug-03	9:21	0:00	0.2	0.4	
11-Aug-03	14:07	0:00	0.2	0.4	
17-Aug-03	0:20	1:28	1.6	2	
17-Aug-03	4:37	0:00	0.2	0.4	
18-Aug-03	13:40	2:46	3	1.6	
18-Aug-03	14:33	0:37	1.8	2.4	
18-Aug-03	11:58	3:56	15.4	10.4	23.1
23-Aug-03	15:29	0:01	0.4	0.8	
24-Aug-03	22:22	0:49	3	4.8	
24-Aug-03	15:33	0:00	0.2	0.4	
24-Aug-03	0:52	0:00	0.2	0.4	
25-Aug-03	19:18	0:05	1.4	2.8	
28-Aug-03	12:31	0:00	0.2	0.4	
29-Aug-03	18:16	5:48	34.2	34.8	241.6
30-Aug-03	9:23	0:48	4.4	7.6	
30-Aug-03	12:43	0:26	6	12	13.9
31-Aug-03	16:45	0:00	0.4	0.8	
31-Aug-03	8:32	0:06	2	4	
31-Aug-03	15:26	0:00	0.2	0.4	
1-Sep-03	19:35	0:00	0.2	0.4	
2-Sep-03	16:40	0:14	1	2	
2-Sep-03	4:24	0:00	0.2	0.4	
3-Sep-03	14:09	0:00	0.2	0.4	
4-Sep-03	15:19	0:00	0.2	0.4	
6-Sep-03	13:43	0:02	0.4	0.8	
6-Sep-03	20:45	0:00	0.2	0.4	
7-Sep-03	15:20	1:06	1.4	1.6	
8-Sep-03	19:24	1:06	1.8	3.2	
9-Sep-03	0:03	0:12	3.6	7.2	
9-Sep-03	10:06	0:00	0.2	0.4	
13-Sep-03	15:28	0:00	0.2	0.4	
13-Sep-03	16:51	2:44	1.6	1.2	
13-Sep-03	20:11	0:00	0.2	0.4	
17-Sep-03	8:42	1:12	1.2	1.6	
17-Sep-03	10:07	0:53	1.2	1.6	
18-Sep-03	0:32	0:00	0.2	0.4	
18-Sep-03	4:25	0:00	0.4	0.8	
30-Sep-03	17:19	0:00	0.2	0.4	

Appendix 4. Big Elk fire, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
8-Oct-03	3:23	0:00	0.8	1.6	
8-Oct-03	11:33	0:01	3.6	7.2	
9-Oct-03	7:09	0:00	0.2	0.4	
9-Oct-03	9:53	1:21	1	1.6	
10-Oct-03	10:10	0:00	0.2	0.4	
10-Oct-03	12:55	0:00	0.2	0.4	
10-Oct-03	16:45	0:00	0.2	0.4	
10-Oct-03	3:45	1:44	1	0.8	
10-Oct-03	8:42	4:19	8	6	7.4
11-Oct-03	14:15	0:00	0.2	0.4	
11-Oct-03	15:28	0:01	0.4	0.8	

Appendix 4. Bobcat fire, 2002: Galuchie gage.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I_{30} (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)
01-Jun-02	4:20	n/a	0.2	n/a	
03-Jun-02	6:05	4:33	17.8	13.2	38
04-Jun-02	12:57	0:39	0.6	0.8	
04-Jun-02	10:45	2:43	2.8	2	
04-Jun-02	2:45	1:00	0.8	1.2	
04-Jun-02	6:31	0:31	1.4	2.4	
15-Jun-02	2:08	n/a	0.2	n/a	
16-Jun-02	1:38	n/a	0.2	n/a	
16-Jun-02	5:44	n/a	0.2	n/a	
16-Jun-02	7:19	n/a	0.2	n/a	
16-Jun-02	9:45	n/a	0.2	n/a	
19-Jun-02	4:52	0:29	0.6	1.2	
19-Jun-02	7:06	0:33	3	5.6	
19-Jun-02	9:49	0:28	1	2	
20-Jun-02	4:07	n/a	0.2	n/a	
21-Jun-02	9:02	1:34	2.8	4.4	
03-Jul-02	3:47	n/a	0.2	n/a	
06-Jul-02	3:45	n/a	0.2	n/a	
10-Jul-02	4:05	0:20	1.6	3.2	
20-Jul-02	3:32	n/a	0.2	n/a	
21-Jul-02	12:47	n/a	0.2	n/a	
21-Jul-02	1:05	1:10	4.8	9.2	7
21-Jul-02	9:02	0:11	1	2	
22-Jul-02	10:29	n/a	0.2	n/a	
23-Jul-02	12:35	1:50	3.2	2.8	
23-Jul-02	3:44	n/a	0.2	n/a	
24-Jul-02	6:30	0:06	0.6	1.2	
24-Jul-02	8:03	0:10	0.4	0.8	
24-Jul-02	11:01	n/a	0.2	n/a	
25-Jul-02	2:39	0:06	0.8	1.6	
25-Jul-02	6:41	0:58	0.8	1.2	
26-Jul-02	9:32	n/a	0.2	n/a	
03-Aug-02	6:06	n/a	0.2	n/a	
03-Aug-02	3:08	1:38	1.4	2	
05-Aug-02	6:05	3:42	6.2	3.6	3
07-Aug-02	2:05	0:10	1.6	3.2	
07-Aug-02	5:28	0:08	0.4	0.8	
07-Aug-02	8:31	0:51	0.8	1.2	
11-Aug-02	3:02	n/a	0.2	n/a	
21-Aug-02	2:05	0:06	1.4	2.8	
21-Aug-02	3:54	n/a	0.2	n/a	
21-Aug-02	8:58	0:10	0.8	1.6	
23-Aug-02	10:38	0:22	1.8	3.6	
25-Aug-02	2:49	n/a	0.2	n/a	
26-Aug-02	10:50	n/a	0.2	n/a	
27-Aug-02	12:17	1:04	0.6	0.8	
27-Aug-02	4:31	2:17	1.4	0.8	

Appendix 4. Bobcat fire, 2002: Galuchie gage (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I ₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)
29-Aug-02	2:32	1:19	3.2	3.6	
29-Aug-02	10:10	0:15	3.6	7.2	
30-Aug-02	11:44	n/a	0.2	n/a	
07-Sep-02	4:40	0:18	0.4	0.8	
08-Sep-02	5:50	0:39	0.4	0.4	
08-Sep-02	9:38	2:14	8.8	9.6	12
09-Sep-02	1:27	n/a	0.2	n/a	
09-Sep-02	3:30	n/a	0.2	n/a	
09-Sep-02	1:46	0:23	0.8	1.6	
09-Sep-02	3:11	0:38	0.8	1.2	
09-Sep-02	5:02	0:13	0.6	1.2	
09-Sep-02	11:05	5:19	8.2	4.4	4
10-Sep-02	5:30	n/a	0.2	n/a	
10-Sep-02	8:07	0:25	0.4	0.8	
10-Sep-02	9:43	0:22	0.4	0.8	
11-Sep-02	5:12	n/a	0.2	n/a	
11-Sep-02	4:51	3:07	4	2.8	
11-Sep-02	11:08	n/a	0.2	n/a	
12-Sep-02	1:02	n/a	0.2	n/a	
12-Sep-02	4:26	0:11	2.2	4.4	
12-Sep-02	7:25	0:13	1.2	2.4	
13-Sep-02	5:27	n/a	0.2	n/a	
13-Sep-02	10:11	0:09	0.8	1.6	
18-Sep-02	3:32	0:10	0.4	0.8	
19-Sep-02	4:29	n/a	0.2	n/a	
25-Sep-02	7:46	1:27	0.8	0.8	
25-Sep-02	11:34	n/a	0.2	n/a	
26-Sep-02	3:33	n/a	0.2	n/a	
26-Sep-02	12:52	n/a	0.2	n/a	
28-Sep-02	3:45	0:31	0.8	1.2	
01-Oct-02	5:56	4:22	10.2	5.2	6
02-Oct-02	9:12	6:35	5	1.6	1
02-Oct-02	5:17	n/a	0.2	n/a	
02-Oct-02	11:35	n/a	0.2	n/a	
03-Oct-02	9:00	0:06	0.4	0.8	
03-Oct-02	11:32	n/a	0.2	n/a	
04-Oct-02	8:34	1:49	1.6	1.6	
23-Oct-02		0:00	2.2		
24-Oct-02		0:00	1.2		
25-Oct-02		0:00	0		
26-Oct-02		0:00	0		
27-Oct-02		0:00	0.4		
28-Oct-02		0:00	0		
29-Oct-02		0:00	0.6		
30-Oct-02		0:00	3.6		
31-Oct-02		0:00	1.4		

Appendix 4. Bobcat fire, 2003: Galuchie gage.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I ₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)
18-Jun-03	9:20	0:12	1.2	2.4	
15-Jul-03	17:26	0:00	0.2	0.4	
16-Jul-03	14:28	0:27	1.2	2.4	
19-Jul-03	14:35	0:27	0.6	1.2	
19-Jul-03	2:28	0:17	0.6	1.2	
20-Jul-03	13:12	0:43	2	3.6	
23-Jul-03	11:43	0:19	2	4	
23-Jul-03	13:13	0:19	0.6	1.2	
25-Jul-03	16:04	0:30	1	2	
26-Jul-03	3:52	0:00	0.2	0.4	
26-Jul-03	20:39	0:00	0.2	0.4	
26-Jul-03	21:46	0:00	0.2	0.4	
27-Jul-03	14:40	1:09	3.2	5.6	
28-Jul-03	13:20	0:41	15.8	30	117
29-Jul-03	12:11	1:54	19.6	33.6	156
30-Jul-03	11:31	2:19	7.6	10.8	14
01-Aug-03	15:21	0:00	0.2	0.4	
01-Aug-03	16:49	0:00	0.2	0.4	
05-Aug-03	14:13	0:10	1	2	
06-Aug-03	19:57	0:09	1.2	2.4	
07-Aug-03	13:59	1:13	5	6	4
08-Aug-03	4:16	0:00	0.2	0.4	
08-Aug-03	16:30	1:21	1.2	1.6	
08-Aug-03	18:51	0:00	0.2	0.4	
09-Aug-03	11:26	2:26	7.6	12.4	17
09-Aug-03	16:40	0:00	0.2	0.4	
17-Aug-03	8:57	1:55	3.6	3.2	
18-Aug-03	2:05	0:21	0.8	1.6	
18-Aug-03	4:55	0:28	0.4	0.8	
18-Aug-03	13:28	1:13	5	8	7
18-Aug-03	16:51	0:00	0.2	0.4	
23-Aug-03	16:36	0:00	0.2	0.4	
24-Aug-03	11:47	0:44	3.8		
25-Aug-03	15:20	0:00	0.2	0.4	
27-Aug-03	12:40	0:37	4.4	8	
29-Aug-03	19:23	4:15	16.8	18	52
30-Aug-03	12:46	1:39	5.2	6	4
30-Aug-03	16:20	0:38	3.8	6.8	
31-Aug-03	3:16	0:50	0.4	0.4	
31-Aug-03	12:13	0:13	0.4	0.8	
31-Aug-03	15:13	0:09	0.4	0.8	
31-Aug-03	17:14	0:00	0.2	0.4	
07-Sep-03	8:28	1:31	6	4.8	4
07-Sep-03	13:21	0:00	0.2	0.4	
07-Sep-03	16:59	0:34	1	1.6	
08-Sep-03	19:54	0:00	0.2	0.4	
08-Sep-03	21:33	0:00	0.2	0.4	

Appendix 4. Bobcat fire, 2003: Galuchie gage (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
09-Sep-03	15:50	0:08	0.8	1.6	
12-Sep-03	23:27	1:59	1.4	1.6	
13-Sep-03	0:05	1:41	0.6	1.2	
13-Sep-03	3:11	0:00	0.2	0.4	
13-Sep-03	6:52	0:00	0.2	0.4	
13-Sep-03	8:34	0:00	0.2	0.4	
17-Sep-03	16:43	3:36	4.8	5.6	
18-Sep-03	8:35	0:39	0.4	0.4	
02-Oct-03	14:21	0:00	0.2	0.4	
02-Oct-03	16:43	0:00	0.2	0.4	
02-Oct-03	17:15	4:07	3.8	2.4	
13-Oct-03	9:44	0:31	1.6	2.8	

Appendix 4. Bobcat fire, 2002: Green Ridge gage.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
01-Jun-02	11:04	n/a	1.0	n/a	
03-Jun-02	7:08	3:41	15.0	8	24
04-Jun-02	11:17	n/a	1.0	n/a	
04-Jun-02	1:38	n/a	1.0	n/a	
19-Jun-02	5:54	n/a	1.0	n/a	
19-Jun-02	7:38	0:42	3.0	4	
21-Jun-02	9:49	0:47	3.0	4	
21-Jul-02	6:41	n/a	1.0	n/a	
21-Jul-02	7:55	n/a	1.0	n/a	
05-Aug-02	6:27	0:47	6.0	8	12
20-Aug-02	12:04	n/a	1.0	2	
21-Aug-02	2:30	0:09	4.0	8	1
27-Aug-02	12:24	n/a	1.0	2	
27-Aug-02	5:01	n/a	1.0	2	
27-Aug-02	6:29	n/a	1.0	2	
29-Aug-02	10:35	0:33	2.0	2	
08-Sep-02	10:01	1:38	11.0	10	19
09-Sep-02	12:51	n/a	1.0	2	
09-Sep-02	3:45	n/a	1.0	2	
09-Sep-02	10:10	n/a	1.0	2	
10-Sep-02	12:29	1:26	7.0	8	6
10-Sep-02	3:11	n/a	1.0	2	
10-Sep-02	6:22	n/a	1.0	2	
10-Sep-02	7:31	n/a	1.0	2	
10-Sep-02	9:35	n/a	1.0	2	
11-Sep-02	5:34	2:20	8.0	6	9
12-Sep-02	1:24	0:21	7.0	14	20
12-Sep-02	5:09	0:05	2.0	4	
12-Sep-02	7:58	0:06	5.0	10	12
13-Sep-02	10:22	n/a	1.0	2	
25-Sep-02	9:46	n/a	1.0	2	
01-Oct-02	7:11	3:04	7.0	4	5
01-Oct-02	11:28	n/a	1.0	2	
02-Oct-02	12:35	0:32	2.0	2	
02-Oct-02	5:04	n/a	1.0	2	
02-Oct-02	6:22	n/a	1.0	2	
02-Oct-02	10:10	n/a	1.0	2	
02-Oct-02	1:37	n/a	1.0	2	
02-Oct-02	5:35	n/a	1.0	2	
02-Oct-02	10:13	n/a	1.0	2	
03-Oct-02	6:36	n/a	1.0	2	
03-Oct-02	2:42	0:36	5.0	8	7
10-Oct-02	11:10	n/a	1.0	2	

Appendix 4. Bobcat fire, 2003: Green Ridge gage.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I_{30} (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
04-Jun-03	2:30	0:00	1.0	2	
04-Jun-03	4:15	0:46	4.0	6	
04-Jun-03	7:19	0:13	2.0	4	
06-Jun-03	6:30	2:23	7.0	6	
07-Jun-03	11:23	0:00	1.0	2	
12-Jun-03	2:46	0:00	1.0	2	
13-Jun-03	3:02	0:00	1.0	2	
17-Jun-03	7:47	2:27	42.0	56	
18-Jun-03	6:41	1:11	4.0	4	
18-Jun-03	10:22	2:18	33.0	44	
19-Jun-03	10:35	0:00	1.0	2	
20-Jun-03	5:28	0:25	4.0	8	
25-Jun-03	2:52	0:51	4.0	6	
20-Jul-03	1:52	0:04	2.0	4	
25-Jul-03	3:40	0:00	1.0	2	
27-Jul-03	3:15	0:09	2.0	4	
28-Jul-03	1:58	0:31	4.0	6	
06-Aug-03	8:19	0:00	1.0	2	
07-Aug-03	12:13	0:31	6.0	10	
09-Aug-03	4:34	0:07	6.0	12	
18-Aug-03	1:35	0:10	8.0	16	
24-Aug-03	1:05	0:32	4.0	6	
29-Aug-03	7:06	4:07	33.0	30	
30-Aug-03	5:44	0:00	1.0	2	
30-Aug-03	1:08	0:59	6.0	6	
30-Aug-03	6:48	0:00	1.0	2	
31-Aug-03	12:56	0:00	2.0	4	
31-Aug-03	3:19	0:00	1.0	2	
13-Sep-03	12:31	0:00	1.0	2	
17-Sep-03	5:02	1:10	4.0	4	
17-Sep-03	7:54	0:37	2.0	2	
17-Sep-03	9:35	0:19	2.0	4	
13-Oct-03	8:26	0:21	2.0	4	

Appendix 4. Bobcat fire, 2002: Snowtop gage.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I_{30} (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)
01-Jun-02	4:25	0:05	0.6	1.2	
03-Jun-02	6:33	4:14	14.8	9.6	22
04-Jun-02	1:18	0:16	0.6	1.2	
04-Jun-02	2:34	n/a	0.2	n/a	
04-Jun-02	11:07	2:28	2.8	4	
04-Jun-02	4:29	n/a	0.2	n/a	
04-Jun-02	6:57	0:11	0.8	1.6	
05-Jun-02	10:41	n/a	0.2	n/a	
13-Jun-02	5:03	0:01	0.4	0.8	
15-Jun-02	2:30	n/a	0.2	n/a	
15-Jun-02	5:02	n/a	0.2	n/a	
16-Jun-02	7:20	n/a	0.2	n/a	
19-Jun-02	5:48	0:05	1.8	3.6	
19-Jun-02	7:26	0:19	3.0	6	
19-Jun-02	10:23	1:11	0.8	1.2	
21-Jun-02	9:48	0:53	1.8	2.4	
03-Jul-02	3:56	0:09	1.0	2	
03-Jul-02	9:41	n/a	0.2	n/a	
05-Jul-02	8:11	n/a	0.2	n/a	
10-Jul-02	4:05	0:10	1.0	2	
20-Jul-02	3:13	0:10	0.4	0.8	
20-Jul-02	9:05	0:05	0.8	1.6	
21-Jul-02	12:16	0:13	0.8	1.6	
21-Jul-02	1:36	n/a	0.2	n/a	
21-Jul-02	7:02	0:58	0.4	0.4	
23-Jul-02	2:14	0:01	0.4	0.8	
24-Jul-02	6:37	n/a	0.2	n/a	
25-Jul-02	3:09	n/a	0.2	n/a	
25-Jul-02	7:39	0:16	0.6	1.2	
03-Aug-02	3:09	0:39	0.6	0.8	
05-Aug-02	6:17	1:17	5.4	6.8	6
05-Aug-02	9:32	n/a	0.2	n/a	
06-Aug-02	7:30	n/a	0.2	n/a	
07-Aug-02	5:43	n/a	0.2	n/a	
07-Aug-02	9:24	n/a	0.2	n/a	
21-Aug-02	2:25	0:03	1.6	3.2	
21-Aug-02	9:20	0:12	0.8	1.6	
23-Aug-02	11:06	0:15	0.8	1.6	
27-Aug-02	12:50	0:39	0.6	0.8	
27-Aug-02	5:37	1:20	1.6	1.6	
29-Aug-02	3:06	1:03	1.0	1.2	
29-Aug-02	10:31	0:21	1.4	2.8	
07-Sep-02	5:16	n/a	0.2	n/a	
08-Sep-02	9:51	1:42	11.0	12.8	23
09-Sep-02	1:40	0:54	0.4	0.8	
09-Sep-02	12:45	0:07	0.8	1.6	
09-Sep-02	2:16	0:12	0.6	1.2	

Appendix 4. Bobcat fire, 2002: Snowtop gage (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I_{30} (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
09-Sep-02	3:43	0:13	0.6	1.2	
09-Sep-02	5:10	0:33	0.4	0.4	
09-Sep-02	10:39	5:39	7.4	4	4
10-Sep-02	5:34	n/a	0.2	n/a	
10-Sep-02	8:04	1:48	1.2	0.8	
11-Sep-02	4:41	n/a	0.2	n/a	
11-Sep-02	5:16	2:54	4.2	3.2	
12-Sep-02	2:02	n/a	0.2	n/a	
12-Sep-02	1:18	0:53	4.6	8.8	
12-Sep-02	4:54	0:05	0.4	0.8	
12-Sep-02	7:50	0:07	3.8	7.6	
13-Sep-02	12:01	n/a	0.2	n/a	
13-Sep-02	10:13	0:15	1.4	2.8	
13-Sep-02	3:08	n/a	0.2	n/a	
25-Sep-02	8:07	1:14	1.2	1.6	
26-Sep-02	12:02	1:00	2.6	4.4	
27-Sep-02	4:53	0:01	0.4	0.8	
28-Sep-02	4:23	n/a	0.2	n/a	
01-Oct-02	6:26	8:54	10.0	3.2	22
02-Oct-02	4:34	1:03	0.6	0.8	
02-Oct-02	7:14	n/a	0.2	n/a	
02-Oct-02	8:48	n/a	0.2	n/a	
02-Oct-02	9:48	0:54	0.4	0.4	
02-Oct-02	12:50	n/a	0.2	n/a	
02-Oct-02	2:27	0:01	0.4	0.8	
02-Oct-02	4:23	n/a	0.2	n/a	
02-Oct-02	7:15	n/a	0.2	n/a	
02-Oct-02	11:00	0:01	0.4	0.8	
03-Oct-02	1:14	n/a	0.2	n/a	
03-Oct-02	2:28	1:52	4.4	5.6	
04-Oct-02	9:57	n/a	0.2	n/a	

Appendix 4. Bobcat fire, 2003: middle Jug Gulch gage

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I ₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)
02-Jun-03	17:17	0:34	1.2	2	
04-Jun-03	9:14	0:21	0.4	0.8	
04-Jun-03	11:15	0:24	1.0	2	
04-Jun-03	13:19	1:44	0.6	1.2	
04-Jun-03	15:03	1:05	4.2	4.4	
04-Jun-03	18:22	0:55	1.8	2.4	
04-Jun-03	23:26	0:00	0.2	0.4	
06-Jun-03	12:42	0:00	0.2	0.4	
06-Jun-03	15:45	4:41	6.4	3.6	3
08-Jun-03	6:36	0:00	0.2	0.4	
09-Jun-03	20:57	0:18	1.0	2	
11-Jun-03	3:59	0:00	0.2	0.4	
11-Jun-03	14:01	0:00	0.2	0.4	
12-Jun-03	12:40	1:21	1.2	1.6	
13-Jun-03	10:26	0:17	3.4	6.8	
13-Jun-03	12:33	1:25	2.8	3.6	
14-Jun-03	16:28	0:00	0.2	0.4	
17-Jun-03	0:29	0:42	2.2	3.6	
17-Jun-03	18:53	2:27	14.8	12.4	32
18-Jun-03	0:33	0:00	0.2	0.4	
18-Jun-03	6:03	0:00	0.2	0.4	
18-Jun-03	13:28	0:00	0.2	0.4	
18-Jun-03	21:39	3:06	17.2	22.4	76
20-Jun-03	5:07	0:00	0.2	0.4	
20-Jun-03	12:53	0:18	0.6	1.2	
20-Jun-03	16:22	0:35	2.2	4	
20-Jun-03	21:46	0:05	0.8	1.6	
21-Jun-03	8:17	0:00	0.2	0.4	
24-Jun-03	22:38	5:18	4.4	2	
29-Jun-03	6:11	0:00	0.2	0.4	
30-Jun-03	5:13	0:00	0.2	0.4	
30-Jun-03	14:41	0:00	0.2	0.4	
30-Jun-03	17:24	0:17	0.8	1.6	
01-Jul-03	2:54	0:00	0.2	0.4	
07-Jul-03	15:23	0:34	1.8	3.2	
18-Jul-03	14:00	1:07	1.2	2	
18-Jul-03	22:24	0:02	0.8	1.6	
19-Jul-03	1:30	0:26	0.6	1.2	
19-Jul-03	14:19	1:10	0.8	1.2	
19-Jul-03	21:40	0:01	0.4	0.8	
20-Jul-03	0:50	0:00	0.2	0.4	
20-Jul-03	13:20	0:00	0.2	0.4	
25-Jul-03	15:13	0:21	0.6	1.2	
26-Jul-03	3:21	0:09	1.0	2	
26-Jul-03	5:32	0:00	0.2	0.4	
27-Jul-03	13:52	1:17	2.2	3.2	
28-Jul-03	2:39	0:00	0.2	0.4	

Appendix 4. Bobcat fire, 2003: middle Jug Gulch gage (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
28-Jul-03	12:38	1:09	2.8	4	
29-Jul-03	12:20	0:45	0.4	0.4	
30-Jul-03	2:03	0:00	0.2	0.4	
03-Aug-03	23:18	0:00	0.2	0.4	
05-Aug-03	12:34	0:32	0.4	0.4	
06-Aug-03	19:08	0:21	4.2	8.4	
07-Aug-03	0:38	0:00	0.2	0.4	
07-Aug-03	11:36	0:21	1.4	2.8	
07-Aug-03	13:19	1:17	3.2	4.8	
09-Aug-03	10:38	0:27	0.8	1.6	
09-Aug-03	12:15	0:11	0.4	0.8	
09-Aug-03	15:35	0:18	11.0	22	
10-Aug-03	7:14	0:00	0.2	0.4	
17-Aug-03	8:36	1:20	1.0	1.2	
18-Aug-03	1:31	0:00	0.2	0.4	
18-Aug-03	12:40	0:55	6.6	11.2	14
23-Sep-03	end of mid jug record (october record is from Galuchie)				
02-Oct-03		0:00	0.2	0.4	
02-Oct-03		0:00	0.2	0.4	
02-Oct-03		4:07	3.8	2.4	
13-Oct-03		0:31	1.6	2.8	

Appendix 4. Bear Tracks fire, 2002: Squaw Mountain gage.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
03-Jun-02	9:06	1:28	7.0	6	8
04-Jun-02	10:06	0:26	5.0	10	7
04-Jun-02	12:10	0:00	1.0	2	
04-Jun-02	5:18	1:48	7.0	6	7
04-Jun-02	8:56	0:00	1.0	2	
05-Jun-02	10:04	0:00	1.0	2	
05-Jun-02	11:21	2:19	5.0	4	4
16-Jun-02	1:08	0:00	3.0	6	
21-Jun-02	9:00	0:00	2.0	4	
21-Jun-02	10:13	0:43	2.0	4	
04-Jul-02	12:10	0:00	1.0	2	
06-Jul-02	5:38	0:52	3.0	4	
06-Jul-02	7:36	0:00	1.0	2	
10-Jul-02	6:17	0:03	3.0	6	
11-Jul-02	12:10	0:00	1.0	2	
21-Jul-02	12:10	0:00	1.0	2	
21-Jul-02	8:13	1:06	4.0	4	
30-Jul-02	12:08	0:00	1.0	2	
21-Aug-02	1:53	0:16	3.0	6	
27-Aug-02	6:55	0:12	2.0	4	
27-Aug-02	3:49	0:00	3.0	6	
29-Aug-02	1:48	0:00	1.0	2	
29-Aug-02	4:05	0:13	3.0	6	
08-Sep-02	11:47	0:10	3.0	6	
09-Sep-02	12:10	0:00	1.0	2	
09-Sep-02	2:29	0:00	2.0	4	
09-Sep-02	6:14	0:18	10.0	20	53
10-Sep-02	5:29	0:00	1.0	2	
11-Sep-02	12:10	0:00	1.0	2	
11-Sep-02	9:24	0:00	1.0	2	
12-Sep-02	12:10	2:06	11.0	8	20
12-Sep-02	3:17	0:48	5.0	6	7
12-Sep-02	5:08	0:00	1.0	2	
13-Sep-02	12:10	0:00	1.0	2	
19-Sep-02	1:26	1:05	4.0	8	
19-Sep-02	5:25	0:00	2.0	4	
26-Sep-02	1:55	1:15	6.0	6	6
26-Sep-02	6:02	0:00	2.0	4	
29-Sep-02	4:50	0:00	2.0	4	
01-Oct-02	11:30	0:00	2.0	4	
02-Oct-02	1:59	2:15	9.0	8	13
03-Oct-02	11:07	0:00	1.0	2	
04-Oct-02	12:28	0:00	1.0	2	
31-Oct-02	2:09	0:00	1.0	2	

Appendix 4. Bear Tracks fire, 2003: Squaw Mountain gage.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I_{30} (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
03-Jun-03	12:18	0:00	1.0		
05-Jun-03	2:02	2:52	11.0	6	12
05-Jun-03	6:42	0:00	1.0		
07-Jun-03	12:42	2:35	4.0		
09-Jun-03	4:47	0:44	4.0		
13-Jun-03	12:18	0:00	2.0		
13-Jun-03	1:48	2:11	8.0	6	9
13-Jun-03	5:07	0:00	1.0		
17-Jun-03	6:50	0:00	1.0		
19-Jun-03	3:50	0:00	1.0		
27-Jun-03	11:26	0:00	2.0		
28-Jun-03	8:09	0:00	1.0		
08-Jul-03	12:19	0:00	1.0		
15-Jul-03	4:49	0:00	1.0		
18-Jul-03	8:46	1:17	8.0	8	12
19-Jul-03	12:19	0:00	1.0		
19-Jul-03	5:36	0:31	15.0	28	101
19-Jul-03	11:18	0:00	1.0		
23-Jul-03	5:24	0:00	1.0		
27-Jul-03	1:31	0:08	5.0	10	12
27-Jul-03	4:53	0:28	4.0		
28-Jul-03	3:11	0:00	1.0		
29-Jul-03	8:32	0:47	6.0	8	8
29-Jul-03	4:03	0:00	1.0		
30-Jul-03	12:19	0:00	1.0		
03-Aug-03	12:11	1:49	5.0	6	6
03-Aug-03	3:44	0:00	2.0		
03-Aug-03	8:15	0:00	1.0		
07-Aug-03	4:15	0:00	1.0		
11-Aug-03	9:51	0:00	1.0		
13-Aug-03	9:12	0:01	2.0		
17-Aug-03	12:19	0:00	3.0		
18-Aug-03	5:29	0:47	4.0		
19-Aug-03	6:36	0:00	3.0		
22-Aug-03	2:19	0:00	1.0		
22-Aug-03	3:32	0:00	1.0		
22-Aug-03	6:45	0:00	2.0		
23-Aug-03	12:19	2:01	10.0	16	31
23-Aug-03	4:03	0:00	1.0		
24-Aug-03	12:19	0:00	1.0		
24-Aug-03	11:38	0:00	1.0		
02-Sep-03	7:03	0:00	2.0		
02-Sep-03	8:13	0:00	1.0		
03-Sep-03	2:34	0:58	12.0	18	50
04-Sep-03	6:50	0:00	3.0		
06-Sep-03	12:32	0:00	1.0		
06-Sep-03	6:19	0:10	2.0		

Appendix 4. Bear Trax fire, 2003: Squaw Mountain gage (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
07-Sep-03	12:19	0:00	1.0		
07-Sep-03	6:39	0:00	5.0	10	14
07-Sep-03	8:09	0:27	2.0		
07-Sep-03	10:59	0:00	1.0		
07-Sep-03	1:16	0:00	1.0		
08-Sep-03	10:45	0:51	4.0		
09-Sep-03	12:19	0:00	1.0		
12-Sep-03	12:19	0:00	2.0		
14-Sep-03	11:12	0:00	1.0		
14-Sep-03	12:19	0:07	2.0		
02-Oct-03	12:26	1:32	4.0		
02-Oct-03	1:42	0:00	1.0		
03-Oct-03	4:49	0:00	1.0		
30-Oct-03	12:19	0:00	2.0		
30-Oct-03	7:03	0:00	3.0		
31-Oct-03	End				

Appendix 4. Crosier Mountain fire, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
31-May-02	1:30	0:15	2.6	5.2	
01-Jun-02	4:16	0:07	1.2	2.4	
03-Jun-02	6:26	4:16	21.8	15	23
04-Jun-02	1:02	0:40	1.4	2	
04-Jun-02	11:31	0:14	0.8	1.6	
04-Jun-02	12:49	0:56	2.6	4	
04-Jun-02	3:06	0:01	0.2	0.4	
04-Jun-02	4:10	0:01	0.2	0.4	
04-Jun-02	7:10	0:17	2.2	4.4	
05-Jun-02	4:40	0:00	0.4	0.8	
13-Jun-02	5:35	0:04	0.4	0.8	
15-Jun-02	2:18	0:12	0.8	1.6	
16-Jun-02	6:10	0:01	0.2	0.4	
19-Jun-02	5:12	0:33	1.6	2.8	
19-Jun-02	7:27	1:35	3.0	5.2	
19-Jun-02	10:15	0:21	0.6	1.2	
20-Jun-02	7:14	0:00	0.2	0.4	
21-Jun-02	9:51	0:45	3.4	6	
06-Jul-02	3:40	0:09	0.4	0.8	
06-Jul-02	8:00	0:00	0.4	0.8	
10-Jul-02	4:10	0:12	2.0	4	
20-Jul-02	3:09	0:18	0.6	1.2	
21-Jul-02	1:07	0:18	6.2	12.4	17
21-Jul-02	3:09	0:00	0.4	0.8	
21-Jul-02	9:09	0:07	0.6	1.2	
21-Jul-02	11:05	0:00	0.2	0.4	
22-Jul-02	10:25	0:00	0.4	0.8	
23-Jul-02	1:29	0:41	6.4	8.4	10
23-Jul-02	3:45	0:00	0.2	0.4	
23-Jul-02	7:07	0:07	0.6	1.3	
24-Jul-02	8:17	0:00	0.4	0.8	
24-Jul-02	11:14	0:00	0.4	0.8	
25-Jul-02	7:22	0:20	1.2	2.4	
26-Jul-02	5:44	0:00	0.4	0.8	
03-Aug-02	2:54	0:38	2.2	3.2	
03-Aug-02	5:13	0:00	0.2	0.4	
04-Aug-02	4:05	0:00	0.4	0.8	
05-Aug-02	2:14	0:00	0.2	0.4	
05-Aug-02	5:52	3:54	12.4	6.8	12
07-Aug-02	1:59	0:06	5.2	10.4	14
07-Aug-02	3:43	0:00	0.2	0.4	
07-Aug-02	7:48	0:00	0.2	0.4	
07-Aug-02	8:50	0:30	1.8	3.2	
19-Aug-02	8:20	0:07	0.6	1.2	
20-Aug-02	1:35	n/a	0.0	0.4	
20-Aug-02	12:20	n/a	0.2		
21-Aug-02	2:15	0:03	1.4	2.8	

Appendix 4. Crosier Mountain fire, 2002 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
21-Aug-02	3:28	0:00	0.4	0.8	
21-Aug-02	9:07	0:03	0.4	0.8	
23-Aug-02	10:51	0:22	2.0	4	
27-Aug-02	12:55	0:00	0.4	0.8	
27-Aug-02	4:59	2:08	1.0	0.8	
29-Aug-02	2:47	1:11	8.0	13.6	22
29-Aug-02	10:21	0:16	1.8	3.6	
30-Aug-02	8:34	0:00	0.2	0.4	
07-Sep-02	5:05	0:00	0.2	0.4	
07-Sep-02	10:13	0:00	0.2	0.4	
08-Sep-02	6:22	0:17	0.4	0.8	
08-Sep-02	9:53	2:12	12.4	16	35
09-Sep-02	1:37	0:15	0.4	0.8	
09-Sep-02	12:24	0:12	0.8	1.6	
09-Sep-02	1:58	0:14	0.4	0.8	
09-Sep-02	3:41	0:10	0.6	1.2	
09-Sep-02	5:15	0:14	1.4	2.8	
09-Sep-02	11:55	4:51	7.2	4.4	4
10-Sep-02	5:58	0:00	0.4	0.8	
10-Sep-02	9:29	0:00	0.2	0.4	
11-Sep-02	8:25	0:00	0.2	0.4	
11-Sep-02	5:05	2:50	5.2	3.6	2
11-Sep-02	11:00	0:00	0.4	0.8	
12-Sep-02	8:31	0:46	333.8	500	Probable false tips
12-Sep-02	10:22	0:02	27.2	54.4	Probable false tips
12-Sep-02	4:36	0:03	1.4	2.8	
12-Sep-02	7:31	0:07	1.4	2.8	
12-Sep-02	10:37	0:00	0.2	0.4	
13-Sep-02	10:29	0:07	1.4	2.8	
18-Sep-02	3:34	0:37	1.6	2.8	
25-Sep-02	7:59	0:20	0.6	1.2	
25-Sep-02	9:21	0:00	0.4	0.8	
26-Sep-02	3:24	0:25	0.6	1.2	
28-Sep-02	3:49	0:37	2.0	3.6	
01-Oct-02	6:07	5:37	13.6	5.6	9
02-Oct-02	12:21	0:00	0.2	0.4	
02-Oct-02	10:38	3:09	2.0	1.6	
02-Oct-02	3:23	0:00	0.2	0.4	
02-Oct-02	9:27	0:00	0.4	0.8	
03-Oct-02	10:14	0:00	0.2	0.4	
03-Oct-02	4:28	2:13	1.2	0.8	
03-Oct-02	7:57	0:00	0.2	0.4	
03-Oct-02	9:49	0:00	0.2	0.4	
04-Oct-02	9:57	0:32	0.8	0.8	
04-Oct-02	11:44	0:00	0.2	0.4	
23-Oct-02	2:26	0:27	0.8	1.6	

Appendix 4. Crosier Mountain fire, 2002 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
24-Oct-02	12:00	3:20	3.4	2	
25-Oct-02	6:53	0:00	0.2	0.4	
25-Oct-02	10:39	0:00	0.2	0.4	
27-Oct-02	9:51	0:00	0.2	0.4	
28-Oct-02	2:55	0:00	0.2	0.4	
29-Oct-02	4:16	0:00	0.4	0.8	
31-Oct-03	End				

Appendix 4. Crosier Mountain fire, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)	
25-Jun-03	0:41	3:03	1.6	1.2		
25-Jun-03	15:00	0:00	0.2	0.4		
18-Jul-03	16:39	1:17	0.6	0.8		
19-Jul-03	13:15	0:11	0.8	1.6		
19-Jul-03	14:39	0:33	2.6	4.8		
20-Jul-03	13:12	0:46	12.0	18.8	45	
23-Jul-03	11:41	0:20	8.8	17.6	36	
23-Jul-03	15:07	0:11	1.2	2.4		
23-Jul-03	17:30	0:00	0.2	0.4		
25-Jul-03	15:55	0:47	4.2	7.6		
25-Jul-03	18:06	0:00	0.2	0.4		
27-Jul-03	14:37	2:27	56.2	100	1512	Probable false tips
28-Jul-03	12:06	2:25	24.2	45.2	286	Probable false tips
29-Jul-03	11:38	2:14	15.8	16.4	50	
30-Jul-03	12:12	0:09	2.0	4		
06-Aug-03	19:45	0:00	0.2	0.4		
07-Aug-03	14:20	1:14	4.6	8.4		
08-Aug-03	16:18	0:55	1.0	1.2		
08-Aug-03	23:08	0:00	0.2	0.4		
09-Aug-03	11:28	1:32	4.0	4.8		
17-Aug-03	8:14	2:00	8.6	8.8	11	
17-Aug-03	13:35	0:00	0.2	0.4		
18-Aug-03	1:57	1:00	0.8	1.2		
18-Aug-03	4:55	0:33	1.0	1.2		
18-Aug-03	13:32	0:33	1.4	2.4		
27-Aug-03	13:09	0:06	4.8	9.6		
29-Aug-03	19:37	3:55	24.8	29.6	149	
30-Aug-03	4:14	0:00	0.2	0.4		
30-Aug-03	12:47	1:09	7.8	8.4	10	
30-Aug-03	18:14	0:55	3.4	5.6		
31-Aug-03	3:25	0:00	0.2	0.4		
31-Aug-03	12:19	0:00	0.2	0.4		
01-Sep-03	1:14	0:00	0.2	0.4		
02-Sep-03	15:41	0:07	0.8	1.6		
07-Sep-03	8:50	2:55	6.6	5.2	4	
07-Sep-03	17:18	0:00	0.2	0.4		
08-Sep-03	5:25	0:00	0.2	0.4		
08-Sep-03	21:23	0:18	1.0	2		
09-Sep-03	15:47	0:02	1.2	2.4		
13-Sep-03	0:31	4:22	3.8	3.2		
13-Sep-03	7:37	0:00	0.4	0.8		
17-Sep-03	16:44	3:19	4.2	4		
02-Oct-03	End					

Appendix 4. Dadd Bennett fire: Mom Gulch gage, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
15-Jun-02	17:18	0:10	1.5	3.048	
16-Jun-02	0:26	0:01	0.3	0	
16-Jun-02	7:15	0:01	0.3	0	
16-Jun-02	17:35	1:33	2.0	2.032	
19-Jun-02	22:25	0:01	0.3	0.508	
20-Jun-02	18:52	0:20	2.8	5.588	
20-Jun-02	23:35	0:01	0.3	0.508	
21-Jun-02	16:00	0:38	3.0	5.08	
21-Jun-02	22:02	0:59	0.8	1.016	
27-Jun-02	13:57	0:01	0.3	0.508	
27-Jun-02	15:08	0:01	0.3	0.508	
28-Jun-02	12:16	0:56	2.3	4.064	
29-Jun-02	18:15	0:11	2.8	5.588	
03-Jul-02	19:40	0:01	0.3	0.508	
04-Jul-02	12:55	1:48	4.3	0	
05-Jul-02	7:13	0:01	0.3	0.508	
05-Jul-02	19:06	1:01	0.8	1.016	
09-Jul-02	20:08	0:01	0.3	0.508	
14-Jul-02	21:30	0:01	0.8	1.524	
20-Jul-02	13:09	0:07	0.5	1.016	
20-Jul-02	16:21	0:01	0.3	0.508	
20-Jul-02	19:22	0:36	0.5	0.508	
21-Jul-02	1:19	0:25	0.8	1.524	
21-Jul-02	18:44	0:01	0.3	0.508	
22-Jul-02	6:15	0:01	0.3	0.508	
23-Jul-02	14:02	0:03	1.0	2.032	
23-Jul-02	18:29	0:01	0.3	0.508	
23-Jul-02	21:18	0:01	0.3	0.508	
25-Jul-02	12:24	0:47	0.5	0.508	
25-Jul-02	14:38	1:16	2.8	3.556	
25-Jul-02	17:33	0:01	0.3	0.508	
26-Jul-02	18:56	0:10	1.0	2.032	
02-Aug-02	15:52	0:01	0.3	0.508	
02-Aug-02	20:24	0:32	0.5	1.016	
03-Aug-02	1:37	0:01	0.5	1.016	
03-Aug-02	15:58	0:01	0.3	0.508	
03-Aug-02	18:33	0:58	4.8	5.08	
04-Aug-02	1:23	0:01	0.3	0.508	
04-Aug-02	14:27	1:04	5.1	7.62	6
05-Aug-02	12:12	0:50	4.6	8.128	
05-Aug-02	14:50	0:27	0.5	1.016	
05-Aug-02	18:52	1:18	3.0	3.048	
05-Aug-02	21:54	0:08	0.8	1.524	
06-Aug-02	13:08	0:54	1.5	2.54	
06-Aug-02	16:56	0:01	0.3	0.508	
07-Aug-02	12:14	0:01	0.3	0.508	
07-Aug-02	14:43	0:04	0.8	1.524	

Appendix 4. Dadd Bennett fire: Mom Gulch gage, 2002 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
07-Aug-02	16:58	2:05	4.8	4.064	
08-Aug-02	7:35	0:01	0.3	0.508	
12-Aug-02	22:30	0:34	1.0	1.524	
13-Aug-02	6:24	n/a	0.3	0.508	
16-Aug-02	16:12	0:00	0.8	1.524	
21-Aug-02	21:10	0:07	0.5	1.016	
24-Aug-02	10:38	n/a	0.3	0.508	
27-Aug-02	5:22	0:45	0.8	1.016	
29-Aug-02	12:34	2:35	3.6	3.048	
07-Sep-02	13:30	0:40	0.5	0.508	
07-Sep-02	17:08	n/a	0.3	0.508	
08-Sep-02	22:03	n/a	0.3	0.508	
12-Sep-02	16:38	0:58	1.8	3.048	
12-Sep-02	19:26	n/a	0.3	0.508	
12-Sep-02	19:21	0:00	0.3	0.5	
13-Sep-02	8:27	0:00	0.3	0.5	
27-Sep-02	16:52	0:06	0.8	1.5	
01-Oct-02	18:26	0:00	0.3	0.5	
01-Oct-02	19:33	3:12	2.5	2.0	
02-Oct-02	11:07	0:32	0.8	1.0	
03-Oct-02	15:55	0:55	1.0	1.5	
23-Oct-02	13:23	0:34	0.8	1.0	
24-Oct-02	13:31	0:00	0.3	0.5	
29-Oct-02	13:50	0:00	0.3	0.5	
31-Oct-02	end				

Appendix 4. Dadd Bennett fire: Mom Gulch gage, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
02-Jun-03	16:34	0:30	1.0	2.032	
03-Jun-03	15:51	0:02	0.8	1.524	
04-Jun-03	8:25	0:00	0.3	0.508	
04-Jun-03	12:33	0:00	0.3	0.508	
04-Jun-03	14:17	1:48	6.9	8.128	9
04-Jun-03	17:31	1:17	5.1	6.604	5
04-Jun-03	22:58	0:00	0.3	0.508	
06-Jun-03	16:21	3:24	9.1	4.064	4
07-Jun-03	7:12	0:00	0.3	0.508	
09-Jun-03	18:28	0:00	0.3	0.508	
10-Jun-03	17:03	0:00	0.3	0.508	
11-Jun-03	16:05	1:42	4.1	6.604	
13-Jun-03	11:14	1:16	2.5	4.572	
13-Jun-03	19:53	0:04	1.3	2.54	
14-Jun-03	1:05	0:00	0.3	0.508	
14-Jun-03	15:19	1:05	1.0	1.524	
15-Jun-03	3:25	0:00	0.3	0.508	
16-Jun-03	22:39	0:10	0.8	1.524	
17-Jun-03	5:53	0:00	0.3	0.508	
17-Jun-03	11:18	0:50	12.4	19.812	52
17-Jun-03	17:15	0:25	2.5	5.08	
17-Jun-03	19:12	0:42	2.8	5.08	
18-Jun-03	8:00	0:46	0.8	1.016	
18-Jun-03	13:58	0:00	0.3	0.508	
20-Jun-03	0:02	0:00	0.3	0.508	
20-Jun-03	12:47	0:28	2.3	4.572	
20-Jun-03	16:01	2:05	4.8	7.62	
21-Jun-03	4:04	0:00	0.3	0.508	
24-Jun-03	13:41	1:08	0.8	1.016	
24-Jun-03	18:55	0:04	0.8	1.524	
25-Jun-03	0:12	0:19	0.5	1.016	
25-Jun-03	2:41	0:00	0.3	0.508	
28-Jun-03	22:37	0:00	0.3	0.508	
30-Jun-03	6:36	0:00	0.3	0.508	
14-Jul-03	15:16	0:37	2.3	4.064	
18-Jul-03	15:20	0:09	2.0	4.064	
18-Jul-03	16:45	0:00	0.3	0.508	
18-Jul-03	21:20	0:30	20.1	39.624	210
18-Jul-03	23:56	0:00	0.3	0.508	
19-Jul-03	14:16	0:34	18.0	32.512	146
19-Jul-03	21:47	0:32	5.3	10.16	12
20-Jul-03	14:10	0:00	0.3	0.508	
20-Jul-03	16:01	0:00	0.3	0.508	
23-Jul-03	12:32	0:00	0.3	0.508	
23-Jul-03	13:48	0:00	0.3	0.508	
25-Jul-03	13:53	0:00	0.3	0.508	
25-Jul-03	16:54	0:00	0.3	0.508	

Appendix 4. Dadd Bennett fire: Mom Gulch gage, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
25-Jul-03	18:19	0:28	1.0	2.032	
25-Jul-03	20:13	1:11	0.8	1.016	
26-Jul-03	2:42	0:00	0.3	0.508	
26-Jul-03	16:51	0:47	1.3	2.032	
26-Jul-03	19:09	0:12	2.8	5.588	
26-Jul-03	22:40	0:02	0.5	1.016	
27-Jul-03	14:30	0:00	0.3	0.508	
28-Jul-03	8:23	0:00	0.3	0.508	
28-Jul-03	12:49	0:00	0.3	0.508	
28-Jul-03	17:23	0:00	0.3	0.508	
29-Jul-03	4:39	0:00	0.3	0.508	
30-Jul-03	5:53	0:00	0.3	0.508	
03-Aug-03	11:53	0:29	0.8	1.524	
03-Aug-03	13:35	1:00	1.0	1.524	
03-Aug-03	17:36	0:32	1.0	1.524	
03-Aug-03	23:39	0:00	0.3	0.508	
04-Aug-03	10:29	0:00	0.3	0.508	
06-Aug-03	17:48	0:00	0.3	0.508	
08-Aug-03	14:03	0:50	2.8	3.048	
08-Aug-03	16:04	0:00	0.3	0.508	
09-Aug-03	12:14	0:00	0.3	0.508	
09-Aug-03	14:41	0:12	2.3	4.572	
17-Aug-03	10:25	1:02	1.3	1.524	
17-Aug-03	22:13	0:05	0.8	1.524	
18-Aug-03	11:40	1:05	3.0	4.064	
22-Aug-03	12:29	0:34	6.6	10.16	15
23-Aug-03	14:51	0:00	0.3	0.508	
25-Aug-03	12:27	0:42	3.0	5.588	
25-Aug-03	15:59	0:00	0.3	0.508	
29-Aug-03	13:58	0:12	1.5	3.048	
29-Aug-03	17:58	2:37	10.9	10.16	16
30-Aug-03	11:50	0:59	1.5	2.032	
30-Aug-03	17:47	0:20	0.5	1.016	
31-Aug-03	10:49	1:03	1.0	1.524	
31-Aug-03	13:33	0:06	0.8	1.524	
01-Sep-03	2:36	0:00	0.3	0.508	
02-Sep-03	14:34	0:12	2.3	4.572	
02-Sep-03	19:50	0:33	0.5	1.016	
02-Sep-03	21:54	0:00	0.3	0.508	
03-Sep-03	7:35	0:00	0.3	0.508	
03-Sep-03	14:46	0:00	0.3	0.508	
04-Sep-03	6:55	0:00	0.3	0.508	
06-Sep-03	11:42	0:29	2.5	5.08	
06-Sep-03	13:51	0:40	1.0	1.524	
07-Sep-03	10:54	0:00	0.3	0.508	
08-Sep-03	20:28	0:08	0.5	1.016	
09-Sep-03	11:35	0:00	0.3	0.508	

Appendix 4. Dadd Bennett fire: Mom Gulch gage, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
12-Sep-03	22:13	1:02	1.0	1.524	
17-Sep-03	14:55	0:45	1.5	2.54	
17-Sep-03	16:52	3:19	4.1	3.048	
18-Sep-03	9:20	0:00	0.3	0.508	
19-Sep-03	8:41	0:00	0.3	0.508	
02-Oct-03	17:47	0:17	1.0	2.032	
02-Oct-03	10:49	1:27	1.3	2.032	
02-Oct-03	13:33	1:47	1.8	2.032	
03-Oct-03	2:36	0:00	0.3	0.508	
13-Oct-03	16:20	0:22	0.8	1.524	
31-Oct-03	End				

Appendix 4. Hayman fire: Upper Brush Creek gage, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
17-Jul-02		Start			
21-Jul-02	4:39	0:57	12.7	24.4	75
21-Jul-02	7:57	0:00	0.3	0.5	
22-Jul-02	11:55	0:00	0.3	0.5	
22-Jul-02	12:17	0:31	1.3	2.0	
30-Jul-02	3:46	0:00	0.3	0.5	
03-Aug-02	7:26	0:27	1.3	2.5	
03-Aug-02	8:55	2:18	3.3	5.1	
04-Aug-02	12:06	0:36	1.8	3.0	
05-Aug-02	1:50	0:25	4.3	8.6	
05-Aug-02	4:32	0:18	0.8	1.5	
05-Aug-02	6:13	1:11	1.3	1.5	
06-Aug-02	4:41	0:37	1.3	2.0	
07-Aug-02	4:42	0:16	0.8	1.5	
07-Aug-02	7:07	0:10	1.5	3.0	
07-Aug-02	9:18	0:00	0.3	0.5	
19-Aug-02	4:02	0:22	0.5	1.0	
21-Aug-02	4:02	1:05	4.3	7.6	
21-Aug-02	9:36	0:00	0.3	0.5	
27-Aug-02	7:59	1:02	2.0	3.0	
28-Aug-02	2:51	0:05	1.0	2.0	
28-Aug-02	3:58	0:21	2.3	4.6	
29-Aug-02	3:00	0:06	1.0	2.0	
30-Aug-02	6:42	0:00	0.3	0.5	
08-Sep-02	23:32	1:31	3.8	6.1	
09-Sep-02	2:54	0:00	0.3	0.5	
09-Sep-02	19:06	0:00	0.3	0.5	
09-Sep-02	20:40	12:10	17.3	7.1	16
12-Sep-02	16:21	0:29	5.8	11.7	13
18-Sep-02	13:02	1:22	3.8	4.1	
18-Sep-02	17:58	3:56	6.1	3.6	3
19-Sep-02	0:55	0:00	0.3	0.5	
21-Sep-02	14:55	0:00	0.3	0.5	
26-Sep-02	3:59	0:37	1.8	3.0	
26-Sep-02	10:35	0:39	2.0	3.0	
27-Sep-02	14:24	0:00	0.3	0.5	
01-Oct-02	18:36	5:58	20.8	8.1	23
23-Oct-02	9:37	0:04	1.0	2.0	
24-Oct-02	9:18	0:05	0.8	1.5	
26-Oct-02	20:18	2:02	3.8	3.0	
27-Oct-02	2:26	0:54	1.0	1.5	
27-Oct-02	7:23	2:28	4.1	3.0	
30-Oct-02	9:01	0:00	0.3	0.5	
31-Oct-02	10:47	0:53	7.4	9.7	11

Appendix 4. Hayman fire: Upper Brush Creek gage, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I_{30} (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
01-Jun-03	10:54	0:07	0.5	1.0	
04-Jun-03	20:50	1:11	4.8	7.6	3
05-Jun-03	1:43	3:51	4.6	2.5	1
05-Jun-03	6:37	3:11	6.1	3.6	3
05-Jun-03	14:23	0:00	0.3	0.5	
06-Jun-03	11:12	0:00	0.3	0.5	
06-Jun-03	20:46	4:59	10.7	4.6	8
07-Jun-03	3:14	0:00	0.3	0.5	
10-Jun-03	16:59	0:26	8.4	16.8	32
12-Jun-03	14:38	0:25	1.0	2.0	
13-Jun-03	17:53	0:00	0.5	1.0	
16-Jun-03	16:14	0:00	0.5	1.0	
18-Jun-03	15:37	0:07	0.8	1.5	
18-Jun-03	17:48	0:18	0.5	1.0	
18-Jun-03	19:54	0:00	0.3	0.5	
19-Jun-03	13:37	0:39	6.1	9.1	9
19-Jun-03	15:58	0:34	0.5	1.0	
25-Jun-03	1:20	0:26	0.5	1.0	
25-Jun-03	20:23	0:14	3.3	6.6	
25-Jun-03	22:58	1:30	8.6	9.7	14
29-Jun-03	14:45	0:00	0.3	0.5	
18-Jul-03	22:09	0:19	2.0	4.1	
19-Jul-03	18:17	1:00	12.7	18.8	50
27-Jul-03	17:15	0:00	0.3	0.5	
27-Jul-03	18:45	0:00	0.3	0.5	
28-Jul-03	16:59	0:00	0.3	0.5	
29-Jul-03	16:06	0:18	1.3	2.5	
01-Aug-03	17:33	0:12	1.8	3.6	
02-Aug-03	20:37	0:11	0.5	1.0	
03-Aug-03	16:33	0:46	6.9	13.2	19
06-Aug-03	12:08	0:00	0.3	0.5	
07-Aug-03	14:14	0:02	0.8	1.5	
07-Aug-03	15:46	0:00	0.3	0.5	
11-Aug-03	17:59	1:48	11.7	17.3	38
17-Aug-03	13:44	0:47	1.3	1.5	
17-Aug-03	16:03	0:00	0.3	0.5	
17-Aug-03	17:37	0:00	0.5	1.0	
18-Aug-03	12:59	0:00	0.5	1.0	
18-Aug-03	17:49	0:53	2.0	3.6	
22-Aug-03	16:13	1:36	7.6	11.7	16
23-Aug-03	14:32	0:30	0.3	0.5	
28-Aug-03	5:00	0:30	0.5	1.0	
29-Aug-03	17:07	0:22	2.0	4.1	
30-Aug-03	0:26	4:32	18.0	11.2	32
30-Aug-03	10:09	0:00	0.3	0.5	
30-Aug-03	16:07	0:23	1.5	3.0	
30-Aug-03	20:30	0:58	10.7	16.3	34

Appendix 4. Hayman fire: Upper Brush Creek gage, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
31-Aug-03	2:54	0:00	0.3	0.5	
03-Sep-03	15:47	0:11	0.5	1.0	
07-Sep-03	6:33	0:00	0.3	0.5	
07-Sep-03	10:33	0:08	0.8	1.5	
07-Sep-03	12:39	1:44	1.3	1.5	
09-Sep-03	7:31	0:00	0.5	1.0	
13-Sep-03	9:49	1:50	2.3	2.0	
13-Sep-03	12:45	1:43	1.3	1.0	
13-Sep-03	16:49	0:00	0.3	0.5	
14-Sep-03	1:15	0:00	0.3	0.5	
17-Sep-03	21:38	1:22	1.0	1.0	
18-Sep-03	0:05	0:57	0.5	0.5	
18-Sep-03	8:36	0:00	0.3	0.5	
18-Sep-03	9:41	0:00	0.5	1.0	
02-Oct-03	5:33	0:00	0.3	0.5	
02-Oct-03	15:27	0:00	0.3	0.5	
03-Oct-03	6:27	0:00	0.3	0.5	
25-Oct-03	9:46	0:01	0.5	1.0	
31-Oct-03	End				

Appendix 4. Hayman fire: Upper Saloon Gulch south gage, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
03-Jun-02	23:19	3:15	3.0	2.5	
04-Jun-02	6:48	0:00	0.3	0.5	
04-Jun-02	8:11	0:58	2.0	2.5	
04-Jun-02	10:16	0:19	0.5	1.0	
04-Jun-02	13:28	1:28	1.3	1.5	
19-Jun-02	22:34	0:33	1.5	2.5	
20-Jun-02	15:25	1:23	4.3	6.1	
20-Jun-02	19:55	1:13	3.3	4.6	
21-Jun-02	17:20	0:33	2.8	4.6	
21-Jun-02	20:39	0:36	1.8	3.0	
24-Jun-02	15:18	0:31	0.5	0.5	
03-Jul-02	12:00	0:00	0.3	0.5	
05-Jul-02	20:27	2:19	3.3	3.6	
06-Jul-02	2:26	4:36	16.5	17.8	33
21-Jul-02	8:13	0:41	11.2	21.8	136
22-Jul-02	12:03	0:02	0.5	1.0	
22-Jul-02	2:42	0:26	1.5	3.0	
29-Jul-02	7:05	0:00	0.3	0.5	
30-Jul-02	3:42	0:01	0.5	1.0	
03-Aug-02	7:26	5:14	5.1	3.6	5
05-Aug-02	1:53	0:26	3.8	7.6	
05-Aug-02	4:35	0:15	0.5	1.0	
05-Aug-02	6:12	1:18	1.3	2.0	
06-Aug-02	4:39	0:42	1.3	2.0	
07-Aug-02	4:49	0:11	1.3	2.5	
07-Aug-02	7:09	0:08	0.8	1.5	
19-Aug-02	4:07	0:29	0.5	1.0	
21-Aug-02	4:05	1:13	3.8	7.1	
22-Aug-02	3:54	0:00	0.3	0.5	
27-Aug-02	8:14	0:47	2.8	5.1	
28-Aug-02	2:51	0:05	0.8	1.5	
28-Aug-02	3:59	0:23	4.1	8.1	
29-Aug-02	3:05	0:02	0.5	1.0	
08-Sep-02	11:34	0:24	2.0	4.1	
09-Sep-02	1:11	0:00	0.3	0.5	
09-Sep-02	2:50	0:00	0.3	0.5	
09-Sep-02	8:54	3:05	5.8	6.6	3
10-Sep-02	12:03	0:42	3.0	6.1	
10-Sep-02	1:01	7:01	5.1	1.5	
12-Sep-02	16:27	0:18	5.1	10.2	16
13-Sep-02	12:07	0:59	1.3	2.0	
18-Sep-02	13:01	1:17	1.5	2.0	
18-Sep-02	18:06	2:28	5.1	3.6	2
18-Sep-02	21:39	0:24	0.5	1.0	
26-Sep-02	3:58	0:26	1.5	3.0	
26-Sep-02	10:30	0:44	2.5	4.1	
27-Sep-02	15:33	0:00	0.3	0.5	

Appendix 4. Hayman fire: Upper Saloon Gulch south gage, 2002 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
01-Oct-02	18:47	4:30	16.0	4.1	3
02-Oct-02	6:35	0:00	0.3	0.5	
03-Oct-02	2:39	0:00	0.3	0.5	
23-Oct-02	9:46	0:16	0.8	1.5	
24-Oct-02	9:11	0:00	0.3	0.5	
26-Oct-02	20:16	1:31	2.5	2.5	
27-Oct-02	10:01	0:56	3.6	4.1	
30-Oct-02	9:50	0:15	1.0	2.0	
30-Oct-02	12:33	0:15	0.5	1.0	
31-Oct-02	8:18	0:00	0.3	0.5	
31-Oct-02	9:33	1:47	2.5	4.1	

Appendix 4. Hayman fire: Upper Saloon Gulch south gage, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
01-Jun-03	10:58	0:03	0.5	1.0	
04-Jun-03	20:50	2:05	5.6	7.6	6
05-Jun-03	2:04	3:23	3.3	2.0	
05-Jun-03	6:30	3:39	5.1	2.5	1
05-Jun-03	14:34	0:00	0.3	0.5	
06-Jun-03	20:26	6:59	8.9	4.1	4
10-Jun-03	16:55	0:17	6.9	13.7	21
12-Jun-03	14:32	0:38	1.8	3.0	
13-Jun-03	17:27	0:00	0.3	0.5	
18-Jun-03	15:26	0:00	0.3	0.5	
18-Jun-03	17:17	0:41	0.5	1.0	
18-Jun-03	19:26	0:47	1.0	1.5	
19-Jun-03	13:38	1:10	8.4	13.2	20
19-Jun-03	16:12	0:32	0.5	0.5	
25-Jun-03	1:00	0:45	0.5	0.5	
25-Jun-03	20:24	0:22	1.8	3.6	
25-Jun-03	22:59	1:27	4.3	5.1	2
29-Jun-03	18:02	0:00	0.3	0.5	
18-Jul-03	20:42	0:00	0.3	0.5	
18-Jul-03	21:57	0:33	2.3	4.1	
19-Jul-03	18:16	1:00	8.6	11.2	17
27-Jul-03	17:08	0:00	0.3	0.5	
27-Jul-03	18:37	0:00	0.3	0.5	
28-Jul-03	16:56	0:00	0.3	0.5	
29-Jul-03	16:09	0:08	0.5	1.0	
01-Aug-03	17:20	0:18	2.0	4.1	
02-Aug-03	20:31	0:14	1.0	2.0	
03-Aug-03	16:34	0:48	4.8	8.6	8
05-Aug-03	1:51	0:00	0.3	0.5	
06-Aug-03	12:07	0:26	1.0	2.0	
07-Aug-03	14:21	0:00	0.3	0.5	
07-Aug-03	15:41	0:13	0.5	1.0	
09-Aug-03	13:23	0:00	0.3	0.5	
11-Aug-03	17:57	1:33	12.7	13.7	48
16-Aug-03	17:19	0:00	0.3	0.5	
17-Aug-03	13:32	0:21	0.8	1.5	
17-Aug-03	16:04	0:02	0.5	1.0	
17-Aug-03	17:48	0:00	0.3	0.5	
18-Aug-03	17:50	0:41	1.5	2.5	
18-Aug-03	20:27	0:00	0.3	0.5	
22-Aug-03	14:06	0:04	0.5	1.0	
22-Aug-03	16:50	1:33	7.6	12.2	17
23-Aug-03	14:41	0:00	0.3	0.5	
24-Aug-03	23:07	0:00	0.3	0.5	
29-Aug-03	17:07	0:00	0.3	0.5	
30-Aug-03	0:22	4:43	16.0	9.7	22
30-Aug-03	16:03	0:28	2.8	5.6	

Appendix 4. Hayman fire: Upper Saloon Gulch south gage, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
30-Aug-03	20:28	1:04	14.0	32.8	63
31-Aug-03	6:56	0:00	0.3	0.5	
02-Sep-03	20:22	0:00	0.3	0.5	
03-Sep-03	15:45	0:07	0.5	1.0	
07-Sep-03	6:20	0:00	0.3	0.5	
07-Sep-03	10:25	0:07	1.0	2.0	
07-Sep-03	12:07	2:19	1.8	1.5	
09-Sep-03	7:31	0:00	0.3	0.5	
09-Sep-03	13:28	0:00	0.3	0.5	
13-Sep-03	9:50	1:57	1.5	1.0	
13-Sep-03	16:34	1:15	0.8	1.0	
13-Sep-03	20:20	0:46	0.5	0.5	
14-Sep-03	7:26	0:00	0.3	0.5	
17-Sep-03	21:39	1:26	1.0	1.0	
18-Sep-03	0:09	0:19	0.5	1.0	
18-Sep-03	8:41	0:05	0.5	1.0	
02-Oct-03	5:12	0:05	0.5	1.0	
02-Oct-03	15:29	0:00	0.3	0.5	
03-Oct-03	6:19	0:00	0.3	0.5	
29-Oct-03	End				

Appendix 4. Hayman fire: Upper Saloon Gulch north gage, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
05-Aug-02	8:19	0:01	2.2	4.0	
06-Aug-02	9:49	0:07	0.4	0.8	
06-Aug-02	4:47	0:40	1.2	2.0	
06-Aug-02	8:22	0:00	0.2	0.4	
07-Aug-02	4:48	0:14	1.0	2.0	
07-Aug-02	7:07	0:16	1.0	2.0	
19-Aug-02	4:00	1:05	0.6	0.8	
21-Aug-02	4:11	0:51	2.4	4.4	
21-Aug-02	9:34	0:07	0.4	0.8	
22-Aug-02	3:45	0:11	0.4	0.8	
27-Aug-02	8:14	0:48	4.2	7.6	
28-Aug-02	12:03	0:00	0.2	0.4	
28-Aug-02	2:53	0:04	0.8	1.6	
28-Aug-02	4:03	0:17	5.0	10.0	11
29-Aug-02	3:01	0:04	0.6	1.2	
30-Aug-02	1:15	0:00	0.2	0.4	
04-Sep-02	1:43	0:28	0.4	0.8	
08-Sep-02	11:35	0:20	1.6	3.2	
09-Sep-02	12:00	0:00	0.2	0.4	
09-Sep-02	1:02	0:00	0.2	0.4	
09-Sep-02	2:53	0:00	0.2	0.4	
09-Sep-02	8:35	3:20	5.4	4.8	3
10-Sep-02	12:03	0:43	2.2	3.2	
10-Sep-02	1:00	7:11	4.2	1.6	
12-Sep-02	16:22	0:30	3.6	6.8	
13-Sep-02	12:22	0:40	1.0	0.6	
13-Sep-02	15:45	0:00	0.2	0.4	
18-Sep-02	13:03	1:23	1.4	2.0	
18-Sep-02	17:42	4:09	6.4	3.6	3
18-Sep-02	23:06	0:00	0.2	0.4	
19-Sep-02	14:13	0:00	0.2	0.4	
25-Sep-02	21:13	0:00	0.2	0.4	
26-Sep-02	3:55	0:29	1.0	2.0	
26-Sep-02	10:28	0:33	2.6	4.8	
01-Oct-02	18:08	6:16	13.6	5.6	9
03-Oct-02	2:32	0:09	0.4	0.8	
23-Oct-02	10:37	0:46	0.6	0.8	
24-Oct-02	9:13	0:00	0.2	0.4	
25-Oct-02	8:35	0:00	0.2	0.4	
26-Oct-02	20:09	2:05	4.0	2.8	
26-Oct-02	23:19	3:44	1.2	2.4	
27-Oct-02	4:22	0:00	0.2	0.4	
27-Oct-02	6:52	2:12	1.2	0.8	
28-Oct-02	7:29	0:00	0.2	0.4	
30-Oct-02	9:30	4:01	3.0	1.6	
31-Oct-02	9:04	2:53	2.0	1.2	

Appendix 4. Hayman fire: Upper Saloon Gulch north gage, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	I30 (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
01-Jun-03	10:57	0:09	0.6	1.2	
04-Jun-03	20:49	1:35	4.4	6.4	3
05-Jun-03	1:09	4:23	3.0	1.6	
05-Jun-03	6:34	4:18	6.9	2.8	1
05-Jun-03	14:26	0:08	1.2	2.4	
06-Jun-03	20:14	5:39	8.0	4.4	
10-Jun-03	16:56	1:10	7.4	13.2	19
12-Jun-03	14:15	0:58	2.6	2.8	
13-Jun-03	17:50	0:00	0.2	0.4	
18-Jun-03	17:56	2:16	1.4	1.2	
19-Jun-03	13:37	1:10	3.2	4.4	
19-Jun-03	16:07	0:35	0.4	0.4	
21-Jun-03	6:25	0:12	0.4	0.8	
25-Jun-03	20:22	0:14	1.4	2.8	
25-Jun-03	23:00	1:23	2.6	2.8	
29-Jun-03	16:31	0:00	0.2	0.4	
18-Jul-03	21:18	1:12	2.8	4.8	
19-Jul-03	18:11	1:12	10.0	16.4	31
25-Jul-03	13:01	0:00	0.2	0.4	
27-Jul-03	16:54	0:10	0.4	0.8	
27-Jul-03	18:13	0:28	0.4	0.8	
28-Jul-03	5:22	0:00	0.2	0.4	
28-Jul-03	17:26	0:00	0.2	0.4	
29-Jul-03	16:11	0:00	0.2	0.4	
30-Jul-03	7:20	0:00	0.2	0.4	
01-Aug-03	17:18	0:28	3.8	7.6	
02-Aug-03	20:26	0:35	1.0	1.6	
03-Aug-03	16:38	0:45	3.8	7.2	
04-Aug-03	14:39	0:00	0.2	0.4	
06-Aug-03	12:19	0:00	0.2	0.4	
07-Aug-03	14:12	0:10	0.8	1.6	
07-Aug-03	15:46	0:09	0.4	0.8	
09-Aug-03	19:58	0:11	0.6	1.2	
10-Aug-03	8:52	0:00	0.2	0.4	
11-Aug-03	17:47	1:05	20.2	33.6	160
16-Aug-03	17:29	0:00	0.2	0.4	
17-Aug-03	13:34	0:52	1.6	2.8	
17-Aug-03	16:08	0:00	0.2	0.4	
17-Aug-03	17:39	0:00	0.2	0.4	
18-Aug-03	17:53	0:54	2.2	4.0	
19-Aug-03	0:56	0:00	0.2	0.4	
22-Aug-03	14:04	0:40	2.0	3.2	
22-Aug-03	16:52	1:32	9.4	16.4	33
23-Aug-03	14:47	0:06	0.4	0.8	
23-Aug-03	19:02	0:00	0.2	0.4	
24-Aug-03	23:19	0:54	0.4	0.2	
28-Aug-03	5:16	0:00	0.2	0.4	

Appendix 4. Hayman fire: Upper Saloon Gulch north gage, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
30-Aug-03	0:26	4:50	14.8	10.4	22
30-Aug-03	16:04	1:04	2.6	4.8	
30-Aug-03	20:26	1:08	14.6	23.6	73
31-Aug-03	1:00	0:00	0.2	0.4	
31-Aug-03	14:54	0:00	0.2	0.4	
01-Sep-03	6:57	0:00	0.2	0.4	
02-Sep-03	15:24	0:00	0.2	0.4	
02-Sep-03	19:34	1:03	4.4	7.2	5
03-Sep-03	5:30	0:00	0.2	0.4	
03-Sep-03	11:21	0:00	0.2	0.4	
03-Sep-03	15:50	0:07	0.4	0.8	
04-Sep-03	6:18	0:00	0.2	0.4	
06-Sep-03	15:04	0:00	0.2	0.4	
07-Sep-03	6:44	0:00	0.2	0.4	
07-Sep-03	10:23	0:04	0.4	0.8	
07-Sep-03	12:15	2:06	1.2	0.8	
08-Sep-03	5:28	0:00	0.2	0.4	
09-Sep-03	7:24	0:17	0.6	1.2	
13-Sep-03	9:33	2:23	1.2	0.8	
13-Sep-03	13:00	1:14	0.6	0.8	
13-Sep-03	16:17	0:52	0.4	0.4	
14-Sep-03	7:48	0:00	0.2	0.4	
17-Sep-03	21:45	0:51	0.4	0.8	
02-Oct-03	5:12	0:34	0.4	0.8	
03-Oct-03	5:16	0:00	0.2	0.4	
03-Oct-03	6:29	0:17	0.4	0.8	
19-Oct-03	End				

Appendix 4. Hayman fire: Upper Saloon Gulch northeast gage, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
09-Jun-03	14:16	0:00	0.2	0.4	
10-Jun-03	16:59	0:55	8.2	11.6	28
12-Jun-03	14:17	1:26	4.0	4.8	3
18-Jun-03	18:01	2:02	2.0	1.6	
19-Jun-03	13:37	1:13	3.6	4.8	2
19-Jun-03	16:02	0:40	0.4	0.8	
25-Jun-03	20:22	0:13	1.4	2.8	
25-Jun-03	22:59	1:20	2.8	3.2	
18-Jul-03	20:49	0:00	0.2	0.4	
18-Jul-03	21:50	0:38	2.6	4.8	
19-Jul-03	0:03	0:00	0.2	0.4	
19-Jul-03	18:16	0:50	10.0	17.6	35
25-Jul-03	13:00	0:00	0.2	0.4	
27-Jul-03	17:03	0:07	0.4	0.8	
27-Jul-03	18:37	0:40	0.4	0.4	
01-Aug-03	17:20	0:23	2.8	5.6	
02-Aug-03	20:25	0:30	1.0	1.6	
03-Aug-03	16:37	0:52	3.6	6.4	
04-Aug-03	14:40	0:00	0.2	0.4	
06-Aug-03	12:17	0:00	0.2	0.4	
07-Aug-03	14:05	0:12	1.0	2.0	
07-Aug-03	15:36	0:13	0.4	0.8	
09-Aug-03	20:00	0:10	0.6	1.2	
11-Aug-03	17:42	1:10	23.8	40.8	240
12-Aug-03	End				

Appendix 4. Hewlett Gulch fire, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I ₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)
28-Jul-02	17:48	start			
02-Aug-02	16:36	0:01	0.2	0.4	
03-Aug-02	14:17	0:55	1.2	1.6	
03-Aug-02	19:15	1:12	2.2	2.8	
05-Aug-02	14:27	0:35	14.0	27.2	101
05-Aug-02	19:11	0:50	3.2	4	
05-Aug-02	21:11	0:52	0.6	0.8	
06-Aug-02	18:27	0:03	0.6	1.2	
07-Aug-02	20:21	0:01	0.2	n/a	
12-Aug-02	22:38	0:52	2.0	2.8	
13-Aug-02	12:51	0:00	0.2	0.4	
20-Aug-02	12:17	0:06	0.6	1.2	
21-Aug-02	14:09	0:59	3.0	5.2	
21-Aug-02	21:32	0:02	0.6	1.2	
22-Aug-02	13:38	0:00	0.2	0.4	
22-Aug-02	16:33	0:20	2.2	4.4	
22-Aug-02	17:54	0:00	0.4	0.8	
25-Aug-02	11:42	0:00	0.4	0.8	
26-Aug-02	22:22	2:10	4.8	8	6
27-Aug-02	4:59	0:30	0.4	0.8	
27-Aug-02	10:18	0:00	0.2	0.4	
29-Aug-02	15:32	0:24	0.8	1.6	
06-Sep-02	16:21	0:00	0.4	0.8	
08-Sep-02	22:26	1:19	8.4	7.6	9
09-Sep-02	1:44	0:22	0.4	0.8	
09-Sep-02	11:21	0:00	0.4	0.8	
10-Sep-02	0:38	1:21	4.2	4.4	3
10-Sep-02	4:04	0:00	0.2	0.4	
10-Sep-02	20:49	0:00	0.2	0.4	
11-Sep-02	17:34	2:33	7.2	5.6	5
12-Sep-02	17:04	1:03	9.4	15.2	29
12-Sep-02	20:27	0:10	2.6	5.2	
13-Sep-02	7:54	0:00	0.2	0.4	
25-Sep-02	22:56	0:00	0.2	0.4	
26-Sep-02	14:24	0:00	0.4	0.8	
27-Sep-02	14:44	0:02	0.6	1.2	
01-Oct-02	18:18	6:51	8.6	2.8	3
02-Oct-02	4:16	0:00	0.2	0.4	
02-Oct-02	5:34	0:21	0.6	1.2	
02-Oct-02	7:47	0:00	0.2	0.4	
02-Oct-02	16:47	0:00	0.2	0.4	
02-Oct-02	19:12	0:00	0.2	0.4	
02-Oct-02	21:09	0:00	0.2	0.4	
02-Oct-02	23:03	0:00	0.2	0.4	
03-Oct-02	13:18	2:11	9.0	8.8	9
23-Oct-02	13:01	0:27	1.0	2	
23-Oct-02	14:44	0:00	0.2	0.4	

Appendix 4. Hewlett Gulch fire, 2002 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
24-Oct-02	12:36	2:07	1.4	1.2	
24-Oct-02	16:42	0:00	0.4	0.8	
25-Oct-02	11:20	0:00	0.2	0.4	
25-Oct-02	13:05	0:00	0.2	0.4	
26-Oct-02	12:38	0:00	1.2	2.4	
27-Oct-02	7:19	0:00	0.2	0.4	
27-Oct-02	14:14	0:07	0.4	0.8	
28-Oct-02	13:16	0:00	0.2	0.4	
28-Oct-02	20:38	1:42	2.8	2.8	
29-Oct-02	12:00	3:39	3.6	1.6	
27-Oct-02	7:19	0:00	0.2	0.4	
27-Oct-02	14:14	0:07	0.4	0.8	
28-Oct-02	13:16	0:00	0.2	0.4	
28-Oct-02	20:38	1:42	2.8	2.8	
29-Oct-02	12:00	3:39	3.6	1.6	
31-Oct-02	10:45	0:00	0.2	0.4	164
31-Oct-02	14:05	0:49	0.8	1.2	

Appendix 4. Hewlett Gulch fire, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
02-Jun-03	16:01	1:00	1.0	1.2	
02-Jun-03	20:13	0:00	0.2	0.4	
03-Jun-03	15:54	1:16	1.4	1.6	
04-Jun-03	13:10	0:00	0.2	0.4	
04-Jun-03	14:37	1:35	7.8	7.6	8
04-Jun-03	17:53	0:46	2.0	3.2	
04-Jun-03	20:22	0:00	0.4	0.8	
05-Jun-03	14:19	0:00	0.2	0.4	
06-Jun-03	13:02	2:43	2.0	1.6	
06-Jun-03	17:01	2:03	4.0	3.2	
07-Jun-03	18:38	0:02	0.6	1.2	
09-Jun-03	18:48	0:00	0.2	0.4	
10-Jun-03	15:30	0:06	1.4	2.8	
10-Jun-03	17:14	0:00	0.2	0.4	
10-Jun-03	18:37	0:00	0.2	0.4	
13-Jun-03	13:18	0:00	0.2	0.4	
13-Jun-03	20:34	0:14	0.8	1.6	
14-Jun-03	12:23	0:21	1.4	2.8	
16-Jun-03	21:16	1:30	1.4	1.6	
17-Jun-03	19:10	0:07	0.6	1.2	
17-Jun-03	21:04	0:52	1.2	1.2	
18-Jun-03	6:05	0:15	0.6	1.2	
20-Jun-03	12:41	0:42	1.6	2	
20-Jun-03	16:36	0:15	1.0	2	
25-Jun-03	0:23	2:15	2.0	2	
29-Jun-03	2:39	0:00	0.2	0.4	
07-Jul-03	16:04	0:05	4.4	8.8	
15-Jul-03	18:17	0:00	0.4	0.8	
16-Jul-03	15:29	0:52	0.6	0.8	
18-Jul-03	16:48	0:05	0.4	0.8	
18-Jul-03	22:47	0:14	1.4	2.8	
19-Jul-03	15:56	0:29	6.0	12	16
19-Jul-03	17:42	0:00	0.2	0.4	
20-Jul-03	14:35	0:04	1.2	2.4	
25-Jul-03	14:39	0:39	1.2	1.6	
25-Jul-03	23:30	0:00	0.2	0.4	
26-Jul-03	17:13	0:02	0.4	0.8	
26-Jul-03	23:04	0:00	0.2	0.4	
27-Jul-03	14:54	0:00	0.2	0.4	
30-Jul-03	13:10	0:04	1.8	3.6	
03-Aug-03	19:19	0:32	0.8	1.2	
06-Aug-03	18:58	0:21	1.6	3.2	
07-Aug-03	16:59	0:01	1.0	2	
17-Aug-03	11:30	0:00	0.2	0.4	
18-Aug-03	12:18	1:24	6.4	6.4	7
18-Aug-03	17:27	0:00	0.2	0.4	
23-Aug-03	13:19	0:07	2.2	4.4	

Appendix 4. Hewlett Gulch fire, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
24-Aug-03	19:25	0:01	0.6	1.2	
27-Aug-03	13:50	0:51	0.4	0.4	
29-Aug-03	18:50	3:08	11.4	6.4	10
30-Aug-03	4:58	0:00	0.2	0.4	
30-Aug-03	7:29	0:00	0.2	0.4	
30-Aug-03	12:43	1:17	2.8	2.8	
30-Aug-03	18:44	0:36	0.8	1.2	
31-Aug-03	14:03	0:00	0.2	0.4	
31-Aug-03	15:06	0:00	0.4	0.8	
31-Aug-03	17:42	0:00	0.2	0.4	
01-Sep-03	7:32	0:00	0.2	0.4	
02-Sep-03	22:27	0:00	0.2	0.4	
07-Sep-03	8:29	1:04	3.4	4.4	
07-Sep-03	12:45	0:00	0.2	0.4	
07-Sep-03	14:50	0:55	0.6	0.8	
07-Sep-03	17:08	0:03	0.4	0.8	
08-Sep-03	6:26	0:00	0.2	0.4	
08-Sep-03	14:38	0:00	0.2	0.4	
12-Sep-03	23:20	0:00	0.2	0.4	
13-Sep-03	0:09	0:00	0.4	0.8	
13-Sep-03	1:19	0:00	0.2	0.4	
17-Sep-03	16:05	0:56	3.0	3.2	
17-Sep-03	18:07	0:56	1.6	2.4	
18-Sep-03	10:50	0:00	0.4	0.8	
18-Sep-03	13:16	End			

Appendix 4. Hourglass fire, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I_{30} (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
25-Jun-02	0:00				
27-Jun-02	12:24	1:36	3.2	3.6	
28-Jun-02	12:31	0:58	0.6	0.8	
03-Jul-02	19:27	0:01	0.2	0.4	
04-Jul-02	13:16	0:01	0.2	0.4	
05-Jul-02	18:08	1:01	8.8	16.8	27
06-Jul-02	14:12	0:35	7.8	15.2	25
07-Jul-02	2:54	0:01	0.2	0.4	
07-Jul-02	13:34	0:09	3.0	6	
08-Jul-02	21:50	0:01	0.4	0.8	
10-Jul-02	15:21	0:13	4.6	9.2	
20-Jul-02	12:11	0:26	2.2	4.4	
20-Jul-02	15:12	0:41	6.2	11.6	14
20-Jul-02	18:48	2:35	3.4	4.8	
21-Jul-02	0:36	0:01	0.2	0.4	
21-Jul-02	5:29	0:01	0.4	0.8	
21-Jul-02	20:21	0:01	0.4	0.8	
22-Jul-02	13:54	0:01	0.4	0.8	
23-Jul-02	13:29	1:56	8.8	10.4	18
24-Jul-02	18:29	0:19	1.4	2.8	
25-Jul-02	12:39	0:31	1.0	1.2	
25-Jul-02	14:25	1:13	2.0	3.2	
25-Jul-02	17:40	0:01	0.2	0.4	
26-Jul-02	7:59	0:01	0.2	0.4	
26-Jul-02	19:03	0:04	0.4	0.8	
29-Jul-02	End summer record, Lower Flowers used as replacement				

Appendix 4. Hourglass fire, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)	
21-May-03	10:55	Start				
01-Jun-03	10:41	0:00	0.2	0.4		
02-Jun-03	17:29	0:45	3.4	6		
04-Jun-03	13:49	0:22	1.4	2.8		
04-Jun-03	15:21	1:21	3.8	4		
04-Jun-03	18:45	2:26	4.2	6.8		
05-Jun-03	4:38	0:00	0.2	0.4		
05-Jun-03	7:51	0:00	0.2	0.4		
06-Jun-03	16:13	2:15	4.0	6		
07-Jun-03	7:39	3:22	11.6	8.4	13	
09-Jun-03	16:55	0:00	0.4	0.8		
09-Jun-03	21:06	0:20	0.6	1.2		
09-Jun-03	22:45	0:00	0.2	0.4		
10-Jun-03	11:54	0:00	0.2	0.4		
10-Jun-03	18:12	0:26	3.4	6.8		
12-Jun-03	13:06	0:09	1.8	3.6		
13-Jun-03	9:57	0:00	0.2	0.4		
13-Jun-03	10:02	0:18	0.8	1.6		
13-Jun-03	12:19	1:06	2.8	4		
13-Jun-03	15:16	1:07	1.8	2.8		
13-Jun-03	21:00	0:00	0.2	0.4		
16-Jun-03	13:24	0:00	0.4	0.8		
17-Jun-03	12:18	0:13	2.0	4		
17-Jun-03	14:18	0:06	0.8	0.16		
17-Jun-03	16:52	0:00	0.2	0.4		
17-Jun-03	18:53	0:39	8.0	15.2	26	
17-Jun-03	20:30	0:00	0.4	0.8		
19-Jun-03	4:35	0:00	0.2	0.4		
19-Jun-03	11:29	2:22	10.2	13.2	26	
19-Jun-03	21:09	0:46	1.0	1.6		
20-Jun-03	13:40	0:22	2.2	4.4		
20-Jun-03	16:50	0:21	1.6	3.2		
24-Jun-03	15:59	0:00	0.2	0.4		
24-Jun-03	20:11	0:00	0.4	0.8		
25-Jun-03	1:12	0:00	0.2	0.4		
25-Jun-03	2:12	3:24	2.4	2		
29-Jun-03	15:13	0:22	3.2	6.4		
30-Jun-03	3:30	0:00	0.2	0.4		
15-Jul-03	13:00	0:02	0.4	0.8		
15-Jul-03	15:56	0:39	0.8	1.2		
16-Jul-03	13:14	End summer record, Lower Flowers used as replacement				

Appendix 4. Lower Flowers fire, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
04-Jun-02	15:42				
04-Jun-02	19:38	0:01	0.4	0.8	
04-Jun-02	20:49	0:01	0.6	1.2	
05-Jun-02	4:26	0:01	0.2	0.4	
15-Jun-02	17:05	0:19	1.2	2.4	
16-Jun-02	18:58	0:16	0.8	1.6	
20-Jun-02	18:50	0:13	1.8	3.6	
21-Jun-02	15:57	1:36	6.8	10.4	13
22-Jun-02	5:52	0:01	0.2	0.4	
25-Jun-02	15:15	0:01	0.2	0.4	
27-Jun-02	6:24	0:02	1.2	2.4	
27-Jun-02	13:05	0:55	5.2	9.2	8
28-Jun-02	12:48	0:01	0.4	0.8	
28-Jun-02	14:15	0:01	0.2	0.4	
28-Jun-02	17:24	0:01	0.2	0.4	
03-Jul-02	12:34	0:01	0.2	0.4	
04-Jul-02	12:07	2:22	26.0	25.2	138
04-Jul-02	16:23	0:01	0.2	0.4	
05-Jul-02	19:16	0:13	0.8	1.6	
06-Jul-02	4:56	0:01	1.2	2.4	
06-Jul-02	14:28	0:23	1.0	2	
06-Jul-02	16:25	0:01	0.2	0.4	
20-Jul-02	15:57	0:17	1.8	3.6	
20-Jul-02	18:00	0:01	0.2	0.4	
20-Jul-02	19:03	0:41	1.6	2.4	
20-Jul-02	21:11	0:01	0.2	0.4	
21-Jul-02	0:12	0:01	0.2	0.4	
21-Jul-02	1:06	0:17	1.0	2	
21-Jul-02	7:13	0:01	0.2	0.4	
21-Jul-02	14:34	0:07	1.0	2	
22-Jul-02	0:30	0:01	0.2	0.4	
23-Jul-02	13:58	0:01	0.4	0.8	
25-Jul-02	11:44	0:01	0.4	0.8	
25-Jul-02	12:57	0:01	0.2	0.4	
25-Jul-02	14:21	1:30	3.8	4.4	
25-Jul-02	19:35	0:01	0.2	0.4	
26-Jul-02	18:43	0:19	2.8	5.6	
27-Jul-02	9:38	0:01	0.4	0.8	
02-Aug-02	15:49	0:41	0.8	1.2	
02-Aug-02	19:58	0:48	1.0	1.6	
03-Aug-02	n/a	n/a	0.2	0.2	
03-Aug-02	13:49	0:00	0.4	0.4	
03-Aug-02	15:52	0:00	0.4	0.4	
03-Aug-02	18:21	1:32	5.8	8	7
04-Aug-02	n/a	n/a	0.2	0.2	
04-Aug-02	14:25	0:50	6.8	13.2	17
05-Aug-02	n/a	n/a	0.2	0.2	

Appendix 4. Lower Flowers fire, 2002 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I_{30} (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
05-Aug-02	14:43	0:11	0.6	4.4	
05-Aug-02	18:28	1:39	4.4	4.4	2
06-Aug-02	n/a	n/a	0.2	0.2	
06-Aug-02	11:07	1:06	2.2	2.8	
06-Aug-02	n/a	n/a	0.2	0.2	
06-Aug-02	15:40	0:07	0.6	1.2	
07-Aug-02	n/a	n/a	0.2	0.2	
07-Aug-02	13:55	0:43	3.0	4	
07-Aug-02	16:28	2:27	9.8	7.2	9
07-Aug-02	n/a	n/a	0.2	0.2	
08-Aug-02	11:18	0:03	0.2	0.8	
12-Aug-02	22:40	0:41	0.6	0.8	
13-Aug-02	n/a	n/a	0.2	0.2	
21-Aug-02	21:07	0:00	0.4	0.8	
21-Aug-02	23:01	0:00	0.4	0.8	
22-Aug-02	19:06	0:00	0.4	0.8	
23-Aug-02	n/a	n/a	0.2	0.2	
23-Aug-02	n/a	n/a	0.2	0.2	
28-Aug-02	n/a	n/a	0.2	0.2	
29-Aug-02	12:22	3:14	11.8	12.8	23
07-Sep-02	13:37	0:06	0.4	0.8	
07-Sep-02	14:45	0:54	5.8	9.2	2
08-Sep-02	18:02	0:39	1.4	2	
08-Sep-02	20:14	0:01	0.8	1.6	
19-Sep-02	6:34	0:00	0.8	1.6	
20-Sep-02	20:43	0:00	1.4	2.8	
10-Oct-02	0:08	0:00	0.4	0.8	
19-Oct-02	8:57	0:12	1.8	3.6	
19-Oct-02	10:28	0:31	3.4	6	
19-Oct-02	16:55	0:20	10.0	20	49
23-Oct-02	10:57	3:43	3.8	2	
24-Oct-02	9:16	0:47	0.6	0.8	
27-Oct-02	9:18	0:30	0.4	0.8	
30-Oct-02	11:54	0:00	0.2	0.4	
31-Oct-02	10:35	0:00	0.2	0.4	
31-Oct-02	13:18	1:45	1.8	0.6	

Appendix 4. Lower Flowers fire, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
Date	Time	duration	rain (mm)	I30 (mm/hr)	Eros metric
02-Jun-03	5:39	0:32	1.6	2.8	
03-Jun-03	4:22	0:00	0.2	0.4	
04-Jun-03	9:27	0:20	0.4	0.8	
04-Jun-03	2:14	0:10	0.4	0.8	
04-Jun-03	3:26	2:08	4.0	4.4	
04-Jun-03	6:47	1:14	4.8	6.4	
05-Jun-03	12:27	0:00	0.2	0.4	
05-Jun-03	3:49	0:00	0.2	0.4	
06-Jun-03	5:26	5:05	4.8	2.8	
07-Jun-03	7:43	3:05	4.4	2.8	
10-Jun-03	6:03	0:00	0.2	0.4	
11-Jun-03	5:31	0:00	0.2	0.4	
11-Jun-03	6:39	0:00	0.2	0.4	
12-Jun-03	2:14	0:00	0.2	0.4	
13-Jun-03	12:28	1:00	3.6	6.4	
13-Jun-03	4:26	0:00	0.2	0.4	
13-Jun-03	8:57	0:36	2.2	4	
14-Jun-03	3:58	1:00	3.0	4.8	
17-Jun-03	12:55	0:02	0.6	1.2	
17-Jun-03	6:28	2:39	3.4	4	
18-Jun-03	8:44	0:00	0.2	0.4	
18-Jun-03	9:53	0:22	0.6	1.2	
19-Jun-03	12:06	0:30	0.4	0.8	
19-Jun-03	8:16	0:00	0.2	0.4	
19-Jun-03	11:02	0:00	0.2	0.4	
20-Jun-03	12:03	0:17	0.8	1.6	
20-Jun-03	17:01	0:05	0.4	0.8	
21-Jun-03	6:29	0:05	2.8	5.6	
24-Jun-03	14:39	0:37	0.4	0.4	
24-Jun-03	19:07	0:43	0.6	0.8	
25-Jun-03	1:10	2:23	1.2	0.8	
25-Jun-03	7:22	0:02	3.2	6.4	
18-Jul-03	16:05	0:23	4.8	9.6	
18-Jul-03	17:50	0:00	0.2	0.4	
18-Jul-03	21:52	0:42	6.6	12.4	17
19-Jul-03	0:45	0:00	0.2	0.4	
19-Jul-03	1:28	0:07	0.4	0.8	
19-Jul-03	15:07	0:30	11.0	21.6	53
19-Jul-03	21:37	0:00	0.2	0.4	
19-Jul-03	22:41	0:00	0.2	0.4	
19-Jul-03	22:57	1:07	7.2	13.6	20
20-Jul-03	12:54	0:16	0.8	1.6	
20-Jul-03	15:17	0:00	0.2	0.4	
21-Jul-03	12:45	0:07	0.4	0.8	
23-Jul-03	14:29	0:11	1.4	2.8	
25-Jul-03	17:05	0:31	2.4	4.4	

Appendix 4. Lower Flowers fire, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
25-Jul-03	20:27	1:00	1.2	1.2	
25-Jul-03	22:28	0:00	0.2	0.4	
26-Jul-03	17:39	1:54	2.0	2	
26-Jul-03	23:46	0:00	0.2	0.4	
28-Jul-03	16:35	0:54	0.6	0.8	
28-Jul-03	19:11	0:00	0.2	0.4	
29-Jul-03	11:07	0:00	0.2	0.4	
29-Jul-03	12:28	0:39	1.8	3.2	
03-Aug-03	12:39	2:38	4.2	5.6	
03-Aug-03	18:02	0:34	1.2	2	
04-Aug-03	5:42	0:00	0.2	0.4	
05-Aug-03	12:40	0:03	0.4	0.8	
06-Aug-03	18:04	0:03	0.4	0.8	
08-Aug-03	15:34	0:00	0.2	0.4	
08-Aug-03	19:17	0:00	0.2	0.4	
09-Aug-03	15:31	0:15	4.4	8.8	
11-Aug-03	13:49	0:00	0.2	0.4	
17-Aug-03	9:13	0:00	0.2	0.4	
17-Aug-03	11:12	0:26	0.6	1.2	
17-Aug-03	15:52	0:00	0.2	0.4	
17-Aug-03	22:15	0:48	2.6	4.4	
18-Aug-03	12:31	1:20	4.4	6.4	
18-Aug-03	16:12	0:00	0.2	0.4	
21-Aug-03	15:32	0:00	0.2	0.4	
22-Aug-03	13:09	0:51	1.2	2	
22-Aug-03	15:30	0:51	1.0	1.6	
23-Aug-03	21:37	0:08	0.4	0.8	
24-Aug-03	13:54	0:00	0.2	0.4	
25-Aug-03	13:10	0:47	0.6	0.8	
25-Aug-03	16:46	0:00	0.2	0.4	
29-Aug-03	14:28	0:06	3.2	6.4	
29-Aug-03	17:29	0:00	0.2	0.4	
29-Aug-03	18:50	2:00	13.4	9.2	19
30-Aug-03	16:47	0:00	0.2	0.4	
30-Aug-03	18:42	0:06	0.4	0.8	
31-Aug-03	14:04	0:04	0.8	1.6	
01-Sep-03	3:15	0:00	0.2	0.4	
02-Sep-03	20:54	0:32	0.4	0.4	
03-Sep-03	15:03	0:00	0.2	0.4	
04-Sep-03	0:34	0:00	0.2	0.4	
05-Sep-03	17:20	0:25	2.8	5.6	
06-Sep-03	11:08	0:00	0.2	0.4	
06-Sep-03	12:53	0:23	0.6	1.2	
06-Sep-03	21:26	0:00	0.2	0.4	
07-Sep-03	13:46	1:51	1.4	1.6	
08-Sep-03	20:02	0:07	0.4	0.8	
08-Sep-03	21:16	0:12	0.6	1.2	

Appendix 4. Lower Flowers fire, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
12-Sep-03	22:42	0:41	0.6	0.8	
13-Sep-03	10:06	0:43	0.4	0.4	
17-Sep-03	15:41	0:42	0.4	0.4	
17-Sep-03	17:32	1:41	2.6	2.8	
17-Sep-03	20:47	0:00	0.2	0.4	
18-Sep-03	8:48	1:30	3.0	4	
02-Oct-03	15:45	3:27	4.4	2.8	
03-Oct-03	4:31	0:00	0.2	0.4	
10-Oct-03	20:09	0:09	0.4	0.8	
13-Oct-03	9:23	0:30	1.4	2.8	
13-Oct-03	10:04	0:00	0.2	0.4	
13-Oct-03	14:00	0:00	0.2	0.4	
26-Oct-03	12:45	End			

Appendix 4. Schoonover fire, 2002.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
22-Jul-02	6:12	Start			
29-Jul-02	6:47	0:23	1.5	3.0	
03-Aug-02	2:50	0:10	1.0	2.0	
03-Aug-02	7:16	3:11	5.6	5.6	4
03-Aug-02	11:33	0:00	0.3	0.5	
05-Aug-02	12:09	0:00	0.3	0.5	
06-Aug-02	4:37	0:51	2.8	5.1	
07-Aug-02	4:15	0:30	1.0	2.0	
07-Aug-02	7:06	0:12	0.8	1.5	
08-Aug-02	6:19	0:00	0.5	1.0	
19-Aug-02	4:49	0:00	0.5	1.0	
21-Aug-02	4:08	0:54	9.1	17.8	36
27-Aug-02	3:38	0:48	2.5	3.6	
28-Aug-02	8:39	0:00	0.3	0.5	
28-Aug-02	12:23	0:44	0.8	1.5	
09-Sep-02	3:00	0:00	0.3	0.5	
09-Sep-02	3:11	0:51	1.8	3.6	
09-Sep-02	6:12	1:50	2.5	2.5	
09-Sep-02	11:07	0:51	2.3	3.0	
10-Sep-02	12:07	4:46	5.1	2.5	1
10-Sep-02	5:55	2:03	2.8	2.0	
12-Sep-02	3:56	0:35	2.5	4.6	
12-Sep-02	5:44	0:00	0.3	0.5	
13-Sep-02	2:19	0:00	0.3	0.5	
18-Sep-02	5:42	4:02	5.8	3.0	2
19-Sep-02	12:44	0:00	0.3	0.5	
26-Sep-02	4:15	0:58	1.8	3.6	
26-Sep-02	10:49	0:27	1.5	3.0	
27-Sep-02	14:27	0:01	1.0	2.0	
28-Sep-02	21:15	0:00	0.3	0.5	
01-Oct-02	18:25	6:00	14.7	5.6	10
03-Oct-02	2:45	0:12	0.8	1.5	
03-Oct-02	10:09	0:00	0.3	0.5	
24-Oct-02	9:58	1:23	4.3	2.3	
26-Oct-02	20:19	2:22	5.8	5.6	4
27-Oct-02	1:35	1:59	1.5	1.0	
27-Oct-02	4:06	0:36	0.5	0.5	
27-Oct-02	7:56	1:21	1.5	1.0	
31-Oct-02	End				

Appendix 4. Schoonover fire, 2003.

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
01-Jun-03	6:38	0:00	0.3	0.5	
01-Jun-03	10:26	0:41	1.3	2.0	
04-Jun-03	20:51	0:44	3.6	5.1	
04-Jun-03	22:36	0:00	0.5	1.0	
05-Jun-03	2:00	1:07	1.0	1.5	
05-Jun-03	4:17	5:59	7.1	3.0	3
05-Jun-03	14:46	0:02	0.5	1.0	
06-Jun-03	12:23	0:45	1.0	1.0	
06-Jun-03	20:11	1:53	4.1	3.6	
06-Jun-03	23:09	2:53	6.4	5.1	4
09-Jun-03	14:26	0:01	1.0	2.0	
09-Jun-03	17:49	0:08	1.8	3.6	
10-Jun-03	15:27	0:01	0.5	1.0	
10-Jun-03	17:11	0:27	2.5	5.1	
18-Jun-03	16:23	0:00	0.5	1.0	
19-Jun-03	13:18	0:55	12.2	22.9	64
20-Jun-03	15:13	0:03	1.3	2.5	
25-Jun-03	22:20	2:32	3.3	2.5	
30-Jun-03	10:15	0:03	1.5	3.0	
19-Jul-03	6:15	1:25	9.1	13.7	22
23-Jul-03	3:43	1:45	5.1	8.1	
27-Jul-03	5:28	0:00	0.3	0.5	
29-Jul-03	4:23	0:30	1.3	2.5	
01-Aug-03	17:38	0:15	8.6	17.3	40
02-Aug-03	20:39	0:10	0.5	0.5	
03-Aug-03	13:31	1:15	4.8	8.6	9
07-Aug-03	13:59	0:53	3.0	5.1	
11-Aug-03	17:49	1:38	7.1	13.2	22
18-Aug-03	13:00	0:17	5.6	11.2	15
18-Aug-03	14:20	0:10	0.8	1.5	
18-Aug-03	17:59	1:05	1.5	2.0	
22-Aug-03	17:39	0:00	0.3	0.5	
22-Aug-03	19:00	0:00	0.3	0.5	
23-Aug-03	17:38	0:07	0.8	1.5	
25-Aug-03	0:01	0:00	0.3	0.5	
28-Aug-03	4:59	0:52	0.5	1.0	
29-Aug-03	16:46	1:03	4.1	7.6	
30-Aug-03	1:01	3:45	11.7	12.7	24
30-Aug-03	16:11	0:10	2.0	4.1	
30-Aug-03	20:37	1:06	12.2	16.3	38
31-Aug-03	5:35	0:00	0.5	1.0	
02-Sep-03	19:43	0:06	1.3	2.5	
03-Sep-03	16:02	0:11	0.5	1.0	
07-Sep-03	11:55	2:33	2.3	2.0	
09-Sep-03	7:55	0:00	0.3	0.5	
13-Sep-03	9:45	0:58	0.8	1.0	
13-Sep-03	14:00	0:00	0.5	1.0	

Appendix 4. Schoonover fire, 2003 (continued).

Date	Start Time (hr:min)	Duration (hr:min)	Rainfall (mm)	Maximum I₃₀ (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha⁻¹ hr⁻¹)
13-Sep-03	15:28	0:00	0.3	0.5	
03-Oct-03	5:17	0:17	0.8	1.5	
25-Oct-03	10:33	0:38	1.3	2.0	
15-Nov-03		End			

Appendix 5. Event-based rainfall and sediment yields, Hayman
and Schoonover fires.

Appendix 5. Event-based rainfall and sediment production values, Hayman fire.

Date	Site	Rainfall characteristics			Sediment Production		Notes	
		Total Rainfall (mm)	Maximum 30-minute intensity (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)	Total sediment (kg)	Sediment per unit area (kg m ⁻²)		
21-Jul-02	USG8	10.9	21.8	62	6945	0.76	All sites were untreated during the first event in the Hayman fire.	
21-Jul-02	USG9	10.9	21.8	62	4341	0.42		
21-Jul-02	USG12	10.9	21.8	62	991	0.41		
21-Jul-02	USG13	10.9	21.8	62	1293	0.59		
21-Jul-02	USG14	10.9	21.8	62	1888	0.75		
21-Jul-02	USG15	10.9	21.8	62	900	0.35		
21-Jul-02	USG16	10.9	21.8	62	1502	0.58		
21-Jul-02	USG17	10.9	21.8	62	1043	0.55		
21-Jul-02	USG18	10.9	21.8	62	1811	1.06		
21-Jul-02	USG19	10.9	21.8	62	1017	1.08		
21-Jul-02	USG20	10.9	21.8	62	3616	0.76		
21-Jul-02	USG21	10.9	21.8	62	3733	0.77		
21-Jul-02	USG22	10.9	21.8	62	3083	0.74		
21-Jul-02	USG23	10.9	21.8	62	5007	0.99		
21-Jul-02	USG24	10.9	21.8	62	885	0.86		
21-Jul-02	USG25	10.9	21.8	62	629	0.91		
21-Jul-02	USG26	10.9	21.8	62	2164	0.33		
21-Jul-02	USG27	10.9	21.8	62	2656	0.40		
21-Jul-02	USG28	10.9	21.8	62	1551	0.82		
21-Jul-02	USG29	10.9	21.8	62	1284	0.54		
	Mean*	10.9	21.8	62	2317	0.68		
	Standard deviation	--	--	--	1669	0.23		
30-Aug-02	USG9	4.1	8.1	6	0	0.00		Hydromulched, 2003
30-Aug-02	USG12	4.1	8.1	6	99	0.04		
30-Aug-02	USG13	4.1	8.1	6	42	0.02		
30-Aug-02	USG14	4.1	8.1	6	121	0.05		
30-Aug-02	USG15	4.1	8.1	6	0	0.00		
30-Aug-02	USG16	4.1	8.1	6	14	0.01		
30-Aug-02	USG17	4.1	8.1	6	124	0.07		
30-Aug-02	USG18	4.1	8.1	6	0	0.00		
30-Aug-02	USG21	4.1	8.1	6	104	0.02		
30-Aug-02	USG22	4.1	8.1	6	0	0.00		
30-Aug-02	USG24	4.1	8.1	6	14	0.01		
30-Aug-02	USG26	4.1	8.1	6	28	0.00		
30-Aug-02	USG29	4.1	8.1	6	0	0.00		
	Mean*	5.3	10.7	16	433	0.15		
	Standard deviation	--	--	--	753	0.27		
10-Jun-03	usg4	6.9	13.7	25	4	0.00		
10-Jun-03	usg12	8.2	11.6	28	101	0.04		
10-Jun-03	usg17	8.2	11.6	28	562	0.30		
10-Jun-03	usg18	7.4	13.2	19	456	0.27		
10-Jun-03	usg20	7.4	13.2	19	795	0.17		
10-Jun-03	usg22	7.4	13.2	19	381	0.09		
10-Jun-03	usg24	7.4	13.2	19	260	0.25		
10-Jun-03	usg26	6.9	13.7	25	15	0.00		
10-Jun-03	usg29	6.9	13.7	25	26	0.01		
10-Jun-03	usg30	6.9	13.7	25	4	0.00		
10-Jun-03	usg33	6.9	13.7	25	174	0.07		
10-Jun-03	ESG1	8.2	11.6	28	90	0.25		
10-Jun-03	ESG2	8.2	11.6	28	43	0.06		
10-Jun-03	ESG3	8.2	11.6	28	29	0.05		
10-Jun-03	MSG1	7.4	13.2	19	14	0.03		
10-Jun-03	MSG2	7.4	13.2	19	50	0.19		
10-Jun-03	MSG3	7.4	13.2	19	92	0.36		
10-Jun-03	MSG4	7.4	13.2	19	10	0.04		
10-Jun-03	MSG5	7.4	13.2	19	33	0.31		
10-Jun-03	MSG6	7.4	13.2	19	91	0.31		
10-Jun-03	PSG1	7.4	13.2	19	3	0.07		
10-Jun-03	PSG2	7.4	13.2	19	19	0.27		
10-Jun-03	PSG3	7.4	13.2	19	15	0.13		
10-Jun-03	BC1	8.4	16.8	32	1	0.04		
10-Jun-03	BC2	8.4	16.8	32	1	0.02		
10-Jun-03	BC3	8.4	16.8	32	2	0.02		
10-Jun-03	BC4	8.4	16.8	32	1	0.01		
10-Jun-03	BC5	8.4	16.8	32	2	0.01		
10-Jun-03	NBC1	8.4	16.8	32	1	0.02		
10-Jun-03	NBC2	8.4	16.8	32	1	0.01		
10-Jun-03	NBC3	8.4	16.8	32	1	0.01		
	Mean*	7.7	13.9	25	106	0.11		
	Standard deviation	0.6	1.8	6	191	0.12		

Appendix 5. Event-based rainfall and sediment production values, Hayman fire (continued).

Date	Site	Rainfall characteristics			Sediment Production		Notes
		Total Rainfall (mm)	Maximum 30-minute intensity (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)	Total sediment (kg)	Sediment per unit area (kg m ⁻²)	
25-Jun-03	usg26	8.4	13.2	20	413	0.06	
25-Jun-03	usg29	8.4	13.2	20	444	0.19	
25-Jun-03	usg30	8.4	13.2	20	103	0.03	
	Mean*	8.4	13.2	20	320	0.10	
	Standard deviation	--	--	--	188	0.08	
20-Jul-03	usg4	8.6	11.2	17	1	0.00	
20-Jul-03	usg12	10.0	17.6	35	177	0.07	
20-Jul-03	usg17	10.0	17.6	35	138	0.07	
20-Jul-03	usg18	10.0	16.4	31	163	0.09	
20-Jul-03	usg20	10.0	16.4	31	374	0.08	
20-Jul-03	usg22	10.0	16.4	31	194	0.05	
20-Jul-03	usg24	10.0	16.4	31	108	0.11	
20-Jul-03	usg26	8.6	11.2	17	44	0.01	
20-Jul-03	usg29	8.6	11.2	17	53	0.02	
20-Jul-03	usg30	8.6	11.2	17	27	0.01	
20-Jul-03	usg33	10.0	16.4	31	44	0.02	
20-Jul-03	ESG1	10.0	17.6	35	50	0.14	
20-Jul-03	ESG2	10.0	17.6	35	57	0.08	
20-Jul-03	ESG3	10.0	17.6	35	13	0.02	
20-Jul-03	MSG1	10.0	16.4	31	46	0.10	
20-Jul-03	MSG2	10.0	16.4	31	28	0.11	
20-Jul-03	MSG3	10.0	16.4	31	25	0.10	
20-Jul-03	MSG4	10.0	16.4	31	7	0.03	
20-Jul-03	MSG5	10.0	16.4	31	5	0.04	
20-Jul-03	MSG6	10.0	16.4	31	7	0.02	
20-Jul-03	PSG1	10.0	16.4	31	1	0.02	
20-Jul-03	PSG2	10.0	16.4	31	1	0.01	
20-Jul-03	PSG3	10.0	16.4	31	2	0.02	
20-Jul-03	BC1	12.7	18.8	50	0	0.00	
20-Jul-03	BC2	12.7	18.8	50	1	0.01	
20-Jul-03	BC3	12.7	18.8	50	1	0.01	
20-Jul-03	BC4	12.7	18.8	50	1	0.00	
20-Jul-03	BC5	12.7	18.8	50	1	0.00	
20-Jul-03	NBC1	12.7	18.8	50	1	0.02	
20-Jul-03	NBC2	12.7	18.8	50	1	0.01	
20-Jul-03	NBC3	12.7	18.8	50	1	0.00	
	Mean*	10.5	16.5	35	51	0.04	
	Standard deviation	1.4	2.3	10	82	0.04	
12-Aug-03	usg4	12.7	13.7	48	1214	0.69	
12-Aug-03	usg12	23.8	40.8	240	2455	1.01	
12-Aug-03	usg17	23.8	40.8	240	2519	1.33	
12-Aug-03	usg18	20.2	33.6	160	764	0.45	
12-Aug-03	usg20	20.2	33.6	160	2214	0.47	
12-Aug-03	usg22	20.2	33.6	160	6372	1.52	
12-Aug-03	usg24	20.2	33.6	160	610	0.60	
12-Aug-03	usg26	12.7	13.7	48	468	0.07	
12-Aug-03	usg29	12.7	13.7	48	818	0.35	
12-Aug-03	usg30	12.7	13.7	48	130	0.04	
12-Aug-03	usg33	20.2	33.6	160	1917	0.79	
12-Aug-03	ESG1	23.8	40.8	240	468	1.32	
12-Aug-03	ESG2	23.8	40.8	240	867	1.23	
12-Aug-03	ESG3	23.8	40.8	240	488	0.79	
12-Aug-03	MSG1	20.2	33.6	160	212	0.46	
12-Aug-03	MSG2	20.2	33.6	160	250	0.95	
12-Aug-03	MSG3	20.2	33.6	160	390	1.53	
12-Aug-03	MSG4	20.2	33.6	160	44	0.16	
12-Aug-03	MSG5	20.2	33.6	160	106	0.98	
12-Aug-03	MSG6	20.2	33.6	160	409	1.39	
12-Aug-03	PSG1	20.2	33.6	160	3	0.09	
12-Aug-03	PSG2	20.2	33.6	160	20	0.28	
12-Aug-03	PSG3	20.2	33.6	160	18	0.15	
12-Aug-03	BC1	11.7	17.3	38	1	0.01	
12-Aug-03	BC2	11.7	17.3	38	1	0.01	
12-Aug-03	BC3	11.7	17.3	38	1	0.01	
12-Aug-03	BC4	11.7	17.3	38	0	0.00	
12-Aug-03	BC5	11.7	17.3	38	1	0.00	
12-Aug-03	NBC1	11.7	17.3	38	1	0.02	
12-Aug-03	NBC2	11.7	17.3	38	1	0.01	
12-Aug-03	NBC3	11.7	17.3	38	1	0.00	
	Mean*	17.6	28.0	127	734	0.54	
	Standard deviation	4.7	10.0	75	1289	0.53	

Appendix 5. Event-based rainfall and sediment production values, Hayman fire (continued).

Date	Site	Rainfall characteristics			Sediment Production		Notes
		Total Rainfall (mm)	Maximum 30- minute intensity (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)	Total sediment (kg)	Sediment per unit area (kg m ⁻²)	
6-Sep-03	usg4	8.6	11.2	17	749	0.43	
6-Sep-03	usg12	10.0	17.6	35	362	0.15	
6-Sep-03	usg17	10.0	17.6	35	670	0.35	
6-Sep-03	usg18	10.0	16.4	31	443	0.26	
6-Sep-03	usg20	10.0	16.4	31	1890	0.40	
6-Sep-03	usg22	10.0	16.4	31	1354	0.32	
6-Sep-03	usg24	10.0	16.4	31	375	0.37	
6-Sep-03	usg26	8.6	11.2	17	1518	0.23	
6-Sep-03	usg29	8.6	11.2	17	1148	0.49	
6-Sep-03	usg30	8.6	11.2	17	512	0.17	
6-Sep-03	usg33	10.0	16.4	31	445	0.18	
6-Sep-03	ESG1	10.0	17.6	35	77	0.22	
6-Sep-03	ESG2	10.0	17.6	35	139	0.20	
6-Sep-03	ESG3	10.0	17.6	35	90	0.15	
6-Sep-03	MSG1	10.0	16.4	31	129	0.28	
6-Sep-03	MSG2	10.0	16.4	31	132	0.51	
6-Sep-03	MSG3	10.0	16.4	31	150	0.58	
6-Sep-03	MSG4	10.0	16.4	31	45	0.17	
6-Sep-03	MSG5	10.0	16.4	31	42	0.39	
6-Sep-03	MSG6	10.0	16.4	31	125	0.42	
6-Sep-03	PSG1	10.0	16.4	31	3	0.08	
6-Sep-03	PSG2	10.0	16.4	31	40	0.55	
6-Sep-03	PSG3	10.0	16.4	31	78	0.64	
6-Sep-03	BC1	12.7	18.8	50	0	0.00	
6-Sep-03	BC2	12.7	18.8	50	0	0.00	
6-Sep-03	BC3	12.7	18.8	50	0	0.00	
6-Sep-03	BC4	12.7	18.8	50	0	0.00	
6-Sep-03	BC5	12.7	18.8	50	0	0.00	
6-Sep-03	NBC1	12.7	18.8	50	0	0.00	
6-Sep-03	NBC2	12.7	18.8	50	0	0.00	
6-Sep-03	NBC3	12.7	18.8	50	0	0.00	
	Mean*	10.5	16.5	35	339	0.24	
	Standard deviation	1.4	2.3	10	501	0.20	

Appendix 5. Event-based rainfall and sediment production values, Schoonover fire.

Date	Site	Rainfall characteristics			Sediment Production		Notes
		Total Rainfall (mm)	Maximum 30-minute intensity (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)	Total sediment (kg)	Sediment per unit area (kg m ⁻²)	
21-Aug-02	sch1	9.1	17.8	36	395	0.16	
21-Aug-02	sch2	9.1	17.8	36	205	0.17	
21-Aug-02	sch3	9.1	17.8	36	286	0.12	
21-Aug-02	sch4	9.1	17.8	36	1032	0.36	
21-Aug-02	sch5	9.1	17.8	36	391	0.27	
21-Aug-02	sch6	9.1	17.8	36	392	0.31	
	Mean*	9.1	17.8	36	450	0.23	
	Standard deviation	--	--	--	295	0.10	
10-Sep-02	sch1	14.7	5.6	11	5	0.002	
10-Sep-02	sch2	14.7	5.6	11	10	0.008	
10-Sep-02	sch3	14.7	5.6	11	7	0.003	
10-Sep-02	sch4	14.7	5.6	11	91	0.03	
10-Sep-02	sch5	14.7	5.6	11	15	0.01	
10-Sep-02	sch6	14.7	5.6	11	9	0.007	
	Mean*	14.7	5.6	11	23	0.01	
	Standard deviation	--	--	--	34	0.01	
14-Jun-03	sch1	13.5	4.1	7	1	0.0002	
14-Jun-03	sch2	13.5	4.1	7	1	0.0006	
14-Jun-03	sch3	13.5	4.1	7	1	0.0003	
14-Jun-03	sch4	13.5	4.1	7	0	0	
14-Jun-03	sch5	13.5	4.1	7	2	0.001	
14-Jun-03	sch6	13.5	4.1	7	2	0.001	
	Mean*	13.5	4.1	7	1	0.0006	
	Standard deviation	--	--	--	1	0.0005	
24-Jun-03	sch1	12.2	22.9	64	916	0.37	
24-Jun-03	sch2	12.2	22.9	64	338	0.28	
24-Jun-03	sch3	12.2	22.9	64	257	0.11	
24-Jun-03	sch4	12.2	22.9	64	777	0.27	
24-Jun-03	sch5	12.2	22.9	64	299	0.20	
24-Jun-03	sch6	12.2	22.9	64	549	0.43	
	Mean*	12.2	22.9	64	523	0.28	
	Standard deviation	--	--	--	274	0.11	
2-Aug-03	sch1	8.6	17.3	40	1004	0.41	
2-Aug-03	sch2	8.6	17.3	40	2055	1.73	
2-Aug-03	sch3	8.6	17.3	40	1331	0.56	
2-Aug-03	sch4	8.6	17.3	40	2452	0.87	
2-Aug-03	sch5	8.6	17.3	40	1540	1.05	
2-Aug-03	sch6	8.6	17.3	40	929	0.72	
	Mean*	8.6	17.3	40	1552	0.89	
	Standard deviation	--	--	--	600	0.47	
5-Aug-03	sch1	4.8	8.6	9	24	0.01	
5-Aug-03	sch2	4.8	8.6	9	37	0.03	
5-Aug-03	sch3	4.8	8.6	9	12	0.01	
5-Aug-03	sch4	4.8	8.6	9	61	0.02	
5-Aug-03	sch5	4.8	8.6	9	48	0.03	
5-Aug-03	sch6	4.8	8.6	9	12	0.01	
	Mean*	4.8	8.6	9	32	0.02	
	Standard deviation	--	--	--	20	0.01	
15-Aug-03	sch1	7.1	13.2	22	334	0.14	
15-Aug-03	sch2	7.1	13.2	22	471	0.40	
15-Aug-03	sch3	7.1	13.2	22	322	0.14	
15-Aug-03	sch4	7.1	13.2	22	847	0.30	
15-Aug-03	sch5	7.1	13.2	22	418	0.28	
15-Aug-03	sch6	7.1	13.2	22	65	0.05	
	Mean*	7.1	13.2	22	410	0.22	
	Standard deviation	--	--	--	256	0.13	

Appendix 5. Event-based rainfall and sediment production values, Schoonover fire (continued).

Date	Site	Rainfall characteristics			Sediment Production		Notes
		Total Rainfall (mm)	Maximum 30- minute intensity (mm hr ⁻¹)	Rainfall Erosivity (MJ mm ha ⁻¹ hr ⁻¹)	Total sediment (kg)	Sediment per unit area (kg m ⁻²)	
20-Aug-03	sch1	5.6	11.2	15	791	0.32	
20-Aug-03	sch2	5.6	11.2	15	275	0.23	
20-Aug-03	sch3	5.6	11.2	15	128	0.05	
20-Aug-03	sch4	5.6	11.2	15	52	0.02	
20-Aug-03	sch5	5.6	11.2	15	242	0.16	
20-Aug-03	sch6	5.6	11.2	15	350	0.27	
	Mean*	5.6	11.2	15	306	0.18	
	Standard deviation	--	--	--	260	0.12	
9-Sep-03	sch1	23.9	14.5	62	603	0.24	
9-Sep-03	sch2	23.9	14.5	62	252	0.21	
9-Sep-03	sch3	23.9	14.5	62	173	0.07	
9-Sep-03	sch4	23.9	14.5	62	738	0.26	
9-Sep-03	sch5	23.9	14.5	62	325	0.22	
9-Sep-03	sch6	23.9	14.5	62	389	0.30	
	Mean*	23.9	14.5	62	413	0.22	
	Standard deviation	--	--	--	216	0.08	

*Means are plot averages

Appendix 6. Rill incision, estimated eroded volume, and calculated mass of rill erosion for individual storm events, Hayman and Schoonover fires. Negative values indicate deposition.

Appendix 6. Rill incision, estimated eroded volume, and calculated mass of rill erosion for individual storm events, Hayman fire. Negative values indicate deposition.

USG12		22-Sep-02	22-May-03	14-Jun-03	20-Jul-03	19-Aug-03	14-Sep-03	16-Jun-04	27-Jul-04	17-Sep-04	
	Incision (m ²)	-0.035	-0.0055	0.0054	0.0076	0.093	0.0058	0.029	0.010	0.020	
	Estimated eroded volume (m ³)	-0.39	-0.046	0.066	0.10	1.07	0.079	0.38	0.12	0.26	
	Estimated sediment (kg)*	-563	-66	94	143	1528	113	538	177	373	
USG17		22-Sep-02	22-May-03	14-Jun-03	22-Jul-03	19-Aug-03	14-Sep-03	16-Jun-04	28-Jun-04	28-Jun-04	08-Sep-04
	Incision (m ²)	0.018	0.0030	0.045	0.019	0.17	0.036	0.095	0.021	0.097	0.034
	Estimated eroded volume (m ³)	0.25	-0.062	0.48	0.13	1.04	0.21	0.61	0.13	0.72	0.22
	Estimated sediment (kg)*	352	-89	685	183	1484	303	869	182	1024	315
USG18		22-Sep-02	23-May-03	14-Jun-03	21-Jul-03	19-Aug-03	13-Sep-03	16-Jun-04	28-Jun-04	26-Jul-04	08-Sep-04
	Incision (m ²)	0.011	-0.017	0.038	0.024	0.06	0.024	0.095	0.013	0.047	0.028
	Estimated eroded volume (m ³)	0.14	-0.22	0.61	0.27	0.64	0.28	0.98	0.21	0.46	0.41
	Estimated sediment (kg)*	194	-318	877	390	909	404	1393	294	662	589
USG20		22-Sep-02	23-May-03	14-Jun-03	21-Jul-03	19-Aug-03	13-Sep-03	14-Jun-04	28-Jun-04	26-Jul-04	18-Sep-04
	Incision (m ²)	0.039	-0.011	0.027	0.023	0.08	0.039	0.012	0.011	0.025	0.046
	Estimated eroded volume (m ³)	0.80	-0.19	0.56	0.38	1.13	0.77	0.36	0.43	0.31	0.85
	Estimated sediment (kg)*	1141	-269	799	543	1617	1093	511	618	449	1209
USG24		22-Sep-02	23-May-03	14-Jun-03	21-Jul-03	19-Aug-03	13-Sep-03	16-Jun-04	28-Jun-04	26-Jul-04	18-Sep-04
	Incision (m ²)	0.018	0.0030	0.045	0.019	0.17	0.036	0.095	0.021	0.097	0.034
	Estimated eroded volume (m ³)	0.25	-0.062	0.48	0.13	1.04	0.21	0.61	0.13	0.72	0.22
	Estimated sediment (kg)*	352	-89	685	183	1484	303	869	182	1024	315
USG26		22-Sep-02	28-May-03	14-Jun-03	26-Jun-03	18-Aug-03	14-Sep-03	16-Jun-04			
	Incision (m ²)	-0.010	-0.0082	0.012	0.017	0.019	0.037	0.042			
	Estimated eroded volume (m ³)	-0.15	-0.18	0.30	0.43	0.45	0.90	0.96			
	Estimated sediment (kg)*	-216	-260	424	615	637	1292	1366			
ESG1		22-Jul-03	19-Aug-03	14-Sep-03	16-Jun-04	28-Jun-04	17-Sep-04				
	Incision (m ²)	0.0041	0.046	0.0018	0.019	-0.0019	0.033				
	Estimated eroded volume (m ³)	0.031	0.221	0.0093	0.10	0.035	0.14				
	Estimated sediment (kg)*	44	316	13	141	-3	199				
ESG2		22-Jul-03	19-Aug-03	14-Sep-03	16-Jun-04	28-Jun-04	17-Sep-04				
	Incision (m ²)	0.018	0.071	0.0045	0.013	0.0032	0.023				
	Estimated eroded volume (m ³)	0.10	0.38	0.027	0.076	0.0085	0.13				
	Estimated sediment (kg)*	147	545	39	108	12	186				
MSG1		22-Jul-03	21-Aug-03	13-Sep-03	16-Jun-04	28-Jun-04	26-Jul-04	08-Sep-04			
	Incision (m ²)	-0.0010	0.027	0.0082	0.028	0.023	0.0063	0.024			
	Estimated eroded volume (m ³)	-0.0018	0.14	0.058	0.14	0.14	0.038	0.13			
	Estimated sediment (kg)*	-3	194	82	204	200	55	180			
MSG2		22-Jul-03	21-Aug-03	13-Sep-03	16-Jun-04	28-Jun-04	26-Jul-04	08-Sep-04			
	Incision (m ²)	0.0054	0.014	0.012	0.015	0.0065	0.010	0.017			
	Estimated eroded volume (m ³)	0.029	0.085	0.068	0.10	0.043	0.056	0.10			
	Estimated sediment (kg)*	42	122	97	145	62	80	138			
MSG3		22-Jul-03	21-Aug-03	13-Sep-03	16-Jun-04	28-Jun-04	26-Jul-04	08-Sep-04			
	Incision (m ²)	0.0086	0.022	0.0026	0.012	0.021	0.011	0.012			
	Estimated eroded volume (m ³)	0.060	0.18	0.027	0.092	0.15	0.084	0.077			
	Estimated sediment (kg)*	85	250	39	131	211	121	110			

*Estimated sediment was calculated using the mean sil bulk density of 1.43 g cm⁻³, as measured in the Hayman fire

Appendix 6. Rill incision, estimated eroded volume, and calculated mass of rill erosion for individual storm events, Schoonover fire. Negative values indicate deposition.

	15-Aug-02	23-Aug-02	16-Nov-02	28-May-03	27-Jun-03	04-Aug-03	21-Aug-03	14-Sep-03	30-Jun-04	29-Jul-04
SCH1										
Incision (m ³)	-0.0033	0.043	-0.037	0.022	0.040	0.027	0.013	0.0082	0.0783	0.0057
Estimated eroded volume (m ³)	-0.037	0.53	-0.48	0.29	0.41	0.35	0.15	0.12	0.92	0.059
Estimated sediment (kg)*	-52	740	-672	399	575	493	212	168	1280	82
SCH4										
Incision (m ³)	-0.0082	0.053	0.0077	-0.0035	0.047	0.12	0.040	0.048	0.23	0.035
Estimated eroded volume (m ³)	-0.17	0.98	0.17	-0.093	0.57	1.08	0.43	0.41	2.02	0.32
Estimated sediment (kg)*	-243	1371	241	-130	793	1505	604	577	2812	440
SCH6										
Incision (m ³)	-0.0076	0.032	-0.0070	0.0068	0.027	0.048	0.011	0.024	0.054	0.019
Estimated eroded volume (m ³)	-0.058	0.28	-0.050	0.068	0.26	0.50	0.080	0.21	0.48	0.15
Estimated sediment (kg)*	-81	385	-70	95	363	697	111	297	665	215

*Estimated sediment was calculated using the mean sil bulk density of 1.39 g cm⁻³, as measured in the Schoonover fire

Appendix 7. Correlation matrix of all dependent and independent variables used in the regression models in Chapter 2. Values given are correlation coefficients.

Appendix 7. Correlation matrix of all dependent and independent variables used in the regression models in Chapter 2. Values given are correlation coefficients (r).

	Fire	Year	Fire Severity	Contributing area (m2)	Sediment (kg)	Unit-area Sediment (kg m-2)	Bare Soil (%)
Fire	1	0.17055	-0.0573	0.03068	0.30118	0.20746	0.31137
Year	0.17055	1	-0.14359	0.1185	0.23799	0.21708	-0.02928
Fire Severity	-0.0573	-0.14359	1	-0.11792	-0.2469	-0.29542	-0.43998
Contributing area (m2)	0.03068	0.1185	-0.11792	1	0.33439	-0.02005	0.0808
Sediment (kg)	0.30118	0.23799	-0.2469	0.33439	1	0.68557	0.53146
Unit-area Sediment (kg m-2)	0.20746	0.21708	-0.29542	-0.02005	0.68557	1	0.59161
Bare Soil (%)	0.31137	-0.02928	-0.43998	0.0808	0.53146	0.59161	1
Rainfall (mm)	-0.12549	-0.23398	0.1638	-0.10931	-0.13581	-0.08884	-0.17442
Maximum I30 (mm hr-1)	-0.06962	0.07787	0.04369	-0.10022	0.05431	0.20605	-0.05135
Rainfall Erosivity (MJ mm ha-1 yr-1)	-0.02357	0.00786	0.07023	-0.09897	0.05898	0.18644	-0.03065
Time Since Burning (yr)	-0.02945	0.16049	0.07781	-0.02028	-0.31084	-0.34394	-0.6418
Hillslope Position	-0.20226	-0.25134	0.2853	-0.44648	-0.35035	-0.28158	-0.22872
Aspect (°)	0.00851	-0.03972	-0.01445	-0.19526	-0.03365	0.16305	0.04219
Slope (%)	-0.12967	0.01395	-0.06336	-0.27399	-0.1436	-0.07622	-0.01191
D84	0.55063	0.11343	-0.22641	0.13491	0.15538	0.10106	0.13637
D50	0.66006	0.3966	-0.33055	0.15817	0.55456	0.52933	0.68486
D16	0.65871	0.39618	-0.30826	0.16239	0.5693	0.53725	0.70758
Rock cover (%)	0.7736	0.29171	-0.27408	0.07828	0.48089	0.5143	0.60202
Slope Length (m)	0.00628	0.09214	-0.14741	0.80142	0.2543	-0.04084	0.02197
Horizontal Length (m)	0.01608	0.08984	-0.14051	0.81039	0.26132	-0.03445	0.02466

Appendix 7 (continued). Correlation matrix of all dependent and independent variables used in the regression models in Chapter 2. Values given are correlation coefficients (r).

	Rainfall (mm)	Maximum I30 (mm hr-1)	Rainfall Erosivity (MJ mm ha-1 yr-1)	Time Since Burning (yr)	Hillslope Position	Aspect (°)	Slope (%)
Fire	-0.12549	-0.06962	-0.02357	-0.02945	-0.20226	0.00851	-0.12967
Year	-0.23398	0.07787	0.00786	0.16049	-0.25134	-0.03972	0.01395
Fire Severity	0.1638	0.04369	0.07023	0.07781	0.2853	-0.01445	-0.06336
Contributing area (m2)	-0.10931	-0.10022	-0.09897	-0.02028	-0.44648	-0.19526	-0.27399
Sediment (kg)	-0.13581	0.05431	0.05898	-0.31084	-0.35035	-0.03365	-0.1436
Unit-area Sediment (kg m-2)	-0.08884	0.20605	0.18644	-0.34394	-0.28158	0.16305	-0.07622
Bare Soil (%)	-0.17442	-0.05135	-0.03065	-0.6418	-0.22872	0.04219	-0.01191
Rainfall (mm)	1	0.48863	0.59972	0.06332	0.22787	-0.10171	-0.1013
Maximum I30 (mm hr-1)	0.48863	1	0.9149	-0.02586	0.06597	0.05931	-0.08605
Rainfall Erosivity (MJ mm ha-1 yr-1)	0.59972	0.9149	1	-0.10232	0.11371	-0.00558	-0.07545
Time Since Burning (yr)	0.06332	-0.02586	-0.10232	1	-0.0829	-0.00263	-0.05601
Hillslope Position	0.22787	0.06597	0.11371	-0.0829	1	-0.11225	0.05099
Aspect (°)	-0.10171	0.05931	-0.00558	-0.00263	-0.11225	1	0.24848
Slope (%)	-0.1013	-0.08605	-0.07545	-0.05601	0.05099	0.24848	1
D84	-0.10539	-0.08817	-0.08927	0.18922	-0.28911	0.18374	0.09045
D50	-0.32296	-0.06868	-0.07084	-0.33743	-0.46668	0.09926	0.03531
D16	-0.30474	-0.04822	-0.04959	-0.37817	-0.43654	0.05358	-0.01573
Rock cover (%)	-0.26759	-0.03722	-0.05074	-0.16748	-0.42238	0.16246	0.07284
Slope Length (m)	-0.07581	-0.06569	-0.07466	0.08529	-0.48624	-0.28302	-0.18459
Horizontal Length (m)	-0.06646	-0.0576	-0.06743	0.08761	-0.47924	-0.29619	-0.24456

Appendix 7 (continued). Correlation matrix of all dependent and independent variables used in the regression models in Chapter 2. Values given are correlation coefficients (r).

	D84	D50	D16	Rock cover (%)	Slope Length (m)	Horizontal Length (m)
Fire	0.55063	0.66006	0.65871	0.7736	0.00628	0.01608
Year	0.11343	0.3966	0.39618	0.29171	0.09214	0.08984
Fire Severity	-0.22641	-0.33055	-0.30826	-0.27408	-0.14741	-0.14051
Contributing area (m2)	0.13491	0.15817	0.16239	0.07828	0.80142	0.81039
Sediment (kg)	0.15538	0.55456	0.5693	0.48089	0.2543	0.26132
Unit-area Sediment (kg m-2)	0.10106	0.52933	0.53725	0.5143	-0.04084	-0.03445
Bare Soil (%)	0.13637	0.68486	0.70758	0.60202	0.02197	0.02466
Rainfall (mm)	-0.10539	-0.32296	-0.30474	-0.26759	-0.07581	-0.06646
Maximum I30 (mm hr-1)	-0.08817	-0.06868	-0.04822	-0.03722	-0.06569	-0.0576
Rainfall Erosivity (MJ mm ha-1 yr-1)	-0.08927	-0.07084	-0.04959	-0.05074	-0.07466	-0.06743
Time Since Burning (yr)	0.18922	-0.33743	-0.37817	-0.16748	0.08529	0.08761
Hillslope Position	-0.28911	-0.46668	-0.43654	-0.42238	-0.48624	-0.47924
Aspect (°)	0.18374	0.09926	0.05358	0.16246	-0.28302	-0.29619
Slope (%)	0.09045	0.03531	-0.01573	0.07284	-0.18459	-0.24456
D84	1	0.47244	0.41413	0.51419	0.06244	0.05809
D50	0.47244	1	0.97647	0.87988	0.06801	0.06738
D16	0.41413	0.97647	1	0.86707	0.09025	0.09346
Rock cover (%)	0.51419	0.87988	0.86707	1	0.04312	0.04062
Slope Length (m)	0.06244	0.06801	0.09025	0.04312	1	0.99776
Horizontal Length (m)	0.05809	0.06738	0.09346	0.04062	0.99776	1