

Table D-2. Comparison of Results from SCS Lag Methodology to USGS Regression Equations

Basin ID	Area (mi ²)	Calculated Peak Runoff Rate USGS REGRESSION ¹					Calculated Peak Runoff Rate SCS LAG					Peak Runoff Rate Per Square Mile									
		2yr (cfs)	10-yr (cfs)	25-yr (cfs)	50-yr (cfs)	100-yr (cfs)	2yr (cfs)	10-yr (cfs)	25-yr (cfs)	50-yr (cfs)	100-yr (cfs)	2-yr		10-yr		25-yr		50-yr		100-yr	
												USGS	SCS LAG	USGS	SCS LAG	USGS	SCS LAG	USGS	SCS LAG	USGS	SCS LAG
BL1	0.3594	11.1	20.2	25.1	29.5	33.1	22.6	22.6	30.8	39.1	39.1	31	63	56	63	70	86	82	109	92	109
BL10	1.0031	27.4	49.2	60.9	71.4	80.2	35.6	49.2	49.1	63.7	63.7	27	35	49	49	61	49	71	64	80	64
BL10b	0.0047	0.2	0.5	0.6	0.7	0.8	0.3	0.3	0.5	0.6	0.6	53	66	100	66	126	96	149	128	169	128
BL11	0.0313	1.3	2.4	3.0	3.6	4.0	1.3	1.3	2.0	2.8	2.8	42	40	78	40	97	63	115	88	129	88
BL12	0.0172	0.8	1.4	1.8	2.1	2.4	1.1	1.1	1.7	2.2	2.2	45	66	84	66	106	97	125	130	141	130
BL12b	0.0031	0.2	0.3	0.4	0.5	0.6	0.4	0.4	0.5	0.7	0.7	55	125	105	125	133	173	158	224	178	224
BL13	0.0109	0.5	1.0	1.2	1.5	1.6	0.8	0.8	1.2	1.7	1.7	48	69	89	69	112	109	133	155	150	155
BL14	0.0172	0.8	1.4	1.8	2.1	2.4	1.1	1.1	1.6	2.1	2.1	45	62	84	62	106	91	125	123	141	123
BL14b	0.0063	0.3	0.6	0.8	0.9	1.0	0.6	0.6	0.9	1.1	1.1	51	94	96	94	121	136	144	182	162	182
BL15	0.1469	5.1	9.3	11.6	13.6	15.3	5.5	5.5	8.3	11.4	11.4	35	37	63	37	79	57	93	78	104	78
BL15b	0.0031	0.2	0.3	0.4	0.5	0.6	0.2	0.2	0.3	0.4	0.4	55	58	105	58	133	90	158	125	178	125
BL16	0.1313	4.6	8.4	10.5	12.4	13.9	5.2	5.2	8.4	12.0	12.0	35	40	64	40	80	64	94	91	106	91
BL17	0.5125	15.2	27.5	34.1	40.0	45.0	15.8	15.8	22.3	29.6	29.6	30	31	54	31	67	44	78	58	88	58
BL17b	0.0016	0.1	0.2	0.2	0.3	0.3	0.5	0.5	0.6	0.7	0.7	60	301	115	301	146	378	174	461	196	461
BL17c	0.0531	2.1	3.8	4.8	5.7	6.4	2.4	2.4	3.7	5.2	5.2	39	45	72	45	91	70	107	98	120	98
BL18	0.0375	1.5	2.8	3.6	4.2	4.7	3.9	3.9	5.5	7.2	9.7	41	105	76	105	95	147	112	191	126	258
BL19	0.0750	2.8	5.2	6.5	7.6	8.6	7.2	7.2	10.1	13.1	17.8	38	95	69	95	86	134	102	175	115	237
BL2	0.1297	4.5	8.3	10.4	12.2	13.8	8.9	8.9	12.4	15.9	15.9	35	69	64	69	80	95	94	122	106	122
BL20	0.0359	1.5	2.7	3.4	4.1	4.6	3.6	3.6	5.1	6.7	9.1	41	101	76	101	95	142	113	186	127	253
BL21	0.0016	0.1	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.4	60	96	115	96	146	141	174	192	196	269
BL22	0.0297	1.2	2.3	2.9	3.4	3.9	3.0	3.0	4.2	5.5	7.5	42	101	78	101	98	142	116	185	130	251
BL23	0.0078	0.4	0.7	0.9	1.1	1.2	0.8	0.8	1.2	1.5	2.1	50	108	93	108	117	151	139	196	157	266
BL24	0.1125	4.0	7.4	9.2	10.8	12.2	9.5	9.5	12.9	16.5	22.1	36	84	65	84	82	115	96	147	108	196
BL24b	0.0938	3.4	6.3	7.9	9.3	10.4	6.6	6.6	9.3	12.0	16.3	37	71	67	71	84	99	99	128	111	174
BL24c	0.0250	1.1	2.0	2.5	3.0	3.3	2.9	2.9	4.0	5.1	6.8	43	117	80	117	100	159	119	203	134	270
BL24d	0.0953	3.5	6.4	8.0	9.4	10.6	5.7	5.7	8.0	10.3	14.0	36	60	67	60	84	84	99	108	111	147
BL25	0.0141	0.6	1.2	1.5	1.8	2.0	1.5	1.5	2.0	2.6	2.6	46	103	86	103	108	142	128	183	145	183
BL26	0.1844	6.2	11.3	14.1	16.6	18.7	10.7	10.7	14.6	18.6	18.6	34	58	61	58	76	79	90	101	101	101
BL26b	0.0297	1.2	2.3	2.9	3.4	3.9	3.3	3.3	4.5	5.8	5.8	42	110	78	110	98	151	116	194	130	194
BL27	0.0250	1.1	2.0	2.5	3.0	3.3	2.1	2.1	2.9	3.8	3.8	43	84	80	84	100	117	119	152	134	152
BL27b	0.0047	0.2	0.5	0.6	0.7	0.8	0.9	0.9	1.1	1.4	1.4	53	186	100	186	126	239	149	294	169	294
BL27c	0.0047	0.2	0.5	0.6	0.7	0.8	0.8	0.8	1.0	1.2	1.2	53	160	100	160	126	207	149	258	169	258
BL27d	0.0078	0.4	0.7	0.9	1.1	1.2	1.1	1.1	1.4	1.8	1.8	50	137	93	137	117	183	139	230	157	230
BL27e	0.0094	0.5	0.9	1.1	1.3	1.4	0.7	0.7	1.0	1.3	1.3	48	71	91	71	115	106	136	143	153	143
BL27f	0.0625	2.4	4.4	5.5	6.5	7.3	5.8	5.8	8.2	10.7	10.7	38	93	71	93	89	130	104	171	118	171
BL3	0.2250	7.4	13.4	16.7	19.7	22.1	11.5	11.5	16.7	22.1	22.1	33	51	60	51	74	74	88	98	98	98
BL4	0.1172	4.2	7.6	9.5	11.2	12.6	6.8	6.8	9.7	12.6	12.6	36	58	65	58	81	82	96	107	108	107
BL5	0.1750	5.9	10.8	13.5	15.9	17.8	7.3	10.7	10.7	14.2	14.2	34	41	62	61	77	61	91	81	102	81
BL5b	0.0359	1.5	2.7	3.4	4.1	4.6	3.0	4.2	4.2	5.5	5.5	41	84	76	118	95	118	113	154	127	154
BL6	0.0484	1.9	3.5	4.4	5.2	5.9	4.4	4.4	6.2	8.3	8.3	40	90	73	90	92	129	108	171	122	171
BL7	0.0250	1.1	2.0	2.5	3.0	3.3	1.4	2.2	2.2	3.1	3.1	43	58	80	90	100	90	119	126	134	126
BL8	0.1109	4.0	7.3	9.1	10.7	12.0	3.7	5.9	5.9	8.3	8.3	36	34	66	53	82	53	97	75	109	75
BL8b	0.0109	0.5	1.0	1.2	1.5	1.6	0.7	1.1	1.1	1.5	1.5	48	67	89	101	112	101	133	138	150	138
BL9	0.0609	2.3	4.3	5.4	6.4	7.2	2.5	2.5	4.0	5.7	5.7	38	42	71	42	89	66	105	93	118	93
NC1	0.7328	20.8	37.5	46.4	54.5	61.2	31.1	31.1	41.0	51.3	67.6	28	42	51	42	63	56	74	70	84	92
NC2	0.0594	2.3	4.2	5.3	6.2	7.0	3.9	3.9	5.3	6.8	9.3	39	65	71	65	89	90	105	115	118	156
NC2b	0.0531	2.1	3.8	4.8	5.7	6.4	3.0	3.0	4.2	5.5	7.6	39	56	72	56	91	79	107	104	120	144
NC2c	0.0141	0.6	1.2	1.5	1.8	2.0	1.0	1.0	1.3	1.6	2.1	46	68	86	68	108	89	128	111	145	146
NC2d	0.0266	1.1	2.1	2.6	3.1	3.5	2.3	2.3	3.1	3.9	5.2	43	85	79	85	99	116	118	147	132	196

1 2-yr Peak Flow (cfs) = 0.09*(Area (mi²)^{0.877})*(MAP^{1.51})
 10-yr Peak Flow (cfs) = 0.129*(Area (mi²)^{0.868})*(MAP^{1.57})
 25-yr Peak Flow (cfs) = 0.148*(Area (mi²)^{0.864})*(MAP^{1.59})
 50-yr Peak Flow (cfs) = 0.161*(Area (mi²)^{0.862})*(MAP^{1.61})
 100-yr Peak Flow (cfs) = 0.174*(Area (mi²)^{0.861})*(MAP^{1.62})
 MAP = Mean Annual Precipitation 44 inches.