Table 4. Regression equations for estimating flood discharges at ungaged sites in Washington

[Q, flood magnitude, in cubic feet per second; A, total drainage area, in square miles; P, mean annual precipitation, in inches; F, forest cover, in percent of contributing drainage area; a, regression constant; b, c, and d, regression coefficients; --, regression coefficient not determined; <, less than]

Region	Number of stations used in analysis	Regression equation	Exceedance probability	Constant a	Coefficients b	Coefficients c	Equivalent years of record	Standard error of prediction, percent
1	61	$Q = aA^bP^c$	0.5	0.350	0.923	1.24	1	32
			.1	.502	.921	1.26	2	33
			.04	.590	.921	1.26	3	34
			.02	.666	.921	1.26	3	36
			.01	.745	.922	1.26	4	37
2	202	$Q = aA^bP^c$	.5	.090	.877	1.51	1	56
			.1	.129	.868	1.57	1	53
			.04	.148	.864	1.59	2	53
			.02	.161	.862	1.61	2	53
			.01	.174	.861	1.62	3	54
3	63	$Q = aA^bP^c$	.5	.817	.877	1.02	1	57
			.1	.845	.875	1.14	1	55
			.04	.912	.874	1.17	2	54
			.02	.808	.872	1.23	2	54
			.01	.801	.871	1.26	3	55
4	60	$Q = aA^bP^c$	.5	.025	.880	1.70	1	82
			.1	.179	.856	1.37	1	84
			.04	.341	.850	1.26	1	87
			.02	.505	.845	1.20	2	90
			.01	.703	.842	1.15	2	92
5	19	$Q = aA^b$	.5	14.7	.815	--	1	96
			.1	35.2	.787	--	2	63
			.04	48.2	.779	--	3	56
			.02	59.1	.774	--	5	53
			.01	71.2	.769	--	6	52
6	23	$Q = aA^bP^c$	.5	2.24	.719	.833	1	63
			.1	17.8	.716	.487	2	69
			.04	38.6	.714	.359	2	72
			.02	63.6	.713	.276	3	74
			.01	100	.713	.201	3	77
7	17	$Q = aA^b$	.5	8.77	.629	--	2	128
			.1	50.9	.587	--	7	63
			.04	91.6	.574	--	12	54
			.02	131	.566	--	15	53
			.01	179	.558	--	16	56

Table 4. Regression equations for estimating flood discharges at ungaged sites in Washington--Continued

Region	Number of stations used in analysis	Regres-sion equation	Exceedance probability	Constant a	Coefficients b	Coefficients c	Equivalent years of record	Standard error of prediction, percent
8	23	$Q = aA^b$	0.5	12.0	0.761	--	<1	133
			.1	32.6	.706	--	1	111
			.04	46.2	.687	--	1	114
			.02	57.3	.676	--	1	119
			.01	69.4	.666	--	1	126
9	36	$Q = aA^bP^c$	.5	0.803	.672	1.16	2	80
			.1	15.4	.597	.662	6	57
			.04	41.1	.570	.508	8	55
			.02	74.7	.553	.420	10	55
			.01	126	.538	.344	12	56