

Table 12. Results of Kendall's tau trend test and flood-frequency analysis of Otter Creek at Climax (station 07167500, map index number 53) peak-flow record with decreasing trend added

Year	Peak flow (cubic feet per second)						
	No change	0.5-percent decrease ¹		1.0-percent decrease ¹		1.5-percent decrease ¹	
1958	10,400	1.000	10,400	1.00	10,400	1.000	10,400
1959	11,900	.995	11,841	.99	11,781	.985	11,722
1960	9,110	.990	9,019	.98	8,928	.970	8,837
1961	44,000	.985	43,340	.97	42,680	.955	42,020
1962	12,400	.980	12,152	.96	11,904	.940	11,656
1963	1,750	.975	1,706	.95	1,663	.925	1,619
1964	254	.970	246	.94	239	.910	231
1965	19,800	.965	19,107	.93	18,414	.895	17,721
1966	4,640	.960	4,454	.92	4,269	.880	4,083
1967	16,600	.955	15,853	.91	15,106	.865	14,359
1968	3,980	.950	3,781	.90	3,582	.850	3,383
1969	18,600	.945	17,577	.89	16,554	.835	15,531
1970	27,800	.940	26,132	.88	24,464	.820	22,796
1971	3,560	.935	3,329	.87	3,097	.805	2,866
1972	3,870	.930	3,599	.86	3,328	.790	3,057
1973	7,860	.925	7,271	.85	6,681	.775	6,092
1974	22,800	.920	20,976	.84	19,152	.760	17,328
1975	17,200	.915	15,738	.83	14,276	.745	12,814
1976	107,000	.910	97,370	.82	87,740	.730	78,110
1977	29,000	0.905	26,245	0.81	23,490	0.715	20,735
1978	4,060	.900	3,654	.80	3,248	.700	2,842
1979	16,100	.895	14,410	.79	12,719	.685	11,029
1980	4,920	.890	4,379	.78	3,838	.670	3,296
1981	1,820	.885	1,611	.77	1,401	.655	1,192
1982	25,600	.880	22,528	.76	19,456	.640	16,384
1983	9,470	.875	8,286	.75	7,103	.625	5,919
1984	7,980	.870	6,943	.74	5,905	.610	4,868
1985	5,710	.865	4,939	.73	4,168	.595	3,397
1986	12,100	.860	10,406	.72	8,712	.580	7,018
1987	16,000	.855	13,680	.71	11,360	.565	9,040
1988	13,400	.850	11,390	.70	9,380	.550	7,370
1989	5,690	.845	4,808	.69	3,926	.535	3,044
1990	4,400	.840	3,696	.68	2,992	.520	2,288
1991	1,610	.835	1,344	.67	1,079	.505	813
1992	4,530	.830	3,760	.66	2,990	.490	2,220
1993	9,880	.825	8,151	.65	6,422	.475	4,693
1994	26,500	.820	21,730	.64	16,960	.460	12,190
1995	16,600	.815	13,529	.63	10,458	.445	7,387
1996	1,730	.810	1,401	.62	1,073	.430	744

Table 12. Results of Kendall's tau trend test and flood-frequency analysis of Otter Creek at Climax (station 07167500, map index number 53) peak-flow record with decreasing trend added—Continued

Year	Peak flow (cubic feet per second)			
	No change	0.5-percent decrease ¹	1.0-percent decrease ¹	1.5-percent decrease ¹
1997	10,900	.805 8,775	.61 6,649	.415 4,523
Mean	14,288	12,989	11,690	10,390
Median	10,140	8,897	7,907	6,555
Kendall's tau	-.0526	-.100	-.162	-.218
Probability level	.641	.370	.145	.049
Slope	-50.2	-94	-134	-173
100-year flood	78,500 ² (52,200, 138,000)	72,500	67,100	62,700
50-year flood	61,800 ² (42,300, 103,500)	56,900	52,400	48,500
25-year flood	47,100 ² (33,300, 75,000)	43,300	39,600	36,300
10-year flood	30,800 ² (22,800, 45,500)	28,200	25,600	23,100
5-year flood	20,600 ² (15,700, 28,500)	18,700	16,800	14,900

¹First column is factor by which original peak flow is multiplied to impart trend.

²Values in parentheses indicate confidence limits.