

**Table 9.** Results of Kendall’s tau trend test and flood-frequency analysis of Caney River near Elgin (station 07172000, map index number 54) peak-flow record with increasing trend added

Year	Peak flow (cubic feet per second)						
	No change	2-percent increase <sup>1</sup>	2.5-percent increase <sup>1</sup>	3-percent increase <sup>1</sup>	3.5-percent increase <sup>1</sup>	4-percent increase <sup>1</sup>	4.5-percent increase <sup>1</sup>
1958	17,900	1.00	17,900	1.000	17,900	1.00	17,900
1959	23,600	1.02	24,072	1.025	24,190	1.03	24,308
1960	23,600	1.04	24,544	1.050	24,780	1.06	25,016
1961	62,000	1.06	65,720	1.075	66,650	1.09	67,580
1962	21,100	1.08	22,788	1.100	23,210	1.12	23,632
1963	2,160	1.10	2,376	1.125	2,430	1.15	2,484
1964	1,930	1.12	2,162	1.150	2,220	1.18	2,277
1965	19,900	1.14	22,686	1.175	23,383	1.21	24,079
1966	25,800	1.16	29,928	1.200	30,960	1.24	31,992
1967	10,100	1.18	11,918	1.225	12,373	1.27	12,827
1968	13,800	1.20	16,560	1.250	17,250	1.30	17,940
1969	23,200	1.22	28,304	1.275	29,580	1.33	30,856
1970	17,800	1.24	22,072	1.300	23,140	1.36	24,208
1971	2,940	1.26	3,704	1.325	3,896	1.39	4,087
1972	8,650	1.28	11,072	1.350	11,678	1.42	12,283
1973	15,300	1.30	19,890	1.375	21,038	1.45	22,185
1974	20,600	1.32	27,192	1.400	28,840	1.48	30,488
1975	20,900	1.34	28,006	1.425	29,783	1.51	31,559
1976	19,100	1.36	25,976	1.450	27,695	1.54	29,414
1977	29,300	1.38	40,434	1.475	43,218	1.57	46,001
1978	16,700	1.40	23,380	1.500	25,050	1.60	26,720
1979	4,670	1.42	6,631	1.525	7,122	1.63	7,612
1980	13,600	1.44	19,584	1.550	21,080	1.66	22,576
1981	872	1.46	1,273	1.575	1,373	1.69	1,474
1982	22,000	1.48	32,560	1.600	35,200	1.72	37,840
1983	12,700	1.50	19,050	1.625	20,638	1.75	22,225
1984	10,600	1.52	16,112	1.650	17,490	1.78	18,868
1985	14,400	1.54	22,176	1.675	24,120	1.81	26,064
1986	27,600	1.56	43,056	1.700	46,920	1.84	50,784
1987	104,000	1.58	164,320	1.725	179,400	1.87	194,480
1988	19,900	1.60	31,840	1.750	34,825	1.90	37,810
1989	23,700	1.62	38,394	1.775	42,068	1.93	45,741
1990	34,600	1.64	56,744	1.800	62,280	1.96	67,816
1991	5,940	1.66	9,860	1.825	10,841	1.99	11,821
1992	5,110	1.68	8,585	1.850	9,454	2.02	10,322
1993	17,800	1.70	30,260	1.875	33,375	2.05	36,490
1994	32,900	1.72	56,588	1.900	62,510	2.08	68,432
1995	4,320	1.74	7,517	1.925	8,316	2.11	9,115
1996	3,020	1.76	5,315	1.950	5,889	2.14	6,463

**Table 9.** Results of Kendall's tau trend test and flood-frequency analysis of Caney River near Elgin (station 07172000, map index number 54) peak-flow record with increasing trend added—Continued

Year	Peak flow (cubic feet per second)			
	No change	2-percent increase <sup>1</sup>	2.5-percent increase <sup>1</sup>	3-percent increase <sup>1</sup>
1997	17,000	1.78 30,260	1.975 33,575	2.17 36,890
<b>Mean</b>	19,278	26,770	28,643	30,516
<b>Median</b>	17,800	22,737	23,751	24,258
<b>Kendall's tau</b>	.0115	.171	.179	.218
<b>Probability level</b>	.926	.124	.110	.049
<b>Slope</b>	9.62	329	437	524
<b>100-year flood</b>	84,900 <sup>2</sup> (60,000, 136,000)	123,000	136,000	144,000
<b>50-year flood</b>	72,100 <sup>2</sup> (51,900, 112,000)	104,000	114,000	121,000
<b>25-year flood</b>	59,500 <sup>2</sup> (43,800, 89,300)	85,200	92,700	98,800
<b>10-year flood</b>	43,200 <sup>2</sup> (32,900, 61,400)	61,200	65,900	70,400
<b>5-year flood</b>	31,300 <sup>2</sup> (24,400, 42,300)	43,800	46,700	50,000

<sup>1</sup>First column is factor by which original peak flow is multiplied to impart trend.

<sup>2</sup>Values in parentheses indicate confidence limits.