Table 6. Streamflow estimates (fit) for selected annual exceedance probabilities and associated confidence intervals (lower and upper) and variance estimates for flood-frequency analysis under three different scenarios using U.S. Geological Survey PeakFQ software (Veilleux and others, 2014) version 7.2 for Spring Creek, South Dakota, with comparisons to Harden and others (2011).

[PILF, potentially influential low flood; AEP, annual exceedance probability; ft^3/s, cubic foot per second; PE3, Pearson type III distribution; NA, not applicable to method; --, not reported]

Analysis scenario	Number of peaks in record	Gaged peaks in analysis	Historical or paleoflood peak point estimates in analysis	Flow intervals in analysis[a]	Beginning year	Ending year	Historical period length	PILF threshold	Number of PILFs	Statistic	AEP of 0.1 (ft^3/s)	AEP of 0.01 (ft^3/s)	AEP of 1×10^{-3} (ft^3/s)	AEP of 1×10^{-4} (ft^3/s)	AEP of 1×10^{-5} (ft^3/s)	AEP of 1×10^{-6} (ft^3/s)
1. Systematic peaks, PeakFQ with weighted skew	60	60	0	0	1950	2009	60	40	19	Lower	483	2,404	7,053	15,960	30,920	53,790
										Fit	842	6,000	27,570	102,500	334,100	990,200
										Upper	1,918	39,370	711,000	12,420,000	217,600,000	3,857,000,000
										Variance	0.0202	0.0713	0.1779	0.3498	0.5929	0.9095
2. Systematic and paleo data, PeakFQ with weighted skew	60	60	0	4	1048	2009	962	40	19	Lower	578	3,728	15,550	49,630	129,700	292,800
										Fit	1,053	8,457	42,150	166,900	572,900	1,774,000
										Upper	1,879	18,350	137,000	987,700	6,902,000	46,190,000
										Variance	0.0166	0.0289	0.0522	0.0947	0.1614	0.2553
3. Systematic and predicted paleo data, PeakFQ, weighted skew	66	60	0	10	1100	2009	910	40	19	Lower	445	2,666	9,802	27,370	64,580	135,700
										Fit	684	4,790	21,830	80,830	263,300	781,300
										Upper	993	9,301	67,820	445,500	2,765,000	16,430,000
										Variance	0.0077	0.0176	0.0409	0.0832	0.1483	0.2383
4. Harden and others (2011), PeakfqSA, PE3, EMA fitting, all available data	66	66	0	5	1048	2009	962	NA	NA	Lower	--	4,160	--	--	--	--
										Fit	--	7,960	--	--	--	--
										Upper	--	14,500	--	--	--	--
5. Harden and others (2011), FLDFRQ3, PE3, maximum likelihood estimation fitting, gaged, historical, and paleo data	66	66	0	5	1048	2009	962	NA	NA	Lower	--	4,630	--	--	--	--
										Fit	--	8,080	--	--	--	--
										Upper	--	14,800	--	--	--	--

[a]In keeping with PeakFQ results, flow intervals are not included in the number of peaks in record. Therefore, the total number of peak point and interval estimates is greater than or equal to the number of peaks in record.