
 Hydrograph separation by the local minimum method

Entiat River near Entiat WA (NWIS data 1997-2001; synthesized data 1958-1996)
 Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1958 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	-1.00	-1.00	-1.00	-1.000	-1.000	-1.000	-1.00	-1.000
Nov.	143.57	123.40	20.17	0.382	0.329	0.054	85.95	0.295
Dec.	126.23	116.87	9.36	0.347	0.322	0.026	92.59	0.279
Jan.	111.94	105.13	6.80	0.308	0.289	0.019	93.92	0.251
Feb.	169.00	127.05	41.95	0.420	0.316	0.104	75.18	0.303
Mar.	184.61	153.34	31.27	0.508	0.422	0.086	83.06	0.366
Apr.	312.17	289.99	22.18	0.831	0.772	0.059	92.89	0.692
May	2267.65	1249.02	1018.62	6.239	3.437	2.803	55.08	2.981
June	1493.37	1320.76	172.61	3.976	3.517	0.460	88.44	3.152
July	407.81	394.05	13.76	1.122	1.084	0.038	96.63	0.940
Aug.	167.71	164.70	3.01	0.461	0.453	0.008	98.20	0.393
Sept.	121.07	111.19	9.88	0.322	0.296	0.026	91.84	0.265
	475.35	359.63	115.71	15.273	11.555	3.718	75.66	0.858

Above summary information based on 362 days of good base-flow values.

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1959 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	167.00	151.45	15.55	0.460	0.417	0.043	90.69	0.361
Nov.	180.43	154.69	25.74	0.480	0.412	0.069	85.73	0.369
Dec.	243.55	204.78	38.77	0.670	0.563	0.107	84.08	0.489
Jan.	193.16	161.81	31.35	0.531	0.445	0.086	83.77	0.386
Feb.	152.04	139.48	12.56	0.378	0.347	0.031	91.74	0.333
Mar.	172.00	166.92	5.08	0.473	0.459	0.014	97.05	0.398

Apr.	493.60	438.96	54.64	1.314	1.169	0.145	88.93	1.048
May	1253.13	1036.11	217.02	3.448	2.851	0.597	82.68	2.473
June	2083.57	1572.72	510.85	5.548	4.188	1.360	75.48	3.754
July	1150.48	1035.47	115.02	3.166	2.849	0.316	90.00	2.471
Aug.	314.00	311.98	2.02	0.864	0.858	0.006	99.36	0.745
Sept.	242.10	213.47	28.63	0.645	0.568	0.076	88.18	0.509
	554.91	466.92	87.99	17.977	15.127	2.851	84.14	1.114

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1960 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	378.10	266.76	111.34	1.040	0.734	0.306	70.55	0.637
Nov.	372.77	221.98	150.79	0.993	0.591	0.402	59.55	0.530
Dec.	459.97	270.63	189.34	1.266	0.745	0.521	58.84	0.646
Jan.	205.39	197.98	7.41	0.565	0.545	0.020	96.39	0.473
Feb.	165.38	159.71	5.67	0.426	0.411	0.015	96.57	0.381
Mar.	221.06	183.97	37.09	0.608	0.506	0.102	83.22	0.439
Apr.	614.60	393.95	220.65	1.637	1.049	0.588	64.10	0.940
May	1078.03	626.84	451.19	2.966	1.725	1.241	58.15	1.496
June	1775.03	1393.41	381.63	4.727	3.710	1.016	78.50	3.326
July	820.52	730.90	89.62	2.258	2.011	0.247	89.08	1.744
Aug.	264.03	253.98	10.05	0.726	0.699	0.028	96.19	0.606
Sept.	162.03	157.58	4.45	0.431	0.420	0.012	97.25	0.376
	543.08	404.65	138.43	17.643	13.145	4.497	74.51	0.966

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1961 interval = 7 days

Mean stream-	Mean base	Mean surface	Total stream-	Total base	Total surface	BF/ stream-	Base flow
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	flow (ft3/s)	flow (ft3/s)	runoff (ft3/s)	flow (in)	flow (in)	runoff (in)	flow (%)	(ft3/s/ mi2)
Oct.	135.19	129.35	5.85	0.372	0.356	0.016	95.68	0.309
Nov.	135.40	125.57	9.83	0.361	0.334	0.026	92.74	0.300
Dec.	115.19	102.37	12.82	0.317	0.282	0.035	88.87	0.244
Jan.	121.74	109.85	11.89	0.335	0.302	0.033	90.23	0.262
Feb.	159.54	139.88	19.66	0.396	0.348	0.049	87.68	0.334
Mar.	187.45	178.32	9.13	0.516	0.491	0.025	95.13	0.426
Apr.	389.80	337.13	52.67	1.038	0.898	0.140	86.49	0.805
May	1522.84	1269.12	253.72	4.190	3.492	0.698	83.34	3.029
June	2402.13	1664.39	737.75	6.396	4.432	1.964	69.29	3.972
July	584.90	531.73	53.17	1.609	1.463	0.146	90.91	1.269
Aug.	232.19	219.27	12.92	0.639	0.603	0.036	94.43	0.523
Sept.	151.40	142.13	9.27	0.403	0.378	0.025	93.88	0.339
	511.55	412.97	98.58	16.573	13.379	3.194	80.73	0.986

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 1962

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	132.19	123.71	8.48	0.364	0.340	0.023	93.58	0.295
Nov.	115.10	100.13	14.97	0.306	0.267	0.040	87.00	0.239
Dec.	112.00	100.31	11.69	0.308	0.276	0.032	89.57	0.239
Jan.	147.52	108.32	39.20	0.406	0.298	0.108	73.43	0.259
Feb.	176.39	130.74	45.66	0.438	0.325	0.113	74.12	0.312
Mar.	138.42	128.99	9.42	0.381	0.355	0.026	93.19	0.308
Apr.	431.93	273.12	158.81	1.150	0.727	0.423	63.23	0.652
May	709.77	486.29	223.48	1.953	1.338	0.615	68.51	1.161
June	1332.87	1142.60	190.27	3.549	3.042	0.507	85.72	2.727
July	560.45	497.42	63.04	1.542	1.369	0.173	88.75	1.187
Aug.	233.68	226.04	7.64	0.643	0.622	0.021	96.73	0.539
Sept.	139.33	134.94	4.39	0.371	0.359	0.012	96.85	0.322
	352.25	287.64	64.61	11.412	9.319	2.093	81.66	0.686

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1963 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	154.97	134.44	20.53	0.426	0.370	0.056	86.75	0.321
Nov.	225.00	164.76	60.24	0.599	0.439	0.160	73.23	0.393
Dec.	217.00	184.08	32.92	0.597	0.507	0.091	84.83	0.439
Jan.	152.29	119.55	32.74	0.419	0.329	0.090	78.50	0.285
Feb.	221.21	166.48	54.74	0.550	0.414	0.136	75.26	0.397
Mar.	202.32	196.88	5.44	0.557	0.542	0.015	97.31	0.470
Apr.	241.43	234.15	7.28	0.643	0.623	0.019	96.98	0.559
May	1105.71	844.27	261.44	3.042	2.323	0.719	76.36	2.015
June	1334.53	1098.78	235.75	3.554	2.926	0.628	82.33	2.622
July	483.55	429.52	54.03	1.330	1.182	0.149	88.83	1.025
Aug.	245.39	230.28	15.11	0.675	0.634	0.042	93.84	0.550
Sept.	150.80	141.48	9.32	0.402	0.377	0.025	93.82	0.338
	394.92	329.17	65.75	12.794	10.664	2.130	83.35	0.786

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1964 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	134.81	113.56	21.25	0.371	0.312	0.058	84.24	0.271
Nov.	145.83	131.06	14.78	0.388	0.349	0.039	89.87	0.313
Dec.	150.19	127.47	22.72	0.413	0.351	0.063	84.87	0.304
Jan.	142.42	121.71	20.70	0.392	0.335	0.057	85.46	0.290
Feb.	120.45	117.15	3.30	0.310	0.302	0.008	97.26	0.280
Mar.	127.13	124.89	2.24	0.350	0.344	0.006	98.24	0.298
Apr.	220.73	211.19	9.54	0.588	0.562	0.025	95.68	0.504
May	726.00	608.40	117.60	1.998	1.674	0.324	83.80	1.452
June	2136.23	1664.00	472.23	5.688	4.431	1.257	77.89	3.971
July	937.16	875.82	61.34	2.579	2.410	0.169	93.46	2.090
Aug.	283.52	278.80	4.71	0.780	0.767	0.013	98.34	0.665
Sept.	150.13	146.25	3.88	0.400	0.389	0.010	97.42	0.349

Jan.	112.10	105.16	6.93	0.308	0.289	0.019	93.81	0.251
Feb.	104.11	101.46	2.65	0.259	0.252	0.007	97.45	0.242
Mar.	122.61	116.01	6.60	0.337	0.319	0.018	94.61	0.277
Apr.	333.33	305.44	27.89	0.888	0.813	0.074	91.63	0.729
May	1209.81	685.33	524.48	3.329	1.886	1.443	56.65	1.636
June	1218.23	918.25	299.99	3.244	2.445	0.799	75.38	2.192
July	600.10	573.25	26.85	1.651	1.577	0.074	95.53	1.368
Aug.	233.03	231.06	1.97	0.641	0.636	0.005	99.16	0.551
Sept.	142.90	138.52	4.38	0.381	0.369	0.012	96.93	0.331
	372.81	294.57	78.23	12.078	9.543	2.535	79.01	0.703

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1967

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	126.19	111.90	14.29	0.347	0.308	0.039	88.67	0.267
Nov.	121.90	116.33	5.57	0.325	0.310	0.015	95.43	0.278
Dec.	135.19	117.44	17.75	0.372	0.323	0.049	86.87	0.280
Jan.	125.35	115.61	9.74	0.345	0.318	0.027	92.23	0.276
Feb.	129.43	122.91	6.52	0.322	0.305	0.016	94.96	0.293
Mar.	122.90	116.94	5.97	0.338	0.322	0.016	95.14	0.279
Apr.	148.93	145.43	3.51	0.397	0.387	0.009	97.65	0.347
May	940.48	682.69	257.79	2.588	1.878	0.709	72.59	1.629
June	2663.67	1714.26	949.41	7.093	4.565	2.528	64.36	4.091
July	810.29	757.80	52.49	2.230	2.085	0.144	93.52	1.809
Aug.	267.35	263.16	4.20	0.736	0.724	0.012	98.43	0.628
Sept.	160.67	152.27	8.39	0.428	0.405	0.022	94.77	0.363
	479.01	368.28	110.73	15.519	11.931	3.587	76.88	0.879

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1968

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	191.32	160.97	30.36	0.526	0.443	0.084	84.13	0.384
Nov.	267.13	227.59	39.55	0.711	0.606	0.105	85.20	0.543
Dec.	198.39	147.72	50.66	0.546	0.406	0.139	74.46	0.353
Jan.	323.42	205.96	117.46	0.890	0.567	0.323	63.68	0.492
Feb.	322.90	280.09	42.81	0.831	0.721	0.110	86.74	0.668
Mar.	407.16	328.50	78.67	1.120	0.904	0.216	80.68	0.784
Apr.	309.00	293.51	15.49	0.823	0.782	0.041	94.99	0.700
May	1207.52	796.81	410.70	3.323	2.192	1.130	65.99	1.902
June	1808.47	1350.91	457.56	4.816	3.597	1.218	74.70	3.224
July	788.42	613.53	174.89	2.169	1.688	0.481	77.82	1.464
Aug.	282.81	251.20	31.61	0.778	0.691	0.087	88.82	0.600
Sept.	198.27	179.79	18.48	0.528	0.479	0.049	90.68	0.429
	525.19	402.52	122.67	17.061	13.076	3.985	76.64	0.961

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 1969

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	152.19	147.81	4.38	0.419	0.407	0.012	97.12	0.353
Nov.	154.20	141.77	12.43	0.411	0.377	0.033	91.94	0.338
Dec.	135.94	120.40	15.53	0.374	0.331	0.043	88.57	0.287
Jan.	178.13	113.62	64.51	0.490	0.313	0.178	63.78	0.271
Feb.	128.18	125.37	2.81	0.319	0.312	0.007	97.81	0.299
Mar.	148.03	142.80	5.23	0.407	0.393	0.014	96.46	0.341
Apr.	409.37	356.07	53.30	1.090	0.948	0.142	86.98	0.850
May	1924.97	1333.48	591.49	5.297	3.669	1.627	69.27	3.183
June	2109.20	1503.27	605.93	5.616	4.003	1.613	71.27	3.588
July	468.06	449.23	18.83	1.288	1.236	0.052	95.98	1.072
Aug.	210.13	208.97	1.16	0.578	0.575	0.003	99.45	0.499
Sept.	169.27	153.59	15.68	0.451	0.409	0.042	90.74	0.367
	516.69	400.43	116.26	16.739	12.973	3.766	77.50	0.956

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1970

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	167.06	157.04	10.03	0.460	0.432	0.028	94.00	0.375
Nov.	138.33	129.68	8.65	0.368	0.345	0.023	93.75	0.310
Dec.	124.32	117.48	6.84	0.342	0.323	0.019	94.50	0.280
Jan.	104.06	100.31	3.75	0.286	0.276	0.010	96.40	0.239
Feb.	113.04	110.40	2.64	0.281	0.274	0.007	97.67	0.263
Mar.	129.61	126.61	3.00	0.357	0.348	0.008	97.68	0.302
Apr.	168.67	158.88	9.79	0.449	0.423	0.026	94.20	0.379
May	814.48	505.44	309.05	2.241	1.391	0.850	62.06	1.206
June	1613.20	966.09	647.11	4.296	2.572	1.723	59.89	2.306
July	399.77	362.99	36.79	1.100	0.999	0.101	90.80	0.866
Aug.	175.71	170.18	5.53	0.483	0.468	0.015	96.85	0.406
Sept.	133.37	123.86	9.51	0.355	0.330	0.025	92.87	0.296
	340.10	252.57	87.53	11.018	8.183	2.836	74.26	0.603

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1971

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	113.32	109.38	3.94	0.312	0.301	0.011	96.52	0.261
Nov.	108.63	100.19	8.44	0.289	0.267	0.022	92.23	0.239
Dec.	104.26	98.53	5.72	0.287	0.271	0.016	94.51	0.235
Jan.	132.32	114.83	17.49	0.364	0.316	0.048	86.78	0.274
Feb.	308.07	222.60	85.47	0.766	0.553	0.212	72.26	0.531
Mar.	173.42	169.30	4.12	0.477	0.466	0.011	97.62	0.404
Apr.	274.17	240.31	33.86	0.730	0.640	0.090	87.65	0.574
May	1716.48	957.73	758.75	4.723	2.635	2.088	55.80	2.286
June	2112.70	1762.64	350.06	5.626	4.694	0.932	83.43	4.207

Oct.	180.71	170.83	9.88	0.497	0.470	0.027	94.53	0.408
Nov.	148.90	140.68	8.22	0.396	0.375	0.022	94.48	0.336
Dec.	140.71	123.13	17.58	0.387	0.339	0.048	87.51	0.294
Jan.	145.48	116.24	29.25	0.400	0.320	0.080	79.90	0.277
Feb.	127.14	122.21	4.93	0.316	0.304	0.012	96.12	0.292
Mar.	151.13	146.79	4.34	0.416	0.404	0.012	97.13	0.350
Apr.	296.53	267.73	28.80	0.790	0.713	0.077	90.29	0.639
May	1008.42	734.28	274.14	2.775	2.020	0.754	72.81	1.752
June	964.73	755.36	209.37	2.569	2.011	0.558	78.30	1.803
July	390.39	363.36	27.03	1.074	1.000	0.074	93.08	0.867
Aug.	198.52	190.80	7.72	0.546	0.525	0.021	96.11	0.455
Sept.	150.57	139.72	10.85	0.401	0.372	0.029	92.79	0.333

	326.19	273.25	52.94	10.567	8.852	1.715	83.77	0.652

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 1974

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	141.35	132.42	8.93	0.389	0.364	0.025	93.68	0.316
Nov.	155.67	134.87	20.80	0.415	0.359	0.055	86.64	0.322
Dec.	141.39	130.54	10.84	0.389	0.359	0.030	92.33	0.312
Jan.	227.77	143.01	84.77	0.627	0.393	0.233	62.78	0.341
Feb.	225.93	225.45	0.48	0.561	0.560	0.001	99.79	0.538
Mar.	238.26	230.64	7.62	0.656	0.635	0.021	96.80	0.550
Apr.	501.67	470.24	31.42	1.336	1.252	0.084	93.74	1.122
May	1277.26	999.14	278.12	3.514	2.749	0.765	78.23	2.385
June	3256.77	1917.39	1339.37	8.672	5.106	3.566	58.87	4.576
July	1744.45	1559.71	184.74	4.800	4.292	0.508	89.41	3.722
Aug.	602.58	579.67	22.91	1.658	1.595	0.063	96.20	1.383
Sept.	246.30	246.30	0.00	0.656	0.656	0.000	100.00	0.588

	730.69	565.49	165.20	23.672	18.320	5.352	77.39	1.350

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

 Period ending in 1975

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	150.23	134.82	15.41	0.413	0.371	0.042	89.74	0.322
Nov.	139.30	130.97	8.33	0.371	0.349	0.022	94.02	0.313
Dec.	136.13	128.08	8.05	0.375	0.352	0.022	94.09	0.306
Jan.	141.52	130.86	10.65	0.389	0.360	0.029	92.47	0.312
Feb.	122.29	117.95	4.33	0.304	0.293	0.011	96.46	0.282
Mar.	139.94	135.11	4.83	0.385	0.372	0.013	96.55	0.322
Apr.	246.93	238.36	8.58	0.658	0.635	0.023	96.53	0.569
May	1147.42	833.70	313.72	3.157	2.294	0.863	72.66	1.990
June	2218.27	1682.09	536.17	5.907	4.479	1.428	75.83	4.015
July	1191.10	739.39	451.71	3.277	2.034	1.243	62.08	1.765
Aug.	341.35	323.35	18.00	0.939	0.890	0.050	94.73	0.772
Sept.	213.67	206.66	7.01	0.569	0.550	0.019	96.72	0.493
	516.84	400.63	116.21	16.744	12.979	3.765	77.51	0.956

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1976

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	194.39	180.30	14.09	0.535	0.496	0.039	92.75	0.430
Nov.	310.33	268.46	41.87	0.826	0.715	0.111	86.51	0.641
Dec.	623.84	293.35	330.49	1.717	0.807	0.909	47.02	0.700
Jan.	279.19	270.19	9.00	0.768	0.743	0.025	96.78	0.645
Feb.	270.66	259.70	10.95	0.697	0.668	0.028	95.95	0.620
Mar.	227.87	225.14	2.73	0.627	0.619	0.008	98.80	0.537
Apr.	425.57	385.78	39.78	1.133	1.027	0.106	90.65	0.921
May	1636.42	1423.08	213.34	4.503	3.916	0.587	86.96	3.396
June	1680.33	1346.48	333.85	4.474	3.585	0.889	80.13	3.214
July	1477.68	1275.76	201.92	4.066	3.510	0.556	86.34	3.045
Aug.	633.35	589.12	44.24	1.743	1.621	0.122	93.02	1.406
Sept.	275.43	257.36	18.07	0.733	0.685	0.048	93.44	0.614
	671.73	566.23	105.51	21.822	18.394	3.427	84.29	1.351

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1977

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	185.65	145.98	39.66	0.511	0.402	0.109	78.64	0.348
Nov.	142.77	128.98	13.79	0.380	0.343	0.037	90.34	0.308
Dec.	123.77	112.46	11.32	0.341	0.309	0.031	90.86	0.268
Jan.	128.74	109.08	19.67	0.354	0.300	0.054	84.73	0.260
Feb.	138.93	125.76	13.17	0.345	0.313	0.033	90.52	0.300
Mar.	130.00	125.73	4.27	0.358	0.346	0.012	96.72	0.300
Apr.	338.57	251.89	86.68	0.902	0.671	0.231	74.40	0.601
May	479.45	419.92	59.53	1.319	1.155	0.164	87.58	1.002
June	642.57	502.31	140.26	1.711	1.338	0.373	78.17	1.199
July	247.26	236.91	10.35	0.680	0.652	0.028	95.82	0.565
Aug.	198.77	183.59	15.19	0.547	0.505	0.042	92.36	0.438
Sept.	154.43	135.82	18.61	0.411	0.362	0.050	87.95	0.324
	242.58	206.67	35.91	7.859	6.696	1.163	85.20	0.493

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1978

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	125.87	121.79	4.08	0.346	0.335	0.011	96.76	0.291
Nov.	172.30	132.00	40.30	0.459	0.351	0.107	76.61	0.315
Dec.	287.94	219.97	67.96	0.792	0.605	0.187	76.40	0.525
Jan.	163.35	159.87	3.49	0.449	0.440	0.010	97.87	0.382
Feb.	148.82	143.41	5.41	0.370	0.356	0.013	96.36	0.342
Mar.	277.71	206.25	71.46	0.764	0.567	0.197	74.27	0.492

Apr.	632.47	504.92	127.55	1.684	1.344	0.340	79.83	1.205
May	1363.23	1111.77	251.45	3.751	3.059	0.692	81.55	2.653
June	2253.13	1482.76	770.37	6.000	3.948	2.051	65.81	3.539
July	1024.77	917.88	106.89	2.820	2.526	0.294	89.57	2.191
Aug.	305.84	290.06	15.77	0.842	0.798	0.043	94.84	0.692
Sept.	283.70	240.14	43.56	0.755	0.639	0.116	84.64	0.573
	587.47	462.10	125.37	19.032	14.971	4.062	78.66	1.103

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1979 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	190.77	151.00	39.77	0.525	0.415	0.109	79.15	0.360
Nov.	209.27	175.30	33.97	0.557	0.467	0.090	83.77	0.418
Dec.	135.10	117.19	17.91	0.372	0.322	0.049	86.74	0.280
Jan.	105.87	102.76	3.11	0.291	0.283	0.009	97.07	0.245
Feb.	110.75	108.35	2.40	0.275	0.269	0.006	97.83	0.259
Mar.	164.84	152.44	12.40	0.454	0.419	0.034	92.48	0.364
Apr.	238.20	209.47	28.73	0.634	0.558	0.076	87.94	0.500
May	1092.19	713.55	378.64	3.005	1.963	1.042	65.33	1.703
June	776.13	649.93	126.21	2.067	1.731	0.336	83.74	1.551
July	332.61	284.94	47.67	0.915	0.784	0.131	85.67	0.680
Aug.	198.10	186.89	11.21	0.545	0.514	0.031	94.34	0.446
Sept.	151.43	137.83	13.61	0.403	0.367	0.036	91.02	0.329
	310.02	249.81	60.20	10.044	8.093	1.950	80.58	0.596

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1980 interval = 7 days

Mean stream-	Mean base	Mean surface	Total stream-	Total base	Total surface	BF/ stream-	Base flow
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	flow (ft3/s)	flow (ft3/s)	runoff (ft3/s)	flow (in)	flow (in)	runoff (in)	flow (%)	(ft3/s/ mi2)
Oct.	123.77	111.72	12.05	0.341	0.307	0.033	90.26	0.267
Nov.	117.43	110.25	7.19	0.313	0.294	0.019	93.88	0.263
Dec.	214.45	129.48	84.97	0.590	0.356	0.234	60.38	0.309
Jan.	153.81	129.69	24.12	0.423	0.357	0.066	84.32	0.310
Feb.	144.93	127.11	17.82	0.373	0.327	0.046	87.70	0.303
Mar.	201.26	196.27	4.99	0.554	0.540	0.014	97.52	0.468
Apr.	604.33	545.30	59.03	1.609	1.452	0.157	90.23	1.301
May	1603.97	1404.42	199.54	4.413	3.864	0.549	87.56	3.352
June	1191.77	862.12	329.65	3.173	2.296	0.878	72.34	2.058
July	565.90	513.86	52.05	1.557	1.414	0.143	90.80	1.226
Aug.	226.13	213.15	12.98	0.622	0.586	0.036	94.26	0.509
Sept.	157.17	148.22	8.94	0.418	0.395	0.024	94.31	0.354
	442.87	375.19	67.69	14.387	12.188	2.199	84.72	0.895

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 1981

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	130.61	128.97	1.64	0.359	0.355	0.005	98.74	0.308
Nov.	166.33	138.24	28.09	0.443	0.368	0.075	83.11	0.330
Dec.	351.29	155.65	195.64	0.967	0.428	0.538	44.31	0.371
Jan.	395.74	261.57	134.18	1.089	0.720	0.369	66.09	0.624
Feb.	288.57	220.46	68.11	0.717	0.548	0.169	76.40	0.526
Mar.	298.19	279.27	18.92	0.820	0.768	0.052	93.65	0.667
Apr.	387.07	322.94	64.13	1.031	0.860	0.171	83.43	0.771
May	1248.97	976.64	272.32	3.437	2.687	0.749	78.20	2.331
June	1100.87	990.46	110.41	2.931	2.637	0.294	89.97	2.364
July	619.87	527.92	91.95	1.706	1.453	0.253	85.17	1.260
Aug.	268.48	251.83	16.65	0.739	0.693	0.046	93.80	0.601
Sept.	156.00	148.60	7.40	0.415	0.396	0.020	95.26	0.355
	452.32	367.72	84.60	14.654	11.913	2.741	81.30	0.878

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1982 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	176.06	153.73	22.33	0.484	0.423	0.061	87.31	0.367
Nov.	209.77	169.67	40.09	0.559	0.452	0.107	80.89	0.405
Dec.	156.61	151.21	5.41	0.431	0.416	0.015	96.55	0.361
Jan.	151.32	125.33	25.99	0.416	0.345	0.072	82.82	0.299
Feb.	214.11	192.56	21.54	0.532	0.479	0.054	89.94	0.460
Mar.	231.90	216.13	15.77	0.638	0.595	0.043	93.20	0.516
Apr.	285.00	268.74	16.26	0.759	0.716	0.043	94.29	0.641
May	1214.42	1049.30	165.12	3.342	2.887	0.454	86.40	2.504
June	2576.50	1421.18	1155.32	6.861	3.784	3.076	55.16	3.392
July	1008.84	875.96	132.88	2.776	2.410	0.366	86.83	2.091
Aug.	343.68	319.16	24.51	0.946	0.878	0.067	92.87	0.762
Sept.	197.80	185.49	12.31	0.527	0.494	0.033	93.78	0.443
	563.93	428.38	135.55	18.270	13.878	4.391	75.96	1.022

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1983 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	162.84	154.66	8.17	0.448	0.426	0.022	94.98	0.369
Nov.	142.90	126.96	15.94	0.381	0.338	0.042	88.85	0.303
Dec.	154.74	127.26	27.48	0.426	0.350	0.076	82.24	0.304
Jan.	192.84	150.89	41.95	0.531	0.415	0.115	78.25	0.360
Feb.	170.96	164.03	6.93	0.425	0.408	0.017	95.94	0.391
Mar.	297.71	269.68	28.03	0.819	0.742	0.077	90.58	0.644
Apr.	518.60	436.81	81.79	1.381	1.163	0.218	84.23	1.043
May	1794.74	1154.03	640.71	4.938	3.175	1.763	64.30	2.754
June	1922.93	1522.98	399.95	5.120	4.055	1.065	79.20	3.635
July	819.26	725.96	93.30	2.254	1.997	0.257	88.61	1.733
Aug.	386.87	354.30	32.57	1.064	0.975	0.090	91.58	0.846
Sept.	227.53	217.37	10.17	0.606	0.579	0.027	95.53	0.519

 567.74 451.39 116.35 18.393 14.624 3.769 79.51 1.077

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1984

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	150.74	141.69	9.05	0.415	0.390	0.025	93.99	0.338
Nov.	210.83	173.48	37.35	0.561	0.462	0.099	82.28	0.414
Dec.	141.74	116.59	25.15	0.390	0.321	0.069	82.26	0.278
Jan.	342.32	205.95	136.37	0.942	0.567	0.375	60.16	0.492
Feb.	254.72	213.79	40.93	0.656	0.550	0.105	83.93	0.510
Mar.	275.81	247.10	28.71	0.759	0.680	0.079	89.59	0.590
Apr.	367.60	333.43	34.17	0.979	0.888	0.091	90.70	0.796
May	677.87	556.83	121.04	1.865	1.532	0.333	82.14	1.329
June	2000.27	1557.35	442.91	5.326	4.147	1.179	77.86	3.717
July	1066.26	948.48	117.78	2.934	2.610	0.324	88.95	2.264
Aug.	363.06	332.08	30.99	0.999	0.914	0.085	91.47	0.793
Sept.	183.23	175.25	7.99	0.488	0.467	0.021	95.64	0.418
	502.18	416.38	85.80	16.314	13.526	2.787	82.92	0.994

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1985

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	168.35	150.04	18.31	0.463	0.413	0.050	89.12	0.358
Nov.	154.67	144.71	9.95	0.412	0.385	0.027	93.56	0.345
Dec.	129.77	120.52	9.26	0.357	0.332	0.025	92.87	0.288

Jan.	116.00	110.84	5.16	0.319	0.305	0.014	95.55	0.265
Feb.	111.36	109.26	2.09	0.277	0.272	0.005	98.12	0.261
Mar.	131.52	124.56	6.95	0.362	0.343	0.019	94.71	0.297
Apr.	369.70	237.48	132.22	0.984	0.632	0.352	64.24	0.567
May	1058.32	625.95	432.38	2.912	1.722	1.190	59.15	1.494
June	1093.07	967.66	125.40	2.911	2.577	0.334	88.53	2.309
July	354.03	340.62	13.41	0.974	0.937	0.037	96.21	0.813
Aug.	176.87	171.35	5.52	0.487	0.471	0.015	96.88	0.409
Sept.	141.80	125.21	16.59	0.378	0.333	0.044	88.30	0.299
	334.45	269.24	65.22	10.835	8.722	2.113	80.50	0.643

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 1986 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	143.52	131.19	12.33	0.395	0.361	0.034	91.41	0.313
Nov.	159.77	130.14	29.63	0.425	0.347	0.079	81.46	0.311
Dec.	122.61	116.18	6.43	0.337	0.320	0.018	94.75	0.277
Jan.	124.42	117.46	6.96	0.342	0.323	0.019	94.40	0.280
Feb.	161.79	126.95	34.84	0.402	0.315	0.087	78.47	0.303
Mar.	347.16	314.90	32.27	0.955	0.866	0.089	90.71	0.752
Apr.	514.40	411.06	103.34	1.370	1.095	0.275	79.91	0.981
May	1144.29	659.87	484.42	3.149	1.816	1.333	57.67	1.575
June	1438.13	774.66	663.47	3.829	2.063	1.767	53.87	1.849
July	377.74	352.40	25.35	1.039	0.970	0.070	93.29	0.841
Aug.	202.90	195.07	7.84	0.558	0.537	0.022	96.14	0.466
Sept.	144.03	134.23	9.80	0.384	0.357	0.026	93.19	0.320
	407.02	289.19	117.82	13.186	9.369	3.817	71.05	0.690

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 1987 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	125.16	109.73	15.43	0.344	0.302	0.042	87.67	0.262
Nov.	165.67	115.13	50.54	0.441	0.307	0.135	69.50	0.275
Dec.	138.19	121.55	16.65	0.380	0.334	0.046	87.95	0.290
Jan.	115.84	107.14	8.70	0.319	0.295	0.024	92.49	0.256
Feb.	116.82	114.17	2.65	0.290	0.284	0.007	97.73	0.272
Mar.	220.16	193.68	26.48	0.606	0.533	0.073	87.97	0.462
Apr.	520.50	410.09	110.41	1.386	1.092	0.294	78.79	0.979
May	1714.29	1006.27	708.02	4.717	2.769	1.948	58.70	2.402
June	996.07	865.78	130.29	2.652	2.305	0.347	86.92	2.066
July	363.26	333.42	29.84	1.000	0.917	0.082	91.79	0.796
Aug.	175.03	170.95	4.08	0.482	0.470	0.011	97.67	0.408
Sept.	127.03	124.30	2.73	0.338	0.331	0.007	97.85	0.297
	399.89	306.80	93.09	12.955	9.939	3.016	76.72	0.732

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 1988

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	101.26	99.50	1.76	0.279	0.274	0.005	98.26	0.237
Nov.	100.47	98.03	2.44	0.268	0.261	0.006	97.58	0.234
Dec.	106.81	99.12	7.68	0.294	0.273	0.021	92.81	0.237
Jan.	96.61	94.72	1.89	0.266	0.261	0.005	98.04	0.226
Feb.	103.93	101.57	2.36	0.268	0.261	0.006	97.73	0.242
Mar.	138.77	131.32	7.46	0.382	0.361	0.021	94.63	0.313
Apr.	491.90	411.20	80.70	1.310	1.095	0.215	83.59	0.981
May	1074.52	781.09	293.43	2.957	2.149	0.807	72.69	1.864
June	1296.07	912.44	383.62	3.451	2.430	1.021	70.40	2.178
July	597.32	551.17	46.15	1.644	1.517	0.127	92.27	1.315
Aug.	220.65	217.77	2.88	0.607	0.599	0.008	98.69	0.520
Sept.	140.23	133.35	6.88	0.373	0.355	0.018	95.09	0.318
	372.37	302.76	69.61	12.097	9.836	2.261	81.31	0.723

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1989

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	157.61	130.52	27.09	0.434	0.359	0.075	82.81	0.312
Nov.	174.20	149.07	25.13	0.464	0.397	0.067	85.58	0.356
Dec.	168.19	143.89	24.31	0.463	0.396	0.067	85.55	0.343
Jan.	149.87	127.12	22.75	0.412	0.350	0.063	84.82	0.303
Feb.	136.96	106.28	30.68	0.340	0.264	0.076	77.60	0.254
Mar.	141.42	135.43	5.99	0.389	0.373	0.016	95.77	0.323
Apr.	523.30	391.83	131.47	1.393	1.043	0.350	74.88	0.935
May	1252.52	935.92	316.59	3.446	2.575	0.871	74.72	2.234
June	1512.47	788.98	723.49	4.027	2.101	1.926	52.16	1.883
July	459.35	428.36	30.99	1.264	1.179	0.085	93.25	1.022
Aug.	197.55	184.77	12.77	0.544	0.508	0.035	93.53	0.441
Sept.	125.43	124.99	0.45	0.334	0.333	0.001	99.64	0.298
	417.04	304.90	112.14	13.511	9.878	3.633	73.11	0.728

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1990

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	122.55	109.52	13.03	0.337	0.301	0.036	89.37	0.261
Nov.	177.33	149.43	27.90	0.472	0.398	0.074	84.26	0.357
Dec.	229.81	183.74	46.07	0.632	0.506	0.127	79.95	0.439
Jan.	157.77	142.16	15.62	0.434	0.391	0.043	90.10	0.339
Feb.	141.64	131.17	10.47	0.352	0.326	0.026	92.61	0.313
Mar.	176.29	171.86	4.43	0.485	0.473	0.012	97.48	0.410
Apr.	763.57	676.31	87.26	2.033	1.801	0.232	88.57	1.614
May	900.94	755.61	145.32	2.479	2.079	0.400	83.87	1.803
June	1343.37	1063.57	279.79	3.577	2.832	0.745	79.17	2.538

July	631.94	590.01	41.93	1.739	1.623	0.115	93.37	1.408
Aug.	252.81	236.62	16.18	0.696	0.651	0.045	93.60	0.565
Sept.	149.73	148.81	0.92	0.399	0.396	0.002	99.39	0.355
	420.88	363.54	57.34	13.635	11.778	1.858	86.38	0.868

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1991 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	163.29	141.15	22.14	0.449	0.388	0.061	86.44	0.337
Nov.	574.50	241.43	333.07	1.530	0.643	0.887	42.02	0.576
Dec.	325.29	236.35	88.94	0.895	0.650	0.245	72.66	0.564
Jan.	195.06	172.08	22.99	0.537	0.473	0.063	88.22	0.411
Feb.	275.43	218.25	57.18	0.685	0.542	0.142	79.24	0.521
Mar.	280.16	233.33	46.83	0.771	0.642	0.129	83.28	0.557
Apr.	457.80	402.92	54.88	1.219	1.073	0.146	88.01	0.962
May	1356.29	978.58	377.71	3.732	2.693	1.039	72.15	2.336
June	1768.43	1488.56	279.87	4.709	3.964	0.745	84.17	3.553
July	1319.58	1041.50	278.08	3.631	2.866	0.765	78.93	2.486
Aug.	421.45	384.37	37.08	1.160	1.058	0.102	91.20	0.917
Sept.	193.60	189.20	4.40	0.516	0.504	0.012	97.73	0.452
	612.16	478.31	133.85	19.832	15.496	4.336	78.13	1.142

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1992 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
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Oct.	134.77	130.15	4.62	0.371	0.358	0.013	96.57	0.311
Nov.	148.07	132.99	15.07	0.394	0.354	0.040	89.82	0.317
Dec.	135.90	106.01	29.90	0.374	0.292	0.082	78.00	0.253
Jan.	127.94	110.05	17.88	0.352	0.303	0.049	86.02	0.263
Feb.	159.34	151.31	8.04	0.410	0.389	0.021	94.96	0.361
Mar.	283.35	269.56	13.79	0.780	0.742	0.038	95.13	0.643
Apr.	563.97	437.68	126.29	1.502	1.165	0.336	77.61	1.045
May	1226.00	894.39	331.61	3.373	2.461	0.912	72.95	2.135
June	847.20	691.24	155.96	2.256	1.841	0.415	81.59	1.650
July	342.23	325.90	16.32	0.942	0.897	0.045	95.23	0.778
Aug.	179.97	174.01	5.96	0.495	0.479	0.016	96.69	0.415
Sept.	128.53	121.96	6.58	0.342	0.325	0.018	94.88	0.291

	356.80	295.67	61.13	11.591	9.605	1.986	82.87	0.706

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 1993

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	116.97	112.42	4.54	0.322	0.309	0.013	96.12	0.268
Nov.	117.53	102.51	15.02	0.313	0.273	0.040	87.22	0.245
Dec.	102.84	81.86	20.98	0.283	0.225	0.058	79.60	0.195
Jan.	101.87	92.84	9.03	0.280	0.255	0.025	91.14	0.222
Feb.	100.61	86.62	13.99	0.250	0.215	0.035	86.10	0.207
Mar.	119.74	112.31	7.43	0.329	0.309	0.020	93.79	0.268
Apr.	172.60	169.88	2.72	0.460	0.452	0.007	98.42	0.405
May	1254.23	1083.03	171.20	3.451	2.980	0.471	86.35	2.585
June	772.90	658.34	114.56	2.058	1.753	0.305	85.18	1.571
July	291.90	269.77	22.14	0.803	0.742	0.061	92.42	0.644
Aug.	183.03	174.18	8.85	0.504	0.479	0.024	95.16	0.416
Sept.	120.37	120.24	0.13	0.321	0.320	0.000	99.89	0.287

	289.33	256.64	32.70	9.374	8.314	1.059	88.70	0.613

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

 Period ending in 1994

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	104.03	99.97	4.06	0.286	0.275	0.011	96.09	0.239
Nov.	93.73	87.14	6.59	0.250	0.232	0.018	92.97	0.208
Dec.	98.35	90.60	7.75	0.271	0.249	0.021	92.12	0.216
Jan.	99.81	93.19	6.62	0.275	0.256	0.018	93.37	0.222
Feb.	101.21	95.41	5.80	0.252	0.237	0.014	94.27	0.228
Mar.	149.42	133.78	15.64	0.411	0.368	0.043	89.53	0.319
Apr.	521.00	321.99	199.01	1.387	0.857	0.530	61.80	0.768
May	1124.10	797.63	326.46	3.093	2.195	0.898	70.96	1.904
June	681.53	587.56	93.98	1.815	1.565	0.250	86.21	1.402
July	343.58	326.82	16.76	0.945	0.899	0.046	95.12	0.780
Aug.	155.94	151.46	4.48	0.429	0.417	0.012	97.13	0.361
Sept.	108.90	106.15	2.75	0.290	0.283	0.007	97.48	0.253
	299.51	241.79	57.72	9.703	7.833	1.870	80.73	0.577

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1995

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	102.61	93.96	8.65	0.282	0.259	0.024	91.57	0.224
Nov.	103.57	92.34	11.23	0.276	0.246	0.030	89.16	0.220
Dec.	108.48	94.07	14.42	0.298	0.259	0.040	86.71	0.225
Jan.	107.32	100.00	7.33	0.295	0.275	0.020	93.17	0.239
Feb.	240.32	141.28	99.04	0.597	0.351	0.246	58.79	0.337
Mar.	279.71	249.78	29.93	0.770	0.687	0.082	89.30	0.596
Apr.	425.13	355.59	69.54	1.132	0.947	0.185	83.64	0.849
May	1771.55	1415.40	356.15	4.874	3.895	0.980	79.90	3.378
June	2086.27	1699.41	386.86	5.555	4.525	1.030	81.46	4.056
July	1027.90	944.59	83.31	2.828	2.599	0.229	91.90	2.254
Aug.	282.77	282.25	0.52	0.778	0.777	0.001	99.82	0.674
Sept.	157.90	148.71	9.19	0.420	0.396	0.024	94.18	0.355
	558.92	469.64	89.28	18.107	15.215	2.892	84.03	1.121

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1996

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	170.19	137.48	32.71	0.468	0.378	0.090	80.78	0.328
Nov.	580.40	312.64	267.76	1.545	0.832	0.713	53.87	0.746
Dec.	619.45	340.67	278.78	1.704	0.937	0.767	55.00	0.813
Jan.	267.84	243.58	24.26	0.737	0.670	0.067	90.94	0.581
Feb.	410.62	334.79	75.83	1.057	0.862	0.195	81.53	0.799
Mar.	545.74	388.58	157.16	1.502	1.069	0.432	71.20	0.927
Apr.	1090.37	772.48	317.89	2.903	2.057	0.846	70.85	1.844
May	1235.52	1047.61	187.91	3.400	2.883	0.517	84.79	2.500
June	1946.33	1646.29	300.04	5.183	4.384	0.799	84.58	3.929
July	1166.03	993.45	172.58	3.208	2.734	0.475	85.20	2.371
Aug.	315.06	296.24	18.83	0.867	0.815	0.052	94.02	0.707
Sept.	177.07	163.64	13.42	0.471	0.436	0.036	92.42	0.391
	709.42	555.84	153.58	23.046	18.057	4.989	78.35	1.327

 Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 1997

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	152.29	143.97	8.32	0.419	0.396	0.023	94.53	0.344
Nov.	157.90	139.32	18.58	0.420	0.371	0.049	88.23	0.332
Dec.	140.61	110.08	30.53	0.387	0.303	0.084	78.29	0.263
Jan.	181.90	116.89	65.02	0.501	0.322	0.179	64.26	0.279
Feb.	201.61	180.86	20.75	0.501	0.449	0.052	89.71	0.432
Mar.	385.32	323.81	61.52	1.060	0.891	0.169	84.03	0.773

Apr.	698.20	575.70	122.50	1.859	1.533	0.326	82.45	1.374
May	2204.84	1397.98	806.86	6.067	3.847	2.220	63.40	3.336
June	2559.33	1972.19	587.14	6.815	5.251	1.563	77.06	4.707
July	1093.42	990.93	102.49	3.009	2.727	0.282	90.63	2.365
Aug.	366.03	360.01	6.02	1.007	0.991	0.017	98.36	0.859
Sept.	231.63	210.64	20.99	0.617	0.561	0.056	90.94	0.503
	699.49	544.53	154.96	22.661	17.641	5.020	77.85	1.300

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1998

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	300.90	254.27	46.63	0.828	0.700	0.128	84.50	0.607
Nov.	265.00	240.80	24.20	0.706	0.641	0.064	90.87	0.575
Dec.	171.77	156.69	15.09	0.473	0.431	0.042	91.22	0.374
Jan.	153.03	142.34	10.69	0.421	0.392	0.029	93.01	0.340
Feb.	197.46	181.62	15.84	0.491	0.451	0.039	91.98	0.433
Mar.	302.84	262.14	40.70	0.833	0.721	0.112	86.56	0.626
Apr.	557.93	511.50	46.43	1.486	1.362	0.124	91.68	1.221
May	2276.77	1711.64	565.13	6.265	4.710	1.555	75.18	4.085
June	1585.17	1404.55	180.61	4.221	3.740	0.481	88.61	3.352
July	591.29	522.13	69.16	1.627	1.437	0.190	88.30	1.246
Aug.	220.06	214.01	6.06	0.606	0.589	0.017	97.25	0.511
Sept.	133.73	130.32	3.41	0.356	0.347	0.009	97.45	0.311
	565.21	479.07	86.14	18.311	15.520	2.791	84.76	1.143

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

Period ending in 1999

interval = 7 days

Mean stream-	Mean base	Mean surface	Total stream-	Total base	Total surface	BF/ stream-	Base flow
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	flow (ft3/s)	flow (ft3/s)	runoff (ft3/s)	flow (in)	flow (in)	runoff (in)	flow (%)	(ft3/s/ mi2)
Oct.	112.32	110.84	1.49	0.309	0.305	0.004	98.68	0.265
Nov.	132.77	112.38	20.39	0.354	0.299	0.054	84.64	0.268
Dec.	129.58	105.69	23.89	0.357	0.291	0.066	81.56	0.252
Jan.	184.45	153.94	30.51	0.508	0.424	0.084	83.46	0.367
Feb.	170.71	160.03	10.69	0.424	0.398	0.027	93.74	0.382
Mar.	278.71	227.31	51.40	0.767	0.625	0.141	81.56	0.543
Apr.	564.13	501.92	62.21	1.502	1.337	0.166	88.97	1.198
May	1250.61	1019.39	231.22	3.441	2.805	0.636	81.51	2.433
June	2674.00	1884.34	789.66	7.120	5.018	2.103	70.47	4.497
July	1681.61	1422.65	258.96	4.627	3.914	0.713	84.60	3.395
Aug.	655.19	627.62	27.57	1.803	1.727	0.076	95.79	1.498
Sept.	231.30	227.21	4.09	0.616	0.605	0.011	98.23	0.542
	673.73	547.80	125.93	21.827	17.747	4.080	81.31	1.307

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
Drainage area = 419.00 square miles

Period ending in 2000

interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	173.97	163.04	10.93	0.479	0.449	0.030	93.72	0.389
Nov.	412.13	200.07	212.06	1.097	0.533	0.565	48.55	0.477
Dec.	316.06	274.55	41.52	0.870	0.755	0.114	86.86	0.655
Jan.	234.87	191.91	42.96	0.646	0.528	0.118	81.71	0.458
Feb.	198.93	182.99	15.94	0.512	0.471	0.041	91.99	0.437
Mar.	250.23	246.32	3.90	0.689	0.678	0.011	98.44	0.588
Apr.	787.43	692.39	95.04	2.097	1.844	0.253	87.93	1.652
May	1220.55	906.73	313.82	3.358	2.495	0.863	74.29	2.164
June	1541.00	1349.98	191.02	4.103	3.595	0.509	87.60	3.222
July	715.55	663.41	52.14	1.969	1.825	0.143	92.71	1.583
Aug.	259.32	248.11	11.21	0.714	0.683	0.031	95.68	0.592
Sept.	162.53	152.72	9.82	0.433	0.407	0.026	93.96	0.364
	522.27	439.01	83.26	16.966	14.262	2.705	84.06	1.048

Hydrograph separation by the local minimum method

keystone

Station ID = 12452990
 Drainage area = 419.00 square miles

 Period ending in 2001 interval = 7 days

	Mean stream- flow (ft3/s)	Mean base flow (ft3/s)	Mean surface runoff (ft3/s)	Total stream- flow (in)	Total base flow (in)	Total surface runoff (in)	BF/ stream- flow (%)	Base flow (ft3/s/ mi2)
Oct.	151.13	139.67	11.46	0.416	0.384	0.032	92.42	0.333
Nov.	141.43	131.72	9.71	0.377	0.351	0.026	93.13	0.314
Dec.	118.39	92.36	26.02	0.326	0.254	0.072	78.02	0.220
Jan.	108.29	89.33	18.96	0.298	0.246	0.052	82.49	0.213
Feb.	92.07	82.60	9.47	0.229	0.205	0.024	89.72	0.197
Mar.	125.19	115.52	9.68	0.344	0.318	0.027	92.27	0.276
Apr.	165.13	143.65	21.49	0.440	0.382	0.057	86.99	0.343
May	672.65	430.63	242.01	1.851	1.185	0.666	64.02	1.028
June	497.03	405.59	91.44	1.323	1.080	0.243	81.60	0.968
July	218.16	204.53	13.64	0.600	0.563	0.038	93.75	0.488
Aug.	122.94	115.39	7.54	0.338	0.318	0.021	93.87	0.275
Sept.	87.67	83.42	4.25	0.233	0.222	0.011	95.16	0.199
	209.14	170.01	39.12	6.775	5.508	1.268	81.29	0.406

 Annual base-flow summary

keystone
 Station ID = 12452990
 Drainage area = 419.00 square miles

Local minimum method

 Year starts in October
 Year ends in September

Period ending	in	ft3/s	ft3/s/ mi2	% of stream- flow
1958	-1.000	-1.00	-1.000	-1.00
1959	15.127	466.92	1.114	84.14
1960	13.145	404.65	0.966	74.51
1961	13.379	412.97	0.986	80.73
1962	9.319	287.64	0.686	81.66
1963	10.664	329.17	0.786	83.35
1964	12.226	376.35	0.898	85.76
1965	11.541	356.25	0.850	79.81
1966	9.543	294.57	0.703	79.01
1967	11.931	368.28	0.879	76.88
1968	13.076	402.52	0.961	76.64

1969	12.973	400.43	0.956	77.50
1970	8.183	252.57	0.603	74.26
1971	14.094	435.03	1.038	73.68
1972	19.421	597.83	1.427	78.98
1973	8.852	273.25	0.652	83.77
1974	18.320	565.49	1.350	77.39
1975	12.979	400.63	0.956	77.51
1976	18.394	566.23	1.351	84.29
1977	6.696	206.67	0.493	85.20
1978	14.971	462.10	1.103	78.66
1979	8.093	249.81	0.596	80.58
1980	12.188	375.19	0.895	84.72
1981	11.913	367.72	0.878	81.30
1982	13.878	428.38	1.022	75.96
1983	14.624	451.39	1.077	79.51
1984	13.526	416.38	0.994	82.92
1985	8.722	269.24	0.643	80.50
1986	9.369	289.19	0.690	71.05
1987	9.939	306.80	0.732	76.72
1988	9.836	302.76	0.723	81.31
1989	9.878	304.90	0.728	73.11
1990	11.778	363.54	0.868	86.38
1991	15.496	478.31	1.142	78.13
1992	9.605	295.67	0.706	82.87
1993	8.314	256.64	0.613	88.70
1994	7.833	241.79	0.577	80.73
1995	15.215	469.64	1.121	84.03
1996	18.057	555.84	1.327	78.35
1997	17.641	544.53	1.300	77.85
1998	15.520	479.07	1.143	84.76
1999	17.747	547.80	1.307	81.31
2000	14.262	439.01	1.048	84.06
2001	5.508	170.01	0.406	81.29
median	12.226	376.35	0.898	80.58

Annual base-flow summary ordered by frequency

keystone
Station ID = 12452990
Drainage area = 419.00 square miles

Local minimum method

Year starts in October
Year ends in September

Cum dist	in	ft3/s/ mi2	year
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-1.0	-1.000	-1.000	1958
2.3	5.508	0.406	2001
4.5	6.696	0.493	1977
6.8	7.833	0.577	1994

9.1	8.093	0.596	1979
11.4	8.183	0.603	1970
13.6	8.314	0.613	1993
15.9	8.722	0.643	1985
18.2	8.852	0.652	1973
20.5	9.319	0.686	1962
22.7	9.369	0.690	1986
25.0	9.543	0.703	1966
27.3	9.605	0.706	1992
29.5	9.836	0.723	1988
31.8	9.878	0.728	1989
34.1	9.939	0.732	1987
36.4	10.664	0.786	1963
38.6	11.541	0.850	1965
40.9	11.778	0.868	1990
43.2	11.913	0.878	1981
45.5	11.931	0.879	1967
47.7	12.188	0.895	1980
50.0	12.226	0.898	1964
52.3	12.973	0.956	1969
54.5	12.979	0.956	1975
56.8	13.076	0.961	1968
59.1	13.145	0.966	1960
61.4	13.379	0.986	1961
63.6	13.526	0.994	1984
65.9	13.878	1.022	1982
68.2	14.094	1.038	1971
70.5	14.262	1.048	2000
72.7	14.624	1.077	1983
75.0	14.971	1.103	1978
77.3	15.127	1.114	1959
79.5	15.215	1.121	1995
81.8	15.496	1.142	1991
84.1	15.520	1.143	1998
86.4	17.641	1.300	1997
88.6	17.747	1.307	1999
90.9	18.057	1.327	1996
93.2	18.320	1.350	1974
95.5	18.394	1.351	1976
97.7	19.421	1.427	1972

Seasonal-distribution table

keystone
Station ID = 12452990
Drainage area = 419.00 square miles

Local minimum method

Year starts in October
Year ends in September

Month	Base flow (in)	Runoff (in)
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October	0.384	0.045
November	0.395	0.108
December	0.393	0.123
January	0.376	0.077
February	0.385	0.056
March	0.546	0.070
April	0.974	0.194
May	2.575	0.981
June	3.367	1.120
July	1.828	0.277
August	0.747	0.045
September	0.426	0.026

Flow duration table for total flow, local minimum method
at keystone (1958-2001)

Lower class limit	Cases equal or exceeding lower limit and less than upper limit		Cases equal or exceeding lower class limit	
	Cases	Percent	Cases	Percent
0.00	0	0.00	16068	100.00
49.00	0	0.00	16068	100.00
57.00	2	0.01	16068	100.00
66.00	10	0.06	16066	99.99
75.00	64	0.40	16056	99.93
87.00	333	2.07	15992	99.53
100.00	1473	9.17	15659	97.45
120.00	979	6.09	14186	88.29
130.00	1936	12.05	13207	82.19
150.00	2042	12.71	11271	70.15
180.00	784	4.88	9229	57.44
200.00	1089	6.78	8445	52.56
230.00	858	5.34	7356	45.78
270.00	722	4.49	6498	40.44
310.00	672	4.18	5776	35.95
360.00	490	3.05	5104	31.76
410.00	444	2.76	4614	28.72
470.00	379	2.36	4170	25.95
540.00	400	2.49	3791	23.59
630.00	319	1.99	3391	21.10
720.00	384	2.39	3072	19.12
830.00	304	1.89	2688	16.73
950.00	356	2.22	2384	14.84
1100.00	383	2.38	2028	12.62
1300.00	354	2.20	1645	10.24
1500.00	310	1.93	1291	8.03
1700.00	246	1.53	981	6.11
1900.00	267	1.66	735	4.57
2200.00	209	1.30	468	2.91
2600.00	91	0.57	259	1.61
2900.00	70	0.44	168	1.05

3400.00	56	0.35	98	0.61
3900.00	27	0.17	42	0.26
4500.00	10	0.06	15	0.09
5200.00	5	0.03	5	0.03
6000.00	0	0.00	0	0.00
100000.00	0	0.00	0	0.00

Flow duration table for surface runoff, local minimum method
at keystone (1958-2001)

Lower class limit	Cases equal or exceeding lower limit and less than upper limit		Cases equal or exceeding lower class limit	
	Cases	Percent	Cases	Percent
0.00	3393	21.12	16068	100.00
0.10	7	0.04	12675	78.88
0.12	0	0.00	12668	78.84
0.13	5	0.03	12668	78.84
0.15	15	0.09	12663	78.81
0.18	7	0.04	12648	78.72
0.20	7	0.04	12641	78.67
0.23	25	0.16	12634	78.63
0.27	10	0.06	12609	78.47
0.31	18	0.11	12599	78.41
0.36	22	0.14	12581	78.30
0.41	21	0.13	12559	78.16
0.47	42	0.26	12538	78.03
0.54	42	0.26	12496	77.77
0.63	24	0.15	12454	77.51
0.72	48	0.30	12430	77.36
0.83	48	0.30	12382	77.06
0.95	92	0.57	12334	76.76
1.10	88	0.55	12242	76.19
1.30	72	0.45	12154	75.64
1.50	110	0.68	12082	75.19
1.70	93	0.58	11972	74.51
1.90	170	1.06	11879	73.93
2.20	203	1.26	11709	72.87
2.60	145	0.90	11506	71.61
2.90	243	1.51	11361	70.71
3.40	214	1.33	11118	69.19
3.90	273	1.70	10904	67.86
4.50	339	2.11	10631	66.16
5.20	349	2.17	10292	64.05
6.00	344	2.14	9943	61.88
6.90	376	2.34	9599	59.74
7.90	351	2.18	9223	57.40
9.10	255	1.59	8872	55.22
10.00	490	3.05	8617	53.63
12.00	456	2.84	8127	50.58
14.00	406	2.53	7671	47.74
16.00	358	2.23	7265	45.21
18.00	453	2.82	6907	42.99

21.00	381	2.37	6454	40.17
24.00	491	3.06	6073	37.80
28.00	381	2.37	5582	34.74
32.00	335	2.08	5201	32.37
37.00	347	2.16	4866	30.28
43.00	270	1.68	4519	28.12
49.00	345	2.15	4249	26.44
57.00	277	1.72	3904	24.30
66.00	216	1.34	3627	22.57
75.00	251	1.56	3411	21.23
87.00	245	1.52	3160	19.67
100.00	294	1.83	2915	18.14
120.00	131	0.82	2621	16.31
130.00	241	1.50	2490	15.50
150.00	277	1.72	2249	14.00
180.00	138	0.86	1972	12.27
200.00	172	1.07	1834	11.41
230.00	190	1.18	1662	10.34
270.00	156	0.97	1472	9.16
310.00	179	1.11	1316	8.19
360.00	137	0.85	1137	7.08
410.00	130	0.81	1000	6.22
470.00	130	0.81	870	5.41
540.00	116	0.72	740	4.61
630.00	96	0.60	624	3.88
720.00	91	0.57	528	3.29
830.00	95	0.59	437	2.72
950.00	77	0.48	342	2.13
1100.00	90	0.56	265	1.65
1300.00	35	0.22	175	1.09
1500.00	37	0.23	140	0.87
1700.00	31	0.19	103	0.64
1900.00	25	0.16	72	0.45
2200.00	23	0.14	47	0.29
2600.00	9	0.06	24	0.15
2900.00	13	0.08	15	0.09
3400.00	0	0.00	2	0.01
4500.00	0	0.00	0	0.00
10000.00	0	0.00	0	0.00

Flow duration table for base flow, local minimum method
at keystone (1958-2001)

Lower class limit	Cases equal or exceeding lower limit and less than upper limit		Cases equal or exceeding lower class limit	
	Cases	Percent	Cases	Percent
0.00	0	0.00	16068	100.00
49.00	0	0.00	16068	100.00
57.00	8	0.05	16068	100.00
66.00	29	0.18	16060	99.95
75.00	178	1.11	16031	99.77
87.00	578	3.60	15853	98.66

100.00	2096	13.04	15275	95.06
120.00	1200	7.47	13179	82.02
130.00	2070	12.88	11979	74.55
150.00	1558	9.70	9909	61.67
180.00	671	4.18	8351	51.97
200.00	1016	6.32	7680	47.80
230.00	861	5.36	6664	41.47
270.00	699	4.35	5803	36.12
310.00	555	3.45	5104	31.76
360.00	489	3.04	4549	28.31
410.00	427	2.66	4060	25.27
470.00	374	2.33	3633	22.61
540.00	353	2.20	3259	20.28
630.00	303	1.89	2906	18.09
720.00	443	2.76	2603	16.20
830.00	411	2.56	2160	13.44
950.00	328	2.04	1749	10.88
1100.00	367	2.28	1421	8.84
1300.00	387	2.41	1054	6.56
1500.00	268	1.67	667	4.15
1700.00	218	1.36	399	2.48
1900.00	138	0.86	181	1.13
2200.00	33	0.21	43	0.27
2600.00	6	0.04	10	0.06
2900.00	4	0.02	4	0.02
3400.00	0	0.00	0	0.00
100000.00	0	0.00	0	0.00