

03498850 LITTLE RIVER NEAR ALCOA, TN

LOCATION.--Lat 35°48'32", long 83°55'36", Blount County, Hydrologic Unit 06010201, at Singleton Bend on left bank, 3.0 mi northeast of Alcoa, and at mile 9.7.

DRAINAGE AREA.--300 mi².

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 814.22 ft above NGVD of 1929.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Diurnal fluctuations at low flow caused by small mills above station. The town of Maryville diverts an average of about 4.0 ft³/s (2.6 MGD) for municipal supply 7.6 mi upstream from gage and the town of Alcoa at the gage diverts about 17.2 ft³/s (11.1 MGD). Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge not determined, May 6, gage height 21.10 ft; minimum 103 ft³/s, Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	246	605	433	725	950	1,630	390	441	371	206	696	227
2	205	486	394	717	778	1,290	385	416	340	1,540	623	188
3	176	405	385	888	678	1,070	373	438	331	1,190	733	164
4	156	372	434	856	1,380	912	370	377	337	701	508	332
5	139	367	1,820	771	1,250	822	488	691	332	588	512	514
6	167	802	1,350	698	964	1,640	581	e9,600	297	614	489	299
7	159	770	921	627	974	1,400	641	e9,700	300	572	2,080	237
8	240	616	727	578	799	1,090	694	4,420	662	482	1,280	215
9	182	521	620	563	697	936	3,790	2,300	418	427	603	196
10	164	462	566	533	685	805	4,330	1,480	349	1,750	495	179
11	155	1,850	765	486	652	723	4,740	1,250	311	1,670	475	166
12	182	1,990	647	448	590	665	2,480	1,040	367	1,550	543	156
13	175	1,530	708	422	546	624	1,670	868	327	916	430	150
14	167	956	963	409	853	609	1,250	772	300	725	370	144
15	151	738	748	389	3,810	574	1,010	726	302	596	333	143
16	310	766	669	369	3,780	551	858	933	304	502	566	138
17	363	858	607	362	2,630	538	791	680	398	454	465	129
18	271	806	557	335	1,740	520	990	771	357	413	380	121
19	218	725	537	326	1,250	512	824	622	539	363	320	115
20	202	684	1,300	311	1,020	504	737	610	450	324	281	110
21	345	874	928	412	961	483	741	691	355	293	267	107
22	245	978	787	563	e6,500	455	712	910	307	506	250	193
23	201	787	679	465	e5,400	430	630	871	274	695	238	833
24	180	668	1,040	376	2,510	412	585	720	245	622	217	331
25	168	593	1,530	388	1,630	392	557	623	223	473	201	232
26	161	539	1,200	404	1,370	382	581	572	206	390	191	190
27	165	568	945	365	2,090	371	521	511	209	345	195	174
28	180	502	786	344	2,380	357	471	464	229	322	187	243
29	756	465	680	940	---	357	438	457	209	332	183	195
30	1,680	458	612	1,860	---	460	411	445	187	292	178	158
31	885	---	564	1,210	---	447	---	398	---	577	192	---
TOTAL	8,994	22,741	24,902	18,140	48,867	21,961	33,039	44,797	9,836	20,430	14,481	6,579
MEAN	290	758	803	585	1,745	708	1,101	1,445	328	659	467	219
MAX	1,680	1,990	1,820	1,860	6,500	1,640	4,740	9,700	662	1,750	2,080	833
MIN	139	367	385	311	546	357	370	377	187	206	178	107

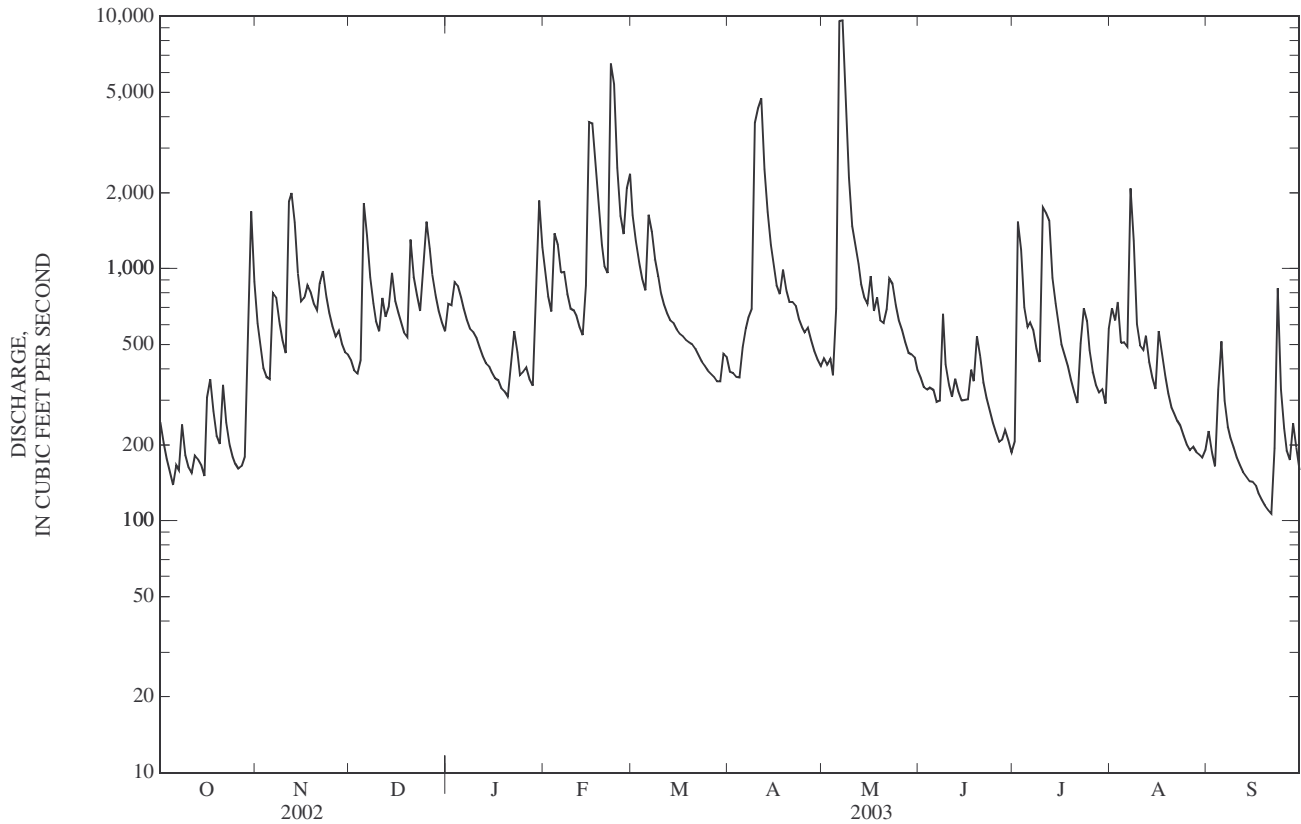
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2003, BY WATER YEAR (WY)

MEAN	184	316	594	859	1,012	1,049	801	586	449	340	237	208
MAX	779	783	1,624	1,410	1,980	2,764	2,008	1,445	1,335	782	586	1,123
(WY)	(1990)	(1990)	(1992)	(1996)	(1994)	(1994)	(1994)	(2003)	(1989)	(1999)	(1994)	(1989)
MIN	43.4	60.6	176	432	427	403	295	199	73.6	106	69.0	59.8
(WY)	(1988)	(1988)	(1988)	(1988)	(2002)	(1988)	(1995)	(1988)	(1988)	(1988)	(1987)	(1998)

03498850 LITTLE RIVER NEAR ALCOA, TN—Continued

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 1987 - 2003	
ANNUAL TOTAL	274767			
ANNUAL MEAN	753		560	
HIGHEST ANNUAL MEAN			953	1994
LOWEST ANNUAL MEAN			220	1988
HIGHEST DAILY MEAN	9700	May 7	28,000	Mar 28, 1994
LOWEST DAILY MEAN	107	Sep 21	28	Jul 10, 1988
ANNUAL SEVEN-DAY MINIMUM	123	Sep 15	35	Oct 14, 1987
MAXIMUM PEAK FLOW	undetermined		undetermined	
MAXIMUM PEAK STAGE	21.10	May 6	25.63	Mar 28, 1994
INSTANTANEOUS LOW FLOW	103	Sep 22	21	Sep 16, 1998
10 PERCENT EXCEEDS	1370		1,090	
50 PERCENT EXCEEDS	514		350	
90 PERCENT EXCEEDS	188		90	

e Estimated



03518500 TELlico RIVER AT TELlico PLAINS, TN

LOCATION.--Lat 35°21'42", long 84°16'44", Monroe County, Hydrologic Unit 06010204, on right bank 1,300 ft upstream from bridge on Tellico Plains-Ballplay Road, 0.4 mi downstream from Laurel Creek, 0.8 mi east of Tellico Plains, and at mile 28.2.

DRAINAGE AREA.--118 mi².

PERIOD OF RECORD.--July 1925 to February 1982, December 2000 to current year. Published as "near Tellico Plains" October 1927 to September 1930.

REVISED RECORDS.--WSP 1336: 1927-28(M), 1936, 1940, 1944.

GAGE.--Data collection platform. Datum of gage is 846.64 ft NGVD of 1929. July 20, 1925 to Sept. 30, 1927, nonrecording gage at same site and datum. Oct. 1, 1927, to Sept. 30, 1930, nonrecording gage at site 0.5 mi upstream at datum 8.29 ft higher.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Flood in May 1840 reached a stage of 15 ft, discharge, about 21,500 ft³/s, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 22	1130	6,640	9.67	May 6	1600	*19,100	*13.98
May 5	1945	7,800	10.23	May 7	1115	6,960	9.83
May 6	0245	16,400	13.24				

Minimum discharge, 79 ft³/s, Sept. 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	333	232	465	445	747	219	259	290	364	447	125
2	149	272	218	421	376	626	216	260	269	1,290	356	113
3	134	236	212	492	341	528	207	274	269	632	530	111
4	121	241	228	446	767	467	203	230	308	404	1,130	300
5	136	237	616	410	595	434	331	2,220	258	336	465	190
6	124	524	499	373	479	876	306	12,100	234	300	441	137
7	134	413	384	334	512	702	419	4,250	461	327	515	128
8	133	329	329	320	440	560	443	1,870	393	279	401	138
9	109	285	299	310	393	491	1,570	1,080	293	246	317	120
10	104	266	283	308	384	433	1,510	823	255	251	317	115
11	160	538	370	275	338	394	1,240	782	238	490	377	111
12	141	672	333	253	319	364	793	636	321	396	344	108
13	120	548	405	245	300	342	578	545	247	330	294	103
14	112	411	583	237	409	325	467	485	286	421	243	99
15	109	363	450	227	1,240	316	408	467	366	321	233	116
16	214	541	382	220	839	303	370	543	268	308	240	105
17	172	522	341	221	701	294	369	532	341	392	205	95
18	142	447	312	201	571	296	482	849	305	298	188	91
19	126	401	299	215	499	318	380	602	292	328	168	87
20	116	355	821	206	456	305	349	487	261	259	165	84
21	121	521	555	257	475	281	408	523	227	232	209	82
22	118	512	459	291	2,960	262	376	1,280	207	276	200	487
23	106	418	388	237	1,550	249	340	990	195	356	163	437
24	101	357	875	335	954	238	321	671	184	260	149	197
25	98	321	873	310	742	228	318	539	176	226	140	151
26	105	299	644	235	703	223	313	476	170	217	135	133
27	102	328	517	210	1,070	216	283	418	184	234	130	137
28	264	278	444	201	995	207	262	375	176	197	136	244
29	407	261	394	571	---	241	248	352	182	187	139	156
30	739	256	359	809	---	255	251	330	208	235	136	143
31	470	---	336	546	---	230	---	312	---	264	131	---
TOTAL	5,361	11,485	13,440	10,181	19,853	11,751	13,980	35,560	7,864	10,656	9,044	4,643
MEAN	173	383	434	328	709	379	466	1,147	262	344	292	155
MAX	739	672	875	809	2,960	876	1,570	12,100	461	1,290	1,130	487
MIN	98	236	212	201	300	207	203	230	170	187	130	82
CFSM	1.47	3.24	3.67	2.78	6.01	3.21	3.95	9.72	2.22	2.91	2.47	1.31
IN.	1.69	3.62	4.24	3.21	6.26	3.70	4.41	11.21	2.48	3.36	2.85	1.46

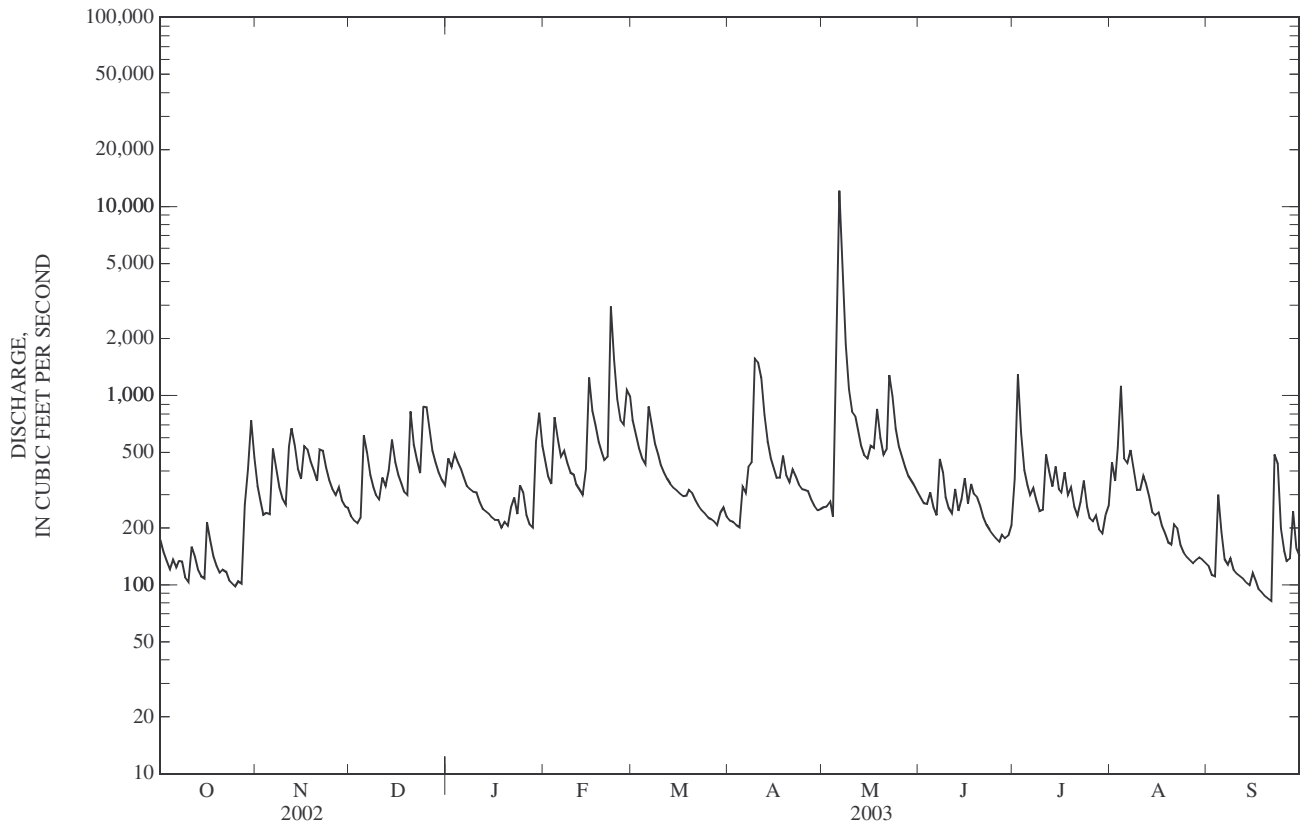
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2003, BY WATER YEAR (WY)

MEAN	103	188	308	435	482	520	427	302	209	193	149	109
MAX	303	980	973	1,033	972	1,039	823	1,147	559	557	459	486
(WY)	(1973)	(1930)	(1927)	(1947)	(1957)	(1963)	(1964)	(2003)	(1957)	(1949)	(1938)	(1928)
MIN	28.4	37.7	60.8	67.7	115	206	161	106	75.0	61.0	28.6	22.4
(WY)	(1955)	(1940)	(1940)	(1981)	(1941)	(1981)	(1967)	(1941)	(1936)	(1944)	(1925)	(1925)

03518500 TELLICO RIVER AT TELLICO PLAINS, TN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1925 - 2003	
ANNUAL TOTAL	95,167		153,818			
ANNUAL MEAN	261		421		286	
HIGHEST ANNUAL MEAN					474 1929	
LOWEST ANNUAL MEAN					147 1940	
HIGHEST DAILY MEAN	2,400	Jan 25	12,100	May 6	12,100	May 6, 2003
LOWEST DAILY MEAN	40	Sep 12	82	Sep 21	14	Sep 7, 1925
ANNUAL SEVEN-DAY MINIMUM	44	Sep 8	94	Sep 15	15	Sep 6, 1925
MAXIMUM PEAK FLOW			19,100	May 6	a19,900	Mar 16, 1973
MAXIMUM PEAK STAGE			13.98	May 6	b14.18	Mar 16, 1973
INSTANTANEOUS LOW FLOW			79	Sep 22	46	Jan 3, 2001
ANNUAL RUNOFF (CFSM)	2.21		3.57		2.42	
ANNUAL RUNOFF (INCHES)	30.00		48.49		32.88	
10 PERCENT EXCEEDS	497		671		560	
50 PERCENT EXCEEDS	186		312		190	
90 PERCENT EXCEEDS	72		133		61	

a From rating curve extended above 12,000 ft³/s on basis of slope-area measurement of peak flow.
 b From cross line in well.



03528000 CLINCH RIVER ABOVE TAZEWEILL, TN

LOCATION.--Lat 36°25'30", long 83°23'54", Claiborne County, Hydrologic Unit 06010205, on right bank 0.4 mi upstream from Grissom Island, 4.6 mi downstream from Big War Creek, 10 mi east of Tazewell, and at mile 159.8.

DRAINAGE AREA.--1,474 mi².

PERIOD OF RECORD.--October 1918 to current year. Published as "near Lone Mountain" October 1918 to September 1927; as "near Tazewell" August 1927 to December 1936; and as "above Tazewell" July 1935 to current year. Prior to April 1919, monthly discharge only, published in WSP 1306. Gage-height record "near Tazewell" January 1937 to July 1941.

REVISED RECORDS.--WSP 803: Drainage area at site "near Tazewell". WSP 1306: Drainage area at site "near Lone Mountain". WSP 1336: 1928.

GAGE.--Data collection platform. Datum of gage is 1,060.7 ft above NGVD of 1929. April 1, 1919, to Sept. 30, 1927, nonrecording gage on railroad bridge 23.3 mi downstream at datum 102.7 ft lower. Aug. 8, 1927, to July 16, 1941, water-stage recorder at site 8.0 mi downstream at datum 47.2 ft lower. Water-stage recorder at present site and datum since July 29, 1935.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1862 reached a stage of about 24 ft, present site and datum, from information by local resident, discharge, about 66,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 17	0200	*40,800	*18.01	Apr 12	0030	28,900	14.72
Feb 23	1630	28,500	14.60				

Minimum discharge, 192 ft³/s, Oct. 9, 10, 11.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	469	1,140	1,520	2,030	2,940	7,100	1,120	1,740	1,630	1,910	2,600	764
2	376	1,010	1,340	1,910	2,640	6,420	1,140	1,630	1,550	2,580	1,900	920
3	312	814	1,190	1,880	2,410	5,260	1,150	1,640	1,510	3,570	1,680	822
4	275	678	1,110	2,330	2,970	4,290	1,190	1,570	1,420	2,950	2,670	798
5	253	640	3,830	3,710	5,330	3,610	1,310	1,540	1,310	2,380	2,890	1,550
6	230	1,280	7,230	3,420	5,630	3,240	1,450	2,490	1,240	1,860	2,040	2,230
7	218	1,820	6,870	2,930	4,210	2,930	4,000	2,860	1,410	1,870	2,310	1,430
8	203	1,530	4,360	2,570	3,330	2,600	7,900	2,490	4,780	2,250	2,900	1,070
9	194	1,380	3,120	2,330	2,720	2,340	9,360	2,760	6,040	2,550	3,450	866
10	192	1,150	2,470	2,160	2,330	2,140	15,600	4,530	3,700	3,350	2,910	746
11	197	5,000	2,710	2,000	2,130	1,960	26,300	3,200	2,620	5,020	2,860	663
12	199	8,520	4,100	1,840	2,000	1,810	24,800	2,530	2,300	5,060	2,160	603
13	201	8,510	4,450	1,670	1,850	1,720	11,500	1,990	2,180	3,830	1,970	559
14	199	6,410	4,400	1,520	1,770	1,740	6,460	1,640	1,950	3,670	1,650	528
15	205	3,630	4,870	1,420	5,860	1,670	4,690	1,430	3,310	2,700	1,360	505
16	264	2,560	4,300	1,340	30,800	1,600	3,680	1,500	5,870	2,310	1,410	481
17	330	2,330	3,460	1,260	37,400	1,520	3,160	1,730	8,450	1,930	2,110	484
18	866	2,490	2,810	1,170	19,900	1,460	4,200	3,020	7,420	1,580	3,610	499
19	959	2,790	2,370	1,110	8,410	1,440	9,430	2,800	7,970	1,340	4,170	509
20	691	2,520	4,270	1,060	5,830	1,400	6,580	2,300	8,750	1,170	2,480	476
21	560	2,460	6,400	1,030	4,590	1,340	4,850	2,050	6,100	1,040	1,790	439
22	462	3,230	4,970	1,010	11,500	1,280	4,120	2,080	4,080	988	1,440	476
23	394	3,390	3,750	977	26,800	1,230	3,460	2,320	3,030	1,090	1,260	604
24	350	3,220	3,070	803	23,000	1,170	2,940	2,050	2,390	1,040	1,100	610
25	324	2,610	3,620	750	11,500	1,120	2,560	2,020	1,950	956	964	611
26	318	2,080	4,840	759	7,230	1,080	2,550	1,810	1,660	877	860	564
27	318	1,800	4,660	777	6,320	1,060	2,550	1,670	1,450	788	781	561
28	330	1,680	3,780	870	6,550	1,030	2,250	1,470	1,290	709	719	625
29	500	1,870	3,090	1,080	---	1,020	2,000	1,380	1,170	736	675	594
30	1,080	1,720	2,600	2,110	---	1,030	1,820	1,390	1,180	1,020	637	559
31	1,390	---	2,240	2,590	---	1,070	---	1,490	---	1,850	687	---
TOTAL	12,859	80,262	113,800	52,416	247,950	68,680	174,120	65,120	99,710	64,974	60,043	22,146
MEAN	415	2,675	3,671	1,691	8,855	2,215	5,804	2,101	3,324	2,096	1,937	738
MAX	1,390	8,520	7,230	3,710	37,400	7,100	26,300	4,530	8,750	5,060	4,170	2,230
MIN	192	640	1,110	750	1,770	1,020	1,120	1,380	1,170	709	637	439
MED	318	2,210	3,750	1,520	5,480	1,600	3,570	1,990	2,240	1,870	1,900	604
CFSM	0.28	1.82	2.49	1.15	6.01	1.50	3.94	1.43	2.25	1.42	1.31	0.50
IN.	0.32	2.03	2.87	1.32	6.26	1.73	4.39	1.64	2.52	1.64	1.52	0.56

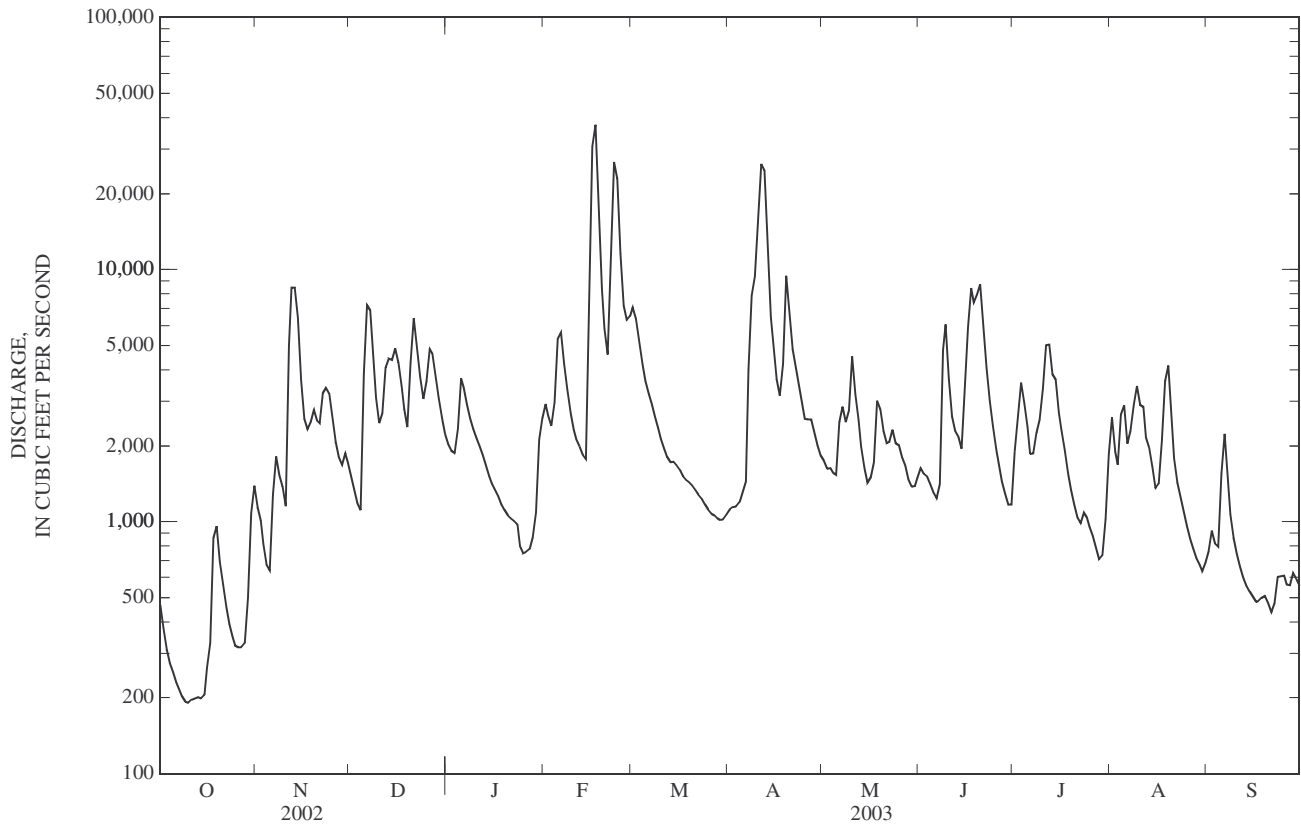
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2003, BY WATER YEAR (WY)

MEAN	640	1,095	2,297	3,399	4,122	4,252	3,107	2,281	1,295	980	872	526
MAX	2,871	4,794	9,107	9,500	9,426	11,950	8,860	6,382	3,865	3,251	4,411	2,939
(WY)	(1990)	(1978)	(1927)	(1937)	(1957)	(1963)	(1977)	(1929)	(1989)	(1938)	(1942)	(1989)
MIN	145	159	217	285	572	990	711	547	301	239	169	136
(WY)	(1964)	(1940)	(1940)	(1940)	(1941)	(1988)	(1986)	(1941)	(1988)	(1988)	(1925)	(1955)

03528000 CLINCH RIVER ABOVE TAZEWELL, TN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1919 - 2003	
ANNUAL TOTAL	681,768		1,062,080		2,063	
ANNUAL MEAN	1,868		2,910		3,269	
HIGHEST ANNUAL MEAN					850	1927
LOWEST ANNUAL MEAN					116	1941
HIGHEST DAILY MEAN	51,200	Mar 19	37,400	Feb 17	83,300	Apr 5, 1977
LOWEST DAILY MEAN	115	Sep 16	192	Oct 10	108	Sep 11, 1925
ANNUAL SEVEN-DAY MINIMUM	118	Sep 13	198	Oct 8	116	Sep 17, 1955
MAXIMUM PEAK FLOW			40,800	Feb 17	98,100	Apr 5, 1977
MAXIMUM PEAK STAGE			18.01	Feb 17	a29.32	Apr 5, 1977
INSTANTANEOUS LOW FLOW			b192	Oct 9	108	Sep 11, 1925
ANNUAL RUNOFF (CFSM)	1.27		1.97		1.40	
ANNUAL RUNOFF (INCHES)	17.21		26.80		19.02	
10 PERCENT EXCEEDS	4,000		5,840		4,630	
50 PERCENT EXCEEDS	733		1,870		1,100	
90 PERCENT EXCEEDS	203		560		264	

a From floodmarks.
 b Also occurred on Oct. 10, 11.



03532000 POWELL RIVER NEAR ARTHUR, TN

LOCATION.--Lat 36°32'30", long 83°37'49", Claiborne County, Hydrologic Unit 06010206, on left bank, 500 ft upstream from bridge on U.S. Highway 25E, 2.3 mi east of Arthur, 2.4 mi downstream from Indian Creek, and at mile 65.4.

DRAINAGE AREA.--685 mi².

PERIOD OF RECORD.--October 1919 to February 1982, October 1996 to current year. Gage-height records collected at same site December 1892 to August 1893, September 1904 to March 1925 are in reports of U.S. Weather Bureau (published as "near Tazewell").

REVISED RECORDS.--WSP 1336: 1920, 1921(M), 1923.

GAGE.--Water-stage recorder. Datum of gage is 1,043.84 ft above NGVD of 1929, Tennessee River Survey datum. Prior to July 23, 1927, nonrecording gage, and July 23, 1927, to Sept. 30, 1970, water-stage recorder, at same site at datum 2.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in March 1826 reached a stage of 29.5 ft present datum, discharge, 34,000 ft³/s, and flood of Jan. 29, 1918, reached a stage of 29.2 ft present datum, discharge, 33,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 12	1215	9,490	13.94	Feb 23	2315	16,400	19.62
Feb 17	1900	*29,800	*27.60	Apr 12	0100	14,600	18.28

Minimum discharge, 114 ft³/s, Oct. 8, 10.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	972	620	1,170	1,310	3,070	584	1,110	835	861	754	219
2	221	620	577	1,200	1,160	2,840	568	982	844	931	779	242
3	178	434	527	1,120	1,070	2,460	527	950	766	1,100	797	327
4	151	354	527	1,050	1,350	2,070	516	909	748	1,060	781	384
5	140	356	2,690	1,050	2,380	1,810	569	991	726	845	623	348
6	128	965	4,260	1,020	2,620	1,650	618	1,700	735	712	568	662
7	121	1,430	3,340	1,000	1,940	1,510	2,340	2,240	3,230	644	602	523
8	119	1,190	2,190	957	1,610	1,350	4,740	1,980	7,460	616	541	366
9	120	817	1,640	922	1,340	1,220	8,820	1,770	5,630	694	544	303
10	117	651	1,320	890	1,160	1,120	11,400	2,090	2,910	1,260	515	266
11	138	6,050	1,490	833	1,080	1,040	13,800	2,140	1,990	2,290	458	241
12	147	8,420	1,950	761	1,020	970	12,100	1,680	1,650	2,670	411	225
13	130	4,010	2,220	700	945	928	5,540	1,370	1,590	1,850	381	211
14	120	2,540	2,730	655	933	923	3,510	1,130	1,410	1,690	353	200
15	118	1,790	2,690	632	3,920	883	2,640	1,000	1,260	1,370	331	196
16	133	1,410	2,370	615	19,400	836	2,140	967	2,080	1,100	325	189
17	184	1,260	1,910	592	27,600	790	1,890	1,040	3,690	984	428	180
18	222	1,230	1,560	564	17,800	770	2,390	1,420	5,220	872	386	173
19	267	1,200	1,320	541	5,570	750	3,000	1,640	5,650	748	332	169
20	229	1,110	3,010	501	3,700	718	2,830	1,380	5,170	659	318	164
21	211	1,210	4,560	503	2,900	684	2,230	1,220	3,510	598	300	158
22	190	1,540	3,410	493	6,570	658	1,880	1,200	2,450	637	279	200
23	168	1,720	2,340	480	13,800	628	1,630	1,160	1,870	726	271	317
24	155	1,490	1,910	459	12,000	607	1,420	1,030	1,510	613	273	284
25	146	1,210	2,190	407	5,290	582	1,270	954	1,240	556	267	321
26	152	1,010	2,490	369	3,690	565	1,310	897	1,060	484	248	270
27	152	898	2,270	397	3,290	553	1,510	824	948	437	230	223
28	163	806	1,910	382	3,200	542	1,410	775	861	414	220	241
29	295	739	1,640	499	---	540	1,210	750	790	439	212	235
30	1,200	672	1,410	1,230	---	554	1,280	769	738	482	204	350
31	1,560	---	1,230	1,470	---	568	---	834	---	604	205	---
TOTAL	7,669	48,104	64,301	23,462	148,648	34,189	95,672	38,902	68,571	28,946	12,936	8,187
MEAN	247	1,603	2,074	757	5,309	1,103	3,189	1,255	2,286	934	417	273
MAX	1,560	8,420	4,560	1,470	27,600	3,070	13,800	2,240	7,460	2,670	797	662
MIN	117	354	527	369	933	540	516	750	726	414	204	158
CFSM	0.36	2.34	3.03	1.10	7.75	1.61	4.66	1.83	3.34	1.36	0.61	0.40
IN.	0.42	2.61	3.49	1.27	8.07	1.86	5.20	2.11	3.72	1.57	0.70	0.44

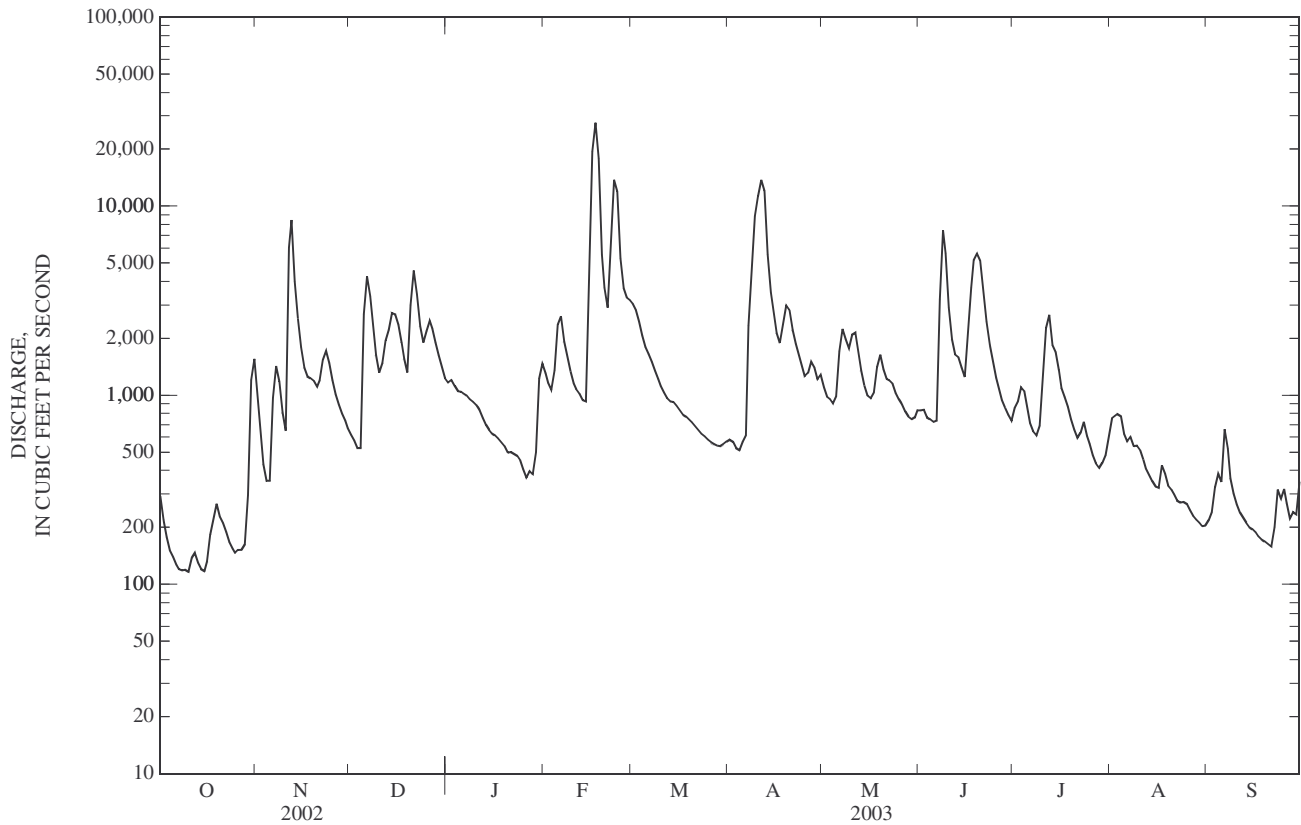
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2003, BY WATER YEAR (WY)

MEAN	314	664	1,317	1,965	2,204	2,367	1,740	1,126	685	555	450	249
MAX	1,648	3,045	5,557	5,812	5,309	6,596	5,224	4,220	2,495	1,917	2,030	1,081
(WY)	(1978)	(1974)	(1927)	(1937)	(2003)	(1963)	(1977)	(1929)	(1928)	(1941)	(1942)	(1928)
MIN	75.5	96.4	117	143	268	887	477	268	168	137	117	79.7
(WY)	(1955)	(1940)	(1966)	(1940)	(1941)	(1931)	(1942)	(1941)	(1936)	(1944)	(1925)	(1955)

03532000 POWELL RIVER NEAR ARTHUR, TN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1920 - 2003	
ANNUAL TOTAL	408,127		579,587		1,129	
ANNUAL MEAN	1,118		1,588		1,858	
HIGHEST ANNUAL MEAN					486	1974
LOWEST ANNUAL MEAN					60	1941
HIGHEST DAILY MEAN	24,400	Mar 19	27,600	Feb 17	50,300	Apr 6, 1977
LOWEST DAILY MEAN	62	Sep 13	117	Oct 10	60	Sep 23, 1955
ANNUAL SEVEN-DAY MINIMUM	68	Sep 9	126	Oct 5	65	Sep 17, 1955
MAXIMUM PEAK FLOW			29,800	Feb 17	59,500	Apr 6, 1977
MAXIMUM PEAK STAGE			27.60	Feb 17	38.96	Apr 6, 1977
INSTANTANEOUS LOW FLOW			a114	Oct 8	47	Jan 6, 1940
ANNUAL RUNOFF (CFSM)	1.63		2.32		1.65	
ANNUAL RUNOFF (INCHES)	22.16		31.48		22.40	
10 PERCENT EXCEEDS	2,300		3,030		2,510	
50 PERCENT EXCEEDS	522		909		578	
90 PERCENT EXCEEDS	125		216		136	

a Also occurred on Oct. 10.



03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TN

LOCATION.--Lat 36°06'52", long 83°59'16", Knox County, Hydrologic Unit 06010207, on left bank on downstream side of bridge on U.S. Highway 441, 2.1 mi downstream from Smith Branch, 4 mi northwest of Halls Crossroads, and at mile 16.3.

DRAINAGE AREA.--68.5 mi².

PERIOD OF RECORD.--October 1957 to December 1986, October 2001 to current year.

GAGE.--Data logger. Datum of gage is 854.91 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges Oct. 1-3, 2001, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,300 ft³/s, April 4, 1977, gage height, 13.28 ft, from rating curve extended above 5,000 ft³/s on basis of contracted-opening measurement of peak flow; minimum, 2.5 ft³/s, Aug. 12, 1974, caused by regulation upstream of unknown origin.

EXTREMES FOR WATER YEARS 2002-2003.- -Peak discharges greater than base discharge of 1,500 ft³/s and maximum (*):

Water Year 2002

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 23	1845	2,450	9.32	Mar 18	1100	*5,730	*10.81
Jan 25	0530	2,260	9.19				

Water Year 2003

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 11	1330	1,790	8.81	Apr 7	1300	2,340	9.25
Feb 16	0900	*12,800	*12.47	Apr 9	1500	2,390	9.28
Feb 22	1345	4,720	10.45	Apr 11	0130	2,110	9.08

Water year 2002: Minimum discharge, 4.9 ft³/s, Aug. 10, 11, Sept. 14.

Water year 2003: Minimum discharge, 15 ft³/s, Sept. 18, 19, 20, 21, 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e14	14	23	32	95	37	273	123	25	22	11	9.0
2	e14	14	19	32	82	38	177	115	23	21	8.5	8.8
3	e14	13	16	32	73	41	143	187	23	28	7.2	8.3
4	13	13	15	32	69	38	121	123	22	43	6.6	7.6
5	13	13	14	32	62	36	105	99	21	17	6.1	7.5
6	15	13	14	32	63	35	93	77	22	13	5.9	7.1
7	15	12	14	32	129	35	84	66	32	11	5.5	7.0
8	14	12	19	32	136	34	77	58	24	10	5.7	6.6
9	13	12	32	32	113	35	167	52	21	9.7	5.5	6.3
10	13	12	37	34	99	38	169	53	20	11	5.2	6.0
11	13	12	97	44	88	34	130	52	19	15	5.6	5.6
12	13	12	46	42	78	36	113	44	19	13	6.1	5.5
13	14	12	79	38	71	39	99	115	18	72	6.5	5.1
14	18	12	168	34	64	38	89	137	19	53	6.2	5.4
15	23	12	114	33	60	36	80	82	21	20	6.0	5.8
16	17	12	76	31	57	73	72	63	19	14	5.4	5.3
17	14	12	66	30	54	825	65	54	19	10	7.6	5.7
18	13	12	103	34	50	3,530	60	84	20	9.3	7.9	5.6
19	13	12	76	581	48	882	56	60	20	8.9	12	5.6
20	14	12	61	409	50	338	53	48	21	9.8	9.3	5.4
21	15	12	52	167	51	232	50	43	22	13	6.9	118
22	14	12	47	121	46	173	49	40	21	8.9	6.9	191
23	14	12	46	1,350	44	145	45	37	21	8.0	8.8	119
24	14	13	53	1,380	42	127	43	35	23	13	11	52
25	17	30	45	1,530	41	114	76	33	23	11	11	40
26	19	25	41	340	41	106	51	32	23	9.0	11	92
27	15	18	38	207	40	99	45	31	23	7.7	11	139
28	14	16	36	161	38	84	46	30	30	7.5	11	81
29	13	15	35	135	---	78	43	28	31	8.4	11	53
30	14	20	34	113	---	86	40	27	24	18	9.9	41
31	14	---	32	97	---	226	---	26	---	30	9.4	---
TOTAL	453	421	1,548	7,199	1,884	7,668	2,714	2,054	669	545.2	247.7	1,055.2
MEAN	14.6	14.0	49.9	232	67.3	247	90.5	66.3	22.3	17.6	7.99	35.2
MAX	23	30	168	1,530	136	3,530	273	187	32	72	12	191
MIN	13	12	14	30	38	34	40	26	18	7.5	5.2	5.1
CFSM	0.21	0.20	0.73	3.39	0.98	3.61	1.32	0.97	0.33	0.26	0.12	0.51
IN.	0.25	0.23	0.84	3.91	1.02	4.16	1.47	1.12	0.36	0.30	0.13	0.57

e Estimated

03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TN—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	63	51	160	87	285	64	71	51	36	218	40
2	35	53	48	135	77	240	61	76	47	301	119	31
3	33	48	46	130	70	195	58	72	46	187	208	57
4	32	48	190	114	148	164	57	63	58	100	237	127
5	36	90	743	105	120	149	96	140	51	71	178	61
6	34	193	250	96	104	179	91	449	44	57	116	41
7	33	104	157	85	110	148	1,440	442	122	50	83	35
8	33	77	125	80	100	135	471	355	100	47	72	32
9	33	65	105	77	90	127	1,680	226	61	56	58	30
10	32	121	93	72	91	117	1,320	163	49	166	50	28
11	57	937	161	64	88	110	1,330	196	46	124	47	27
12	58	224	128	59	81	104	485	145	88	81	43	27
13	45	150	221	56	73	100	317	115	73	65	40	27
14	37	117	286	54	164	98	240	100	55	54	38	23
15	34	99	174	52	1,080	88	190	93	49	47	36	21
16	52	103	139	50	6,100	84	162	91	45	56	42	20
17	51	107	117	50	1,180	81	319	220	209	52	39	18
18	39	92	100	49	469	81	801	310	97	40	36	17
19	35	85	113	49	319	85	321	146	81	37	33	16
20	33	79	611	45	263	80	233	110	67	34	32	16
21	32	153	221	52	228	74	211	143	54	33	31	15
22	30	150	158	51	2,580	69	169	138	47	58	30	108
23	28	116	128	46	1,150	65	142	106	43	75	31	127
24	28	96	203	46	434	62	126	91	40	44	30	43
25	31	82	279	46	313	59	117	78	38	38	29	31
26	37	73	195	46	285	58	122	73	35	34	29	27
27	38	76	153	46	337	57	103	64	40	32	28	124
28	63	65	131	46	347	55	91	59	40	53	28	124
29	114	60	115	75	---	58	83	60	35	63	27	51
30	126	57	102	124	---	79	78	57	33	49	26	38
31	81	---	92	98	---	73	---	54	---	176	28	---
TOTAL	1,386	3,783	5,635	2,258	16,488	3,359	10,978	4,506	1,844	2,316	2,042	1,382
MEAN	44.7	126	182	72.8	589	108	366	145	61.5	74.7	65.9	46.1
MAX	126	937	743	160	6,100	285	1,680	449	209	301	237	127
MIN	28	48	46	45	70	55	57	54	33	32	26	15
CFSM	0.65	1.84	2.65	1.06	8.60	1.58	5.34	2.12	0.90	1.09	0.96	0.67
IN.	0.75	2.05	3.06	1.23	8.95	1.82	5.96	2.45	1.00	1.26	1.11	0.75

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003, BY WATER YEAR (WY)

MEAN	26.7	68.0	129	156	174	205	158	112	60.8	47.5	28.3	21.4
MAX	73.9	322	365	454	589	561	532	575	163	343	76.1	63.1
(WY)	(1973)	(1958)	(1973)	(1974)	(2003)	(1975)	(1977)	(1984)	(1978)	(1967)	(1967)	(1982)
MIN	7.72	11.8	10.8	8.03	44.5	50.7	28.1	25.3	15.9	10.8	7.99	7.52
(WY)	(1964)	(1959)	(1966)	(1981)	(1977)	(1969)	(1986)	(1969)	(1966)	(1964)	(2002)	(1959)

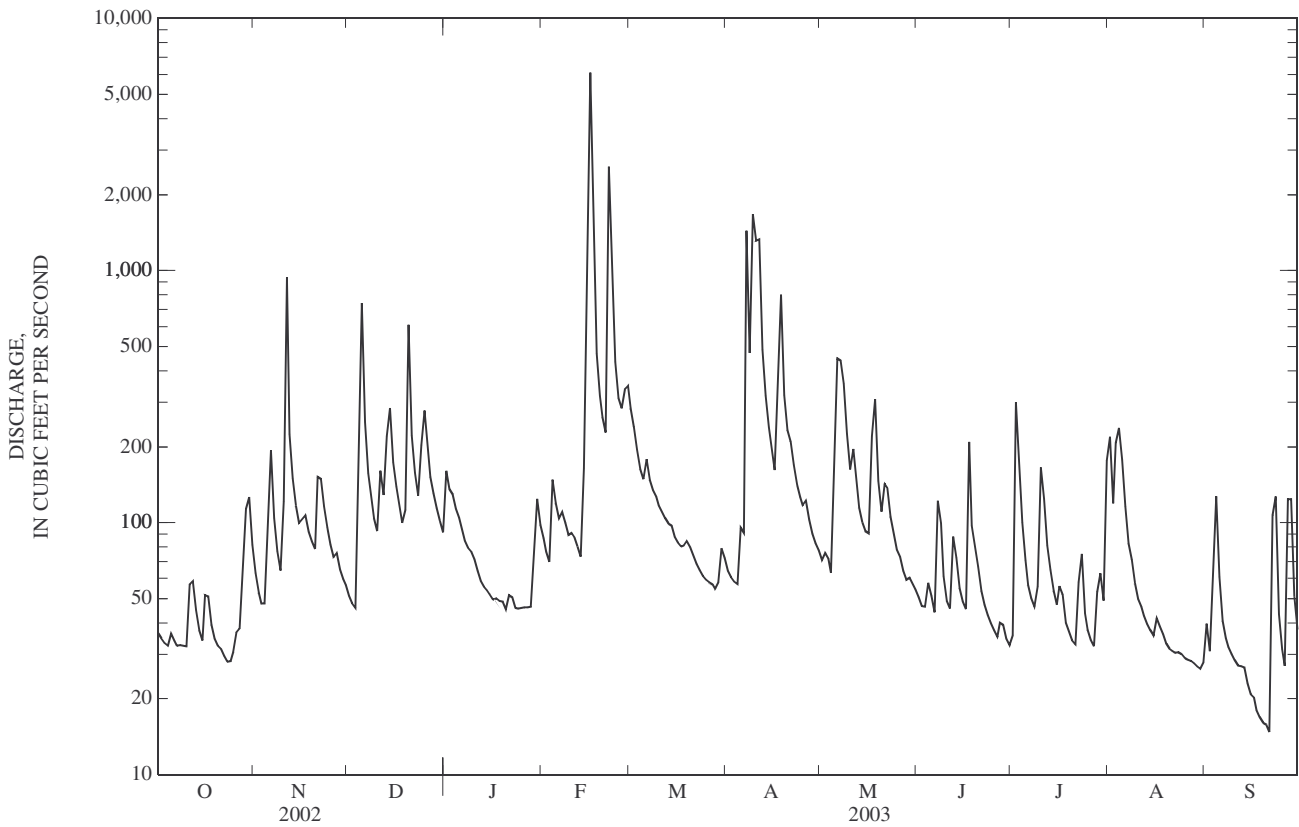
03535000 BULLRUN CREEK NEAR HALLS CROSSROADS, TN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1958 - 2003	
ANNUAL TOTAL	34,840.1		55,977		98.7	
ANNUAL MEAN	95.5		153		37.4	
HIGHEST ANNUAL MEAN					185	1974
LOWEST ANNUAL MEAN					37.4	1986
HIGHEST DAILY MEAN	3,530	Mar 18	6,100	Feb 16	7,400	Apr 4, 1977
LOWEST DAILY MEAN	5.1	Sep 13	15	Sep 21	4.1	Sep 13, 1964
ANNUAL SEVEN-DAY MINIMUM	5.5	Sep 11	18	Sep 15	4.4	Sep 11, 1964
MAXIMUM PEAK FLOW			12,800	Feb 16	a18,300	Apr 4, 1977
MAXIMUM PEAK STAGE			12.47	Feb 16	13.28	Apr 4, 1977
INSTANTANEOUS LOW FLOW	b4.9	Aug 10	c15	Sep 18	2.5	Aug 12, 1974
ANNUAL RUNOFF (CFSM)	1.39		2.24		1.44	
ANNUAL RUNOFF (INCHES)	18.92		30.40		19.58	
10 PERCENT EXCEEDS	161		240		195	
50 PERCENT EXCEEDS	43		76		41	
90 PERCENT EXCEEDS	7.8		32		9.7	

a From rating curve extended above 5,000 ft³/s on basis of contracted-opening measurement of peak flow.

b Also occurred Aug. 11 and Sept. 14, 2002.

c Also occurred Sept. 19, 20, 21, 22.



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03535400 BEAVER CREEK AT SOLWAY, TN

LOCATION.--Lat 35°57'51", long 84°01'41", Knox County, Hydrologic Unit 06010207, at bridge on Solway Road, 1.1 mi southwest of Solway and 5.9 mi southeast of intersection of State Highways 95 and 62 in Oak Ridge.

DRAINAGE AREA.--86.8 mi².

PERIOD OF RECORD.--August 1961 to September 1964, low-flow partial-record site, August 1998 to April 1999, flood crest-stage partial-record site, April 1999 to current year.

GAGE.--Data logger.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb 17	0315	*4,520	*15.79	Feb 23	1145	2,790	12.57

Minimum discharge, 30 ft³/s, Oct. 26, 27, 28.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	123	76	198	180	493	103	126	103	81	369	79
2	57	94	71	240	158	377	90	123	97	484	304	58
3	51	79	67	216	146	306	84	172	93	465	196	96
4	45	79	117	196	211	254	84	125	106	310	346	155
5	41	105	637	171	226	227	108	222	106	158	445	150
6	36	242	747	158	187	267	140	965	87	130	385	96
7	39	213	446	142	191	268	566	1,230	110	116	194	74
8	44	138	232	130	190	207	736	1,150	135	104	157	66
9	38	114	191	124	173	182	840	752	104	93	137	60
10	39	97	170	119	181	170	932	440	83	299	120	54
11	50	447	250	109	189	156	1,060	445	80	513	110	51
12	78	441	254	100	178	146	895	393	85	340	98	50
13	56	272	295	96	159	139	567	245	157	216	89	48
14	45	170	471	90	306	141	357	205	132	190	80	45
15	43	142	403	86	1,130	135	265	196	97	145	72	46
16	97	153	251	86	3,480	125	224	453	113	142	74	46
17	83	156	209	83	3,580	123	389	308	269	153	105	43
18	60	142	178	78	1,500	122	865	397	288	117	95	41
19	50	130	180	74	783	124	772	312	210	99	69	39
20	45	128	579	72	588	125	419	371	161	89	61	37
21	43	177	628	75	487	115	333	310	120	83	74	38
22	41	245	360	93	1,690	104	365	320	100	86	68	179
23	37	193	234	80	2,500	96	261	235	89	127	55	363
24	36	148	354	70	1,260	94	208	196	78	107	51	190
25	35	130	522	65	682	90	189	172	71	82	49	101
26	33	117	486	64	537	87	218	161	66	70	47	79
27	32	115	307	65	547	86	193	145	110	64	45	88
28	70	106	237	65	573	82	158	131	76	66	42	227
29	202	91	205	201	---	92	143	127	65	68	42	353
30	241	81	184	258	---	122	135	121	61	66	39	134
31	181	---	165	189	---	126	---	111	---	246	46	---
TOTAL	2,016	4,868	9,506	3,793	22,012	5,181	11,699	10,659	3,452	5,309	4,064	3,086
MEAN	65.0	162	307	122	786	167	390	344	115	171	131	103
MAX	241	447	747	258	3,580	493	1,060	1,230	288	513	445	363
MIN	32	79	67	64	146	82	84	111	61	64	39	37
CFSM	0.75	1.87	3.53	1.41	9.06	1.93	4.49	3.96	1.33	1.97	1.51	1.19
IN.	0.86	2.09	4.07	1.63	9.43	2.22	5.01	4.57	1.48	2.28	1.74	1.32

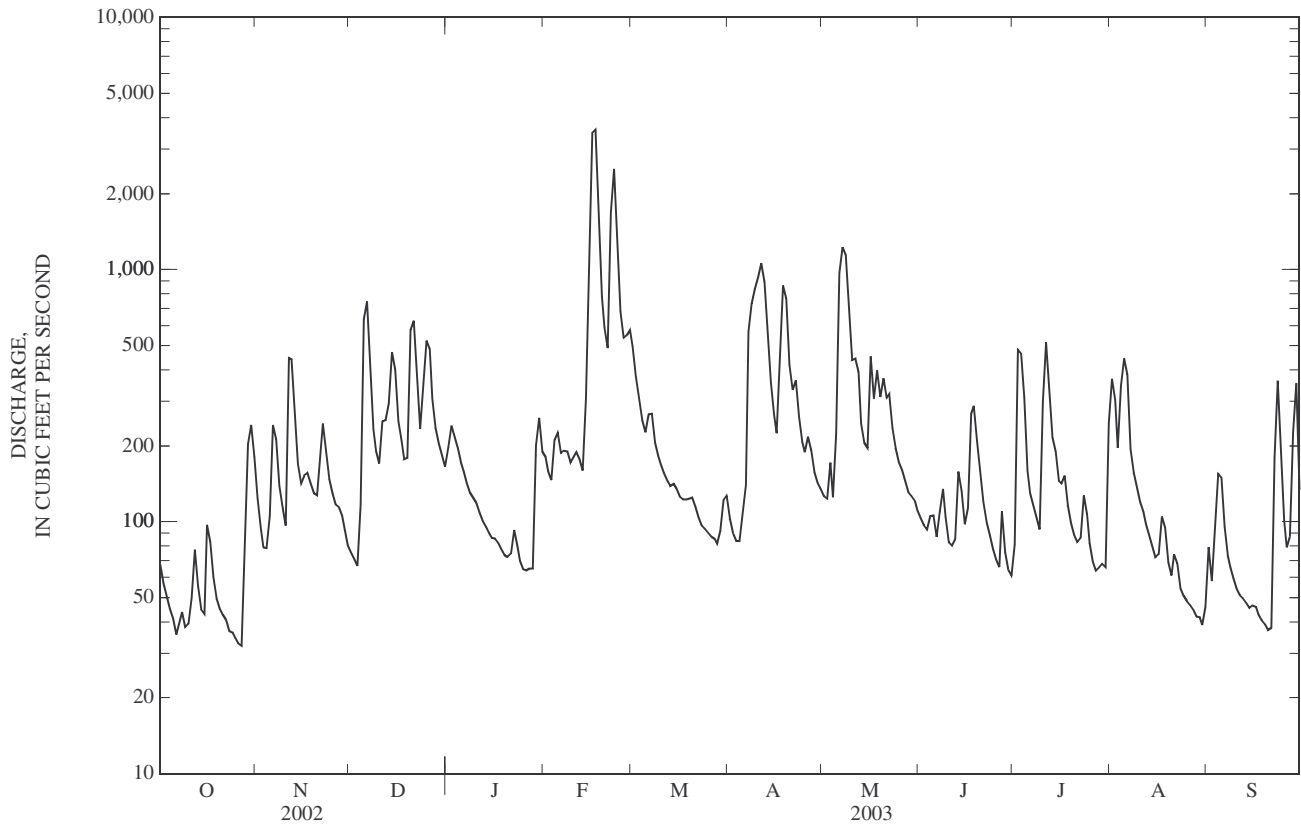
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2003, BY WATER YEAR (WY)

	1998	1999	2000	2001	2002	2003	1998	1999	2000	2001	2002	2003
MEAN	35.7	65.0	121	180	352	215	198	168	86.8	112	54.2	62.2
MAX	65.0	162	307	387	786	417	390	344	154	227	131	103
(WY)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2003)	(2003)	(1999)	(1999)	(2003)	(2003)
MIN	20.6	24.5	34.9	98.1	126	113	84.4	43.5	40.1	37.8	27.0	25.6
(WY)	(2001)	(2002)	(2000)	(2000)	(2002)	(2001)	(2001)	(2001)	(2001)	(2000)	(2000)	(1999)

03535400 BEAVER CREEK AT SOLWAY, TN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1998 - 2003	
ANNUAL TOTAL	61,639		85,645			
ANNUAL MEAN	169		235		136	
HIGHEST ANNUAL MEAN					235	2003
LOWEST ANNUAL MEAN					84.5	2001
HIGHEST DAILY MEAN	3,300	Mar 18	3,580	Feb 17	3,580	Feb 17, 2003
LOWEST DAILY MEAN	19	Sep 13	32	Oct 27	17	Oct 20, 2000
ANNUAL SEVEN-DAY MINIMUM	21	Sep 1	37	Oct 21	18	Sep 14, 2000
MAXIMUM PEAK FLOW			4,520	Feb 17	4520	Feb 17, 2003
MAXIMUM PEAK STAGE			15.79	Feb 17	15.79	Feb 17, 2003
INSTANTANEOUS LOW FLOW			a30	Oct 26	b16	Sep 16, 2000
ANNUAL RUNOFF (CF5M)	1.95		2.70		1.56	
ANNUAL RUNOFF (INCHES)	26.42		36.70		21.21	
10 PERCENT EXCEEDS	354		476		265	
50 PERCENT EXCEEDS	76		134		62	
90 PERCENT EXCEEDS	26		51		25	

a Also occurred Oct. 27, 28.
 b Also occurred Oct. 18, 19, 2000.



03538235 EAST FORK POPLAR CREEK AT BEAR CREEK ROAD AT OAK RIDGE, TN

LOCATION.--Lat 35°59'48", long 84°14'25", Anderson County, Hydrologic Unit 06010207, on left bank upstream from bridge on Bear Creek Road, 0.5 mi south of Oak Ridge, and at mile 14.4.

DRAINAGE AREA.--1.69 mi².

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 890 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good below 100 ft³/s. Flow affected by operations of the Department of Energy, Y-12 Plant. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 933 ft³/s, gage height, 5.90 ft, Feb. 16; minimum, 4.8 ft³/s, Oct. 26, minimum gage height, 1.29 ft, Jan 23; minimum daily, 6.0 ft³/s, Jan. 23.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	10	12	12	14	11	12	11	20	13	19
2	10	10	11	13	12	14	11	16	11	39	12	11
3	10	10	11	12	12	13	11	12	11	14	16	18
4	10	11	33	12	17	13	11	11	15	12	24	19
5	11	28	28	11	12	13	17	54	11	12	15	12
6	10	15	14	11	13	17	20	66	12	12	12	11
7	11	12	13	11	14	12	41	44	43	12	11	11
8	10	11	12	11	12	12	22	19	15	12	11	11
9	10	11	12	11	12	12	31	15	12	15	13	11
10	11	25	16	11	14	12	34	14	12	13	11	11
11	14	49	16	11	12	12	18	26	12	21	11	11
12	10	15	12	11	12	11	15	14	15	13	11	11
13	10	12	30	11	12	12	14	13	12	13	11	10
14	10	12	16	11	46	11	13	12	12	12	11	11
15	13	14	13	11	85	11	13	17	11	12	11	11
16	14	12	12	11	205	11	13	13	13	12	12	10
17	11	12	12	11	27	11	40	30	15	11	13	10
18	10	12	12	11	18	12	18	15	12	11	11	10
19	10	12	26	11	15	30	14	29	12	11	11	10
20	9.9	11	19	11	15	13	13	19	11	11	11	10
21	10	17	13	13	16	12	20	25	11	11	11	10
22	10	12	12	11	87	12	13	15	11	16	11	58
23	9.9	12	12	6.0	20	11	13	13	11	12	11	13
24	10	11	27	7.9	16	11	12	12	11	11	11	11
25	10	11	17	9.6	14	11	13	12	11	11	11	11
26	9.8	12	13	13	17	11	13	12	11	11	11	11
27	10	11	12	13	20	11	12	11	12	11	11	30
28	30	11	12	13	16	11	12	11	11	12	11	13
29	27	11	12	30	---	16	13	12	11	11	11	11
30	14	11	12	15	---	12	12	11	13	11	10	11
31	12	---	13	12	---	11	---	11	---	40	30	---
TOTAL	368.6	424	483	368.5	783	395	513	596	391	445	390	417
MEAN	11.9	14.1	15.6	11.9	28.0	12.7	17.1	19.2	13.0	14.4	12.6	13.9
MAX	30	49	33	30	205	30	41	66	43	40	30	58
MIN	9.8	10	10	6.0	12	11	11	11	11	11	10	10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2003, BY WATER YEAR (WY)

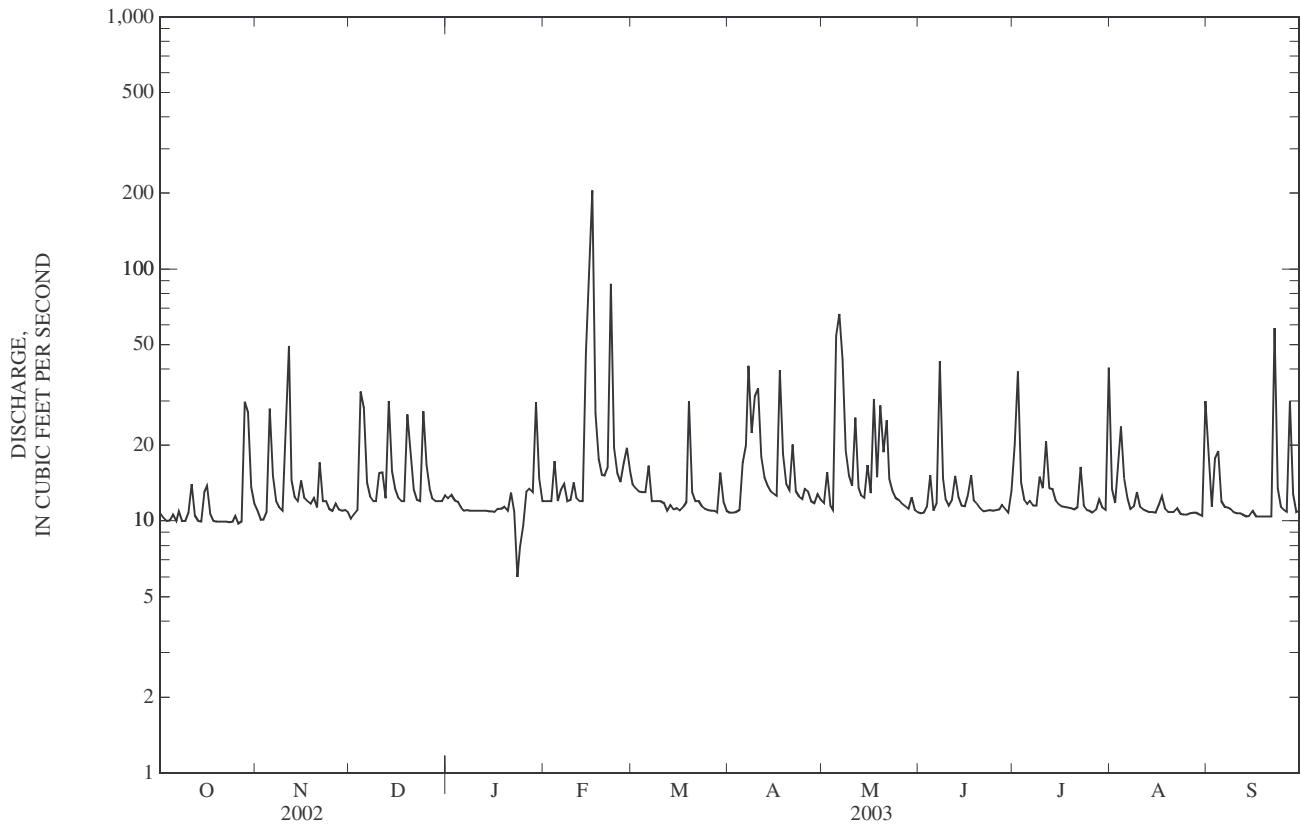
MEAN	9.65	10.8	11.5	13.0	14.2	13.4	13.2	12.2	11.9	12.7	10.7	10.8
MAX	11.9	14.5	15.6	19.6	28.0	20.4	23.8	19.2	17.5	20.8	15.5	15.2
(WY)	(2003)	(1997)	(2003)	(2002)	(2003)	(2002)	(1998)	(2003)	(1998)	(1999)	(1996)	(2002)
MIN	5.47	6.47	5.82	7.56	7.42	7.37	4.87	6.04	4.53	4.14	5.03	5.28
(WY)	(1995)	(1995)	(1995)	(1993)	(1995)	(1995)	(1995)	(1994)	(1995)	(1995)	(1995)	(1995)

03538235 EAST FORK POPLAR CREEK AT BEAR CREEK ROAD AT OAK RIDGE, TN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1993 - 2003	
ANNUAL TOTAL	5,238.9		5,574.1			
ANNUAL MEAN	14.4		15.3		12.4	
HIGHEST ANNUAL MEAN					15.3	2003
LOWEST ANNUAL MEAN					6.30	1995
HIGHEST DAILY MEAN	128	Jan 23	205	Feb 16	205	Feb 16, 2003
LOWEST DAILY MEAN	7.8	Apr 23	6.0	Jan 23	3.3	Sep 30, 1995
ANNUAL SEVEN-DAY MINIMUM	9.9	Jun 15	9.9	Jan 19	3.6	Oct 16, 1995
MAXIMUM PEAK FLOW			933	Feb 16	a2,000	Jul 23, 1997
MAXIMUM PEAK STAGE			5.90	Feb 16	b14.36	Jul 23, 1997
INSTANTANEOUS LOW FLOW			4.8	Oct 26	1.7	Jul 24, 1997
10 PERCENT EXCEEDS	17		21		17	
50 PERCENT EXCEEDS	12		12		11	
90 PERCENT EXCEEDS	10		11		4.9	

a From area velocity estimated at contracted section downstream.

b Affected by backwater. From high-water marks.



03539600 DADDYS CREEK NEAR HEBBERTSBURG, TN

LOCATION.--Lat 35°59'53", long 84°49'24", Cumberland County, Hydrologic Unit 06010208, on right bank, 200 ft downstream of Antioch Bridge, 2.1 mi southeast of Hebbertsburg, 6.9 mi northeast of Crab Orchard, and at mile 9.1.

DRAINAGE AREA.--139 mi².

PERIOD OF RECORD.--October 1956 to September 1968, April 1999 to current year. Prior to May 1957 monthly discharge only, published in WSP 1726.

GAGE.--Data collection platform. Datum of gage is 1,445 ft above NGVD of 1929, from topographic map, datum of 1929, supplementary adjustment of 1936. Prior to May 24, 1965, graphic water-stage recorder at same site and datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,400 ft³/s, May 6, gage height, 11.55 ft; minimum discharge, 5.80 ft³/s, Sept. 21, 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	112	62	230	426	628	110	400	55	51	31	12
2	17	85	58	227	344	493	99	482	45	121	48	10
3	13	68	56	220	284	408	90	406	40	124	152	25
4	11	60	207	203	497	334	83	280	41	99	62	190
5	10	115	2,130	177	517	285	138	2,630	40	83	60	111
6	8.7	731	1,230	158	402	293	252	10,100	34	63	64	56
7	10	463	645	146	379	300	1,380	6,370	167	56	58	39
8	11	273	437	133	327	259	1,070	3,070	211	52	52	35
9	12	183	316	123	276	226	936	1,190	134	46	42	29
10	14	183	305	112	283	196	3,090	655	89	45	39	24
11	16	2,150	1,100	102	299	172	2,520	631	80	116	105	20
12	17	879	897	90	333	150	1,100	572	138	107	246	17
13	23	479	902	82	323	135	658	393	105	74	127	14
14	34	317	1,380	77	999	123	459	287	95	59	85	12
15	36	252	839	72	5,560	116	350	216	114	47	62	10
16	41	374	563	70	7,880	107	280	176	129	38	47	8.8
17	66	370	410	68	2,980	102	302	195	249	31	37	8.2
18	57	278	336	59	1,230	97	510	587	594	25	36	7.5
19	41	220	305	71	787	101	408	664	894	21	25	6.9
20	33	197	658	61	536	104	323	449	497	17	19	6.4
21	27	177	572	80	460	96	408	493	293	15	16	5.9
22	24	154	437	121	2,720	86	426	705	181	24	15	630
23	21	133	351	113	1,860	78	324	481	124	74	26	754
24	19	110	1,390	100	983	71	251	348	89	56	17	313
25	17	97	1,620	115	666	66	209	249	65	42	12	145
26	16	88	887	97	565	61	216	199	50	30	9.5	96
27	15	89	588	88	777	57	193	158	56	22	8.2	86
28	24	85	443	83	832	54	156	122	57	18	8.5	124
29	85	79	359	216	---	71	143	101	51	16	12	119
30	201	71	299	853	---	113	586	85	54	15	7.9	85
31	160	---	255	573	---	124	---	69	---	38	7.8	---
TOTAL	1,102.7	8,872	20,037	4,920	33,525	5,506	17,070	32,763	4,771	1,625	1,536.9	2,999.7
MEAN	35.6	296	646	159	1,197	178	569	1,057	159	52.4	49.6	100
MAX	201	2,150	2,130	853	7,880	628	3,090	10,100	894	124	246	754
MIN	8.7	60	56	59	276	54	83	69	34	15	7.8	5.9
CFSM	0.26	2.13	4.65	1.14	8.61	1.28	4.09	7.60	1.14	0.38	0.36	0.72
IN.	0.30	2.37	5.36	1.32	8.97	1.47	4.57	8.77	1.28	0.43	0.41	0.80

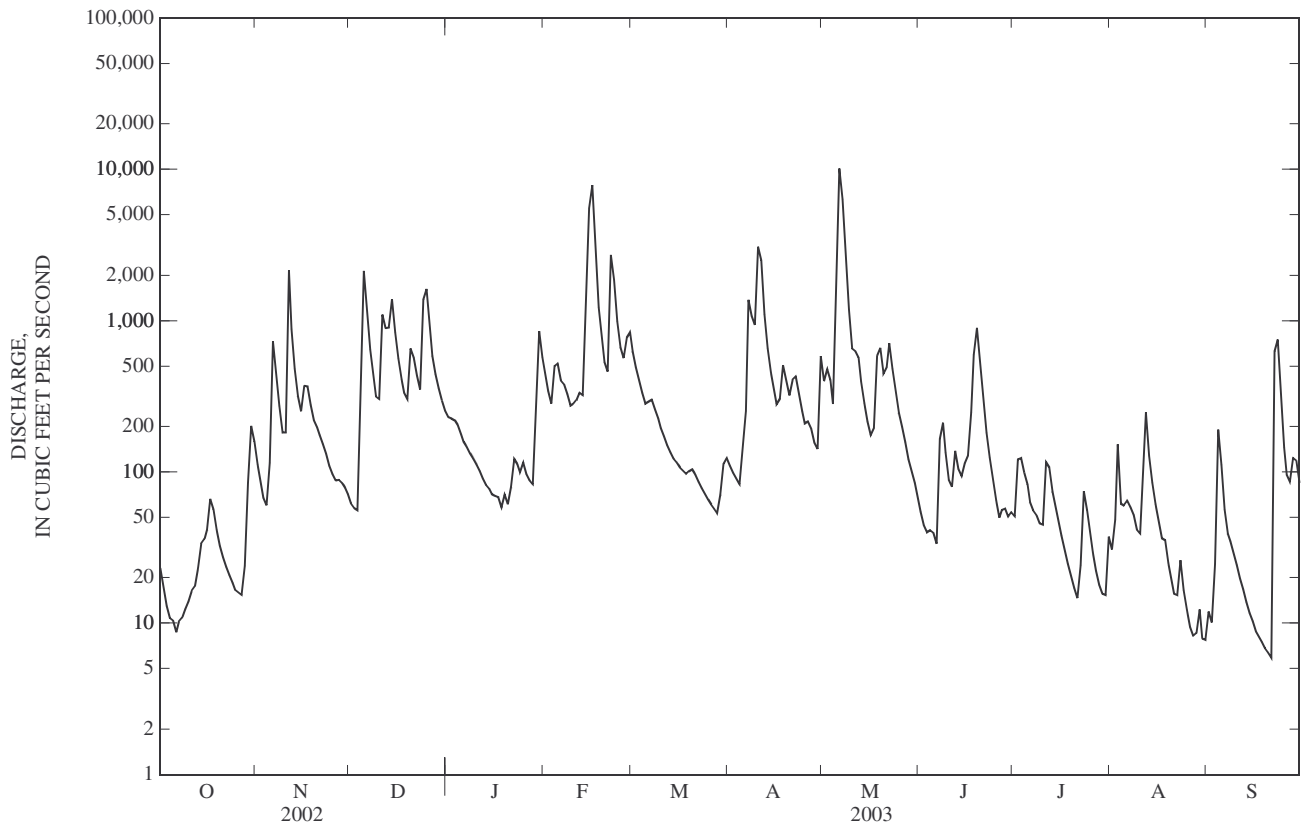
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2003, BY WATER YEAR (WY)

MEAN	50.8	219	379	409	510	590	436	290	91.2	107	45.1	38.5
MAX	220	1,271	860	953	1,197	1,011	812	1,057	457	587	140	209
(WY)	(1958)	(1958)	(1968)	(2002)	(2003)	(1963)	(1962)	(2003)	(1961)	(1967)	(1959)	(1960)
MIN	0.52	2.44	12.5	159	99.2	178	94.1	27.2	10.7	9.44	1.66	0.62
(WY)	(1964)	(1964)	(1964)	(2003)	(1968)	(2003)	(1963)	(1962)	(2002)	(2002)	(1957)	(1968)

03539600 DADDYS CREEK NEAR HEBBERTSBURG, TN—Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1957 - 2003	
ANNUAL TOTAL	115,448.14		134,728.3		259	
ANNUAL MEAN	316		369		369	
HIGHEST ANNUAL MEAN					2003	
LOWEST ANNUAL MEAN					2001	
HIGHEST DAILY MEAN	8,950	Mar 18	10,100	May 6	10,100	May 6, 2003
LOWEST DAILY MEAN	0.17	Sep 13	5.9	Sep 21	0.17	Sep 13, 2002
ANNUAL SEVEN-DAY MINIMUM	0.34	Sep 8	7.7	Sep 15	0.27	Sep 11, 1968
MAXIMUM PEAK FLOW			a11,400	May 6	a13,000	Jan 23, 2002
MAXIMUM PEAK STAGE			a11.55	May 6	b13.23	Mar 12, 1963
INSTANTANEOUS LOW FLOW			c5.8	Sep 21	d0.15	Sep 13, 2002
ANNUAL RUNOFF (CFSM)	2.28		2.66		1.86	
ANNUAL RUNOFF (INCHES)	30.90		36.06		25.34	
10 PERCENT EXCEEDS	695		763		594	
50 PERCENT EXCEEDS	85		116		95	
90 PERCENT EXCEEDS	1.8		17		4.8	

- a From rating curve extended above 8,000 ft³/s at site and datum presently in use.
- b From rating curve extended above 6,600 ft³/s at site and datum then in use.
- c Also occurred Sept. 22, 2003.
- d Also occurred Sept. 14, 2002.



03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN

LOCATION.--Lat 36°06'11", long 84°43'06", Morgan County, Hydrologic Unit 06010208, on right bank 200 yards upstream of Lilly Bridge, 0.1 mi downstream of Little Clear Creek, 3.8 mi west-southwest of Lancing, and at mile 1.6.

DRAINAGE AREA.--170 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1997 to current year.

GAGE.--Data collection platform. Datum of gage is 1,040 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except during periods of missing record, which are fair. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREME FOR CURRENT PERIOD.--Maximum daily discharge, 12,600 ft³/s, Feb. 16, maximum gage height 14.95, May 5; minimum, 7.0 ft³/s, Aug. 28.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	191	105	257	409	553	108	357	91	71	19	9.5
2	28	153	96	237	351	472	105	261	77	96	27	8.5
3	21	132	91	226	307	397	99	227	69	95	56	799
4	17	123	223	209	e475	338	96	184	71	76	51	4,220
5	15	185	3,580	192	e720	300	116	5,170	74	77	45	772
6	14	1,020	1,340	179	e515	297	246	11,600	67	65	55	295
7	14	546	711	165	449	282	585	7,550	77	63	41	175
8	14	350	505	155	368	247	345	3,460	161	54	32	132
9	14	265	390	150	314	227	1,100	1,190	119	44	37	104
10	14	235	368	143	313	205	2,170	709	88	40	28	82
11	23	2,690	1,760	130	306	186	2,150	732	72	79	24	63
12	47	1,030	1,110	118	351	172	748	705	73	99	29	50
13	49	556	1,110	109	336	161	523	479	181	136	24	41
14	43	381	2,070	107	654	151	432	358	250	252	21	34
15	36	307	972	104	7,460	141	381	284	830	139	18	29
16	67	492	652	99	12,600	134	348	243	626	98	16	26
17	100	448	496	100	3,610	128	359	254	762	78	14	24
18	76	346	397	102	1,230	129	666	447	784	63	12	20
19	59	285	345	95	768	133	464	397	896	51	11	17
20	50	258	568	94	594	126	313	307	533	43	9.6	14
21	49	230	550	122	525	119	496	395	330	37	9.4	13
22	46	211	438	199	4,940	110	583	590	230	42	17	1,640
23	39	186	356	181	3,130	101	424	446	173	e55	48	1,570
24	35	162	713	176	1,220	95	335	348	134	e50	17	521
25	34	147	1,210	154	783	89	282	266	108	e40	12	296
26	34	136	776	149	635	85	324	233	89	25	9.8	202
27	34	136	564	137	700	82	295	198	83	19	8.1	198
28	63	130	451	129	658	79	239	159	77	16	7.5	502
29	231	119	374	211	---	91	204	134	79	14	9.6	308
30	331	113	319	642	---	132	246	122	77	13	12	223
31	248	---	280	503	---	121	---	107	---	13	9.8	---
TOTAL	1,883	11,563	22,920	5,574	44,721	5,883	14,782	37,912	7,281	2,043	729.8	12,388.0
MEAN	60.7	385	739	180	1,597	190	493	1,223	243	65.9	23.5	413
MAX	331	2,690	3,580	642	12,600	553	2,170	11,600	896	252	56	4,220
MIN	14	113	91	94	306	79	96	107	67	13	7.5	8.5
CFSM	0.36	2.27	4.35	1.06	9.40	1.12	2.90	7.19	1.43	0.39	0.14	2.43
IN.	0.41	2.53	5.02	1.22	9.79	1.29	3.23	8.30	1.59	0.45	0.16	2.71

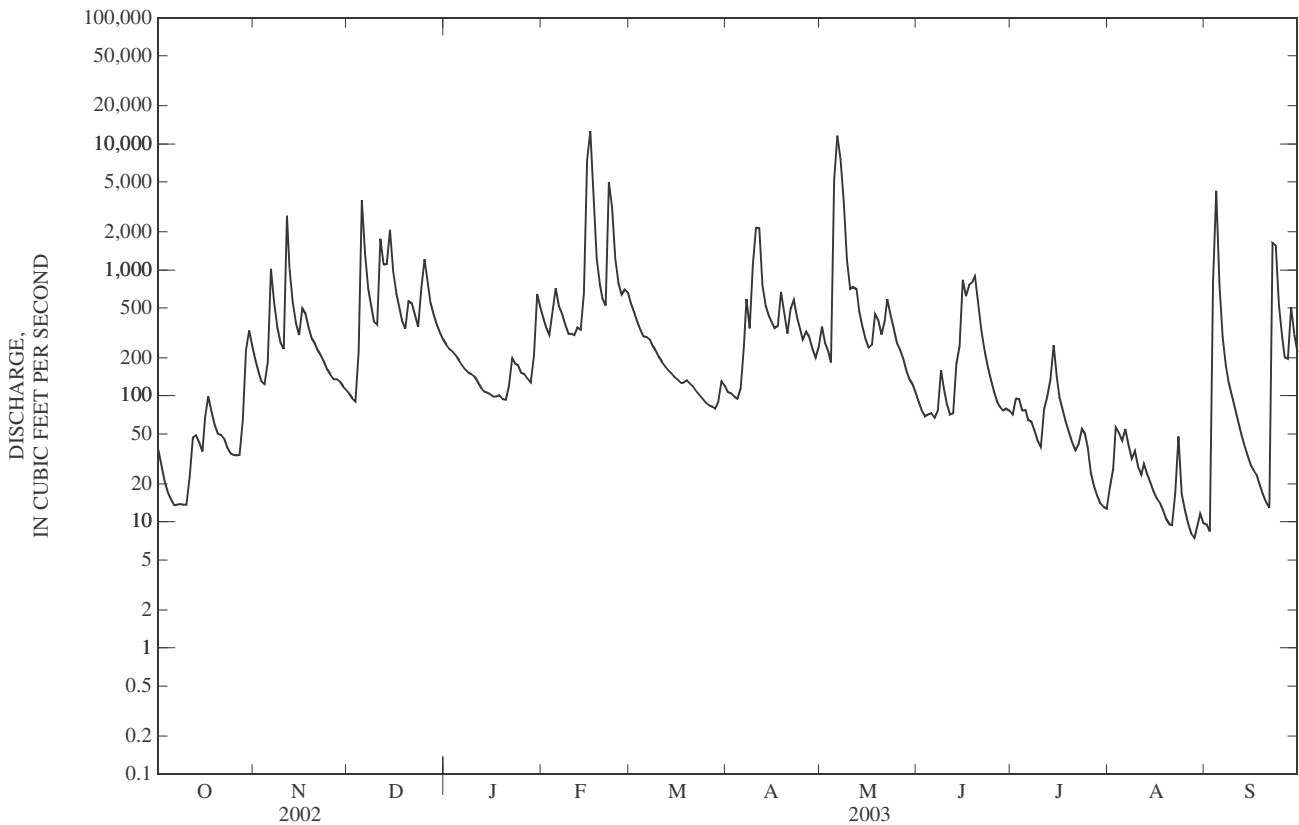
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

MEAN	13.6	80.8	279	598	709	464	472	448	244	94.5	32.3	65.2
MAX	60.7	385	739	962	1,597	964	1,118	1,223	782	349	104	413
(WY)	(2003)	(2003)	(2003)	(1999)	(2003)	(2002)	(1998)	(2003)	(1997)	(1999)	(1998)	(2003)
MIN	0.81	5.07	32.4	141	238	190	206	80.3	30.6	11.9	4.65	1.67
(WY)	(2000)	(1999)	(2000)	(2000)	(2002)	(2003)	(2001)	(2001)	(2001)	(2000)	(1997)	(1997)

03539778 CLEAR CREEK AT LILLY BRIDGE NEAR

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	133,888.70		167,679.8			
ANNUAL MEAN	367		459		289	
HIGHEST ANNUAL MEAN					459 2003	
LOWEST ANNUAL MEAN					138 2000	
HIGHEST DAILY MEAN	11,000	Mar 18	12,600	Feb 16	12,600	Feb 16, 2003
LOWEST DAILY MEAN	0.67	Sep 13	7.5	Aug 28	0.17	Oct 8, 1999
ANNUAL SEVEN-DAY MINIMUM	0.91	Sep 8	9.3	Aug 27	0.23	Oct 2, 1999
MAXIMUM PEAK FLOW			a34,200	May 5	34,200	May 5, 2003
MAXIMUM PEAK STAGE			14.95	May 5	14.95	May 5, 2003
INSTANTANEOUS LOW FLOW			7.0	Aug 28	b0.16	Oct 8, 1999
ANNUAL RUNOFF (CFSM)	2.16		2.70		1.70	
ANNUAL RUNOFF (INCHES)	29.30		36.69		23.07	
10 PERCENT EXCEEDS	712		770		589	
50 PERCENT EXCEEDS	119		162		90	
90 PERCENT EXCEEDS	4.7		21		3.1	

- a From rating curve extended above 6,710 ft³/s.
- b Also occurred Oct. 9, 1999.
- c Estimated



03539778 CLEAR CREEK AT LILLY BRIDGE NEAR LANCING, TN—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, water, unfltrd field, NTU (61028)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat tit inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)
NOV 21...	1130	230	1.8	731	10.2	94	6.7	46	10.0	5	6	3.30	5.5
JAN 28...	1230	116	0.9	739	14.1	100	6.8	48	0.5	5	6	4.02	6.3
FEB 20...	1030	603	3.2	740	11.7	97	6.9	33	6.0	2	2	2.39	6.3
MAR 20...	1045	120	2.4	727	10.6	106	7.1	44	13.5	6	7	3.17	6.5
MAY 15...	1145	282	3.8	731	9.0	95	7.2	37	16.0	6	7	1.83	5.4
JUL 23...	1400	55	2.0	731	7.9	97	7.0	48	23.5	10	12	3.38	4.0
SEP 04...	1310	8,400	120	732	8.1	95	7.0	37	21.0	6	8	1.70	4.0

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	E coli, m-TEC MF, water, col/100 mL (31633)	Suspended sediment concentration mg/L (80154)
NOV 21...	<0.30	<0.04	0.45	<0.008	<0.05	0.007	--	19	2
JAN 28...	0.57	<0.04	0.42	<0.008	<0.02	<0.004	0.99	K10	1
FEB 20...	E.07	<0.04	0.31	<0.008	<0.02	0.007	--	K7	7
MAR 20...	0.10	<0.04	0.13	<0.008	<0.02	0.005	0.23	K3	1
MAY 15...	0.10	<0.04	0.08	<0.008	<0.02	0.008	0.18	20	1
JUL 23...	0.19	<0.04	E.04	<0.008	<0.02	0.009	--	59	1
SEP 04...	1.2	<0.04	0.17	<0.008	0.03	0.23	1.4	11,000	151

E--Estimated

K--Results based on non-ideal colony count.

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