TENNESSEE RIVER BASIN

03528000 CLINCH RIVER ABOVE TAZEWELL, 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 mi^2.

WATER-DISCHARGE RECORDS

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 sea level. 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 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 19	2100	14,700	9.80	Apr 18	0400	*35,900	*16.72
Mar 22	2130	16,800	10.61				

Minimum discharge, 171 ft^3/s, Oct 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	364	262	318	e550	3570	2480	2000	2710	1880	1370	467	302
2	322	251	395	e500	2990	2280	2460	2680	1690	1630	602	288
3	273	247	433	e460	3120	2070	2650	2590	1390	1330	662	279
4	244	246	471	448	8520	1860	6220	3890	1270	1120	574	270
5	225	256	488	468	12800	1700	8820	5000	2140	959	484	266
6	213	280	436	586	8740	1550	6620	4160	3290	863	422	258
7	206	310	407	988	5470	1440	4540	3710	2950	810	380	249
8	199	325	386	5800	4110	1450	3550	4050	2350	758	352	247
9	192	301	383	8750	3660	1940	5060	4160	1930	869	337	250
10	189	275	493	5880	3540	3380	8460	6480	2190	819	335	257
11	185	271	631	3340	3910	3780	8790	10700	6770	868	372	252
12	185	264	789	2280	4650	e3100	6720	11300	10500	802	553	256
13	184	263	741	1750	7160	e2600	5100	7120	5570	686	926	242
14	183	269	620	1450	6540	2220	4050	4870	4670	623	815	234
15	185	282	536	1270	4460	1970	3390	3720	3920	614	842	228
16	184	289	469	1290	3390	1840	3660	3000	3380	666	773	222
17	178	282	416	1400	2980	1940	28000	2520	2860	594	1510	217
18	173	276	375	1380	4320	2670	33800	2150	2300	556	2010	209
19	178	267	346	1360	6670	11400	27600	1870	1910	561	1570	202
20	178	258	324	1350	5550	12600	25600	1650	1730	561	1120	197
21	178	269	312	1360	4330	11700	18100	1490	1730	564	857	198
22	185	418	386	1370	3660	14900	10500	1440	1690	505	686	203
23	185	522	504	1650	3260	12500	7370	1520	1730	498	590	203
24	185	546	494	3060	3150	6220	5660	1780	3120	855	513	203
25	187	484	588	3140	4070	4410	4550	2300	2370	793	461	219
26	214	428	622	2620	3870	3490	3670	3760	1980	775	423	240
27	298	374	e642	2460	3220	2930	3190	3160	1630	644	391	249
28	333	335	e700	5550	2780	2530	3220	2580	1390	564	364	235
29	318	304	e650	6630	---	2260	2790	2510	1210	496	340	223
30	306	293	e600	4820	---	2040	2540	2180	1220	453	326	214
31	286	---	e575	4100	---	1850	---	1830	---	470	314	---
TOTAL	6915	9447	15530	78060	134490	129100	258680	112880	82760	23676	20371	7112
MEAN	223	315	501	2518	4803	4165	8623	3641	2759	764	657	237
MAX	364	546	789	8750	12800	14900	33800	11300	10500	1630	2010	302
MIN	173	246	312	448	2780	1440	2000	1440	1210	453	314	197
CFSM	.15	.21	.34	1.71	3.26	2.83	5.85	2.47	1.87	.52	.45	.16
IN.	.17	.24	.39	1.97	3.39	3.26	6.53	2.85	2.09	.60	.51	.18

e Estimated

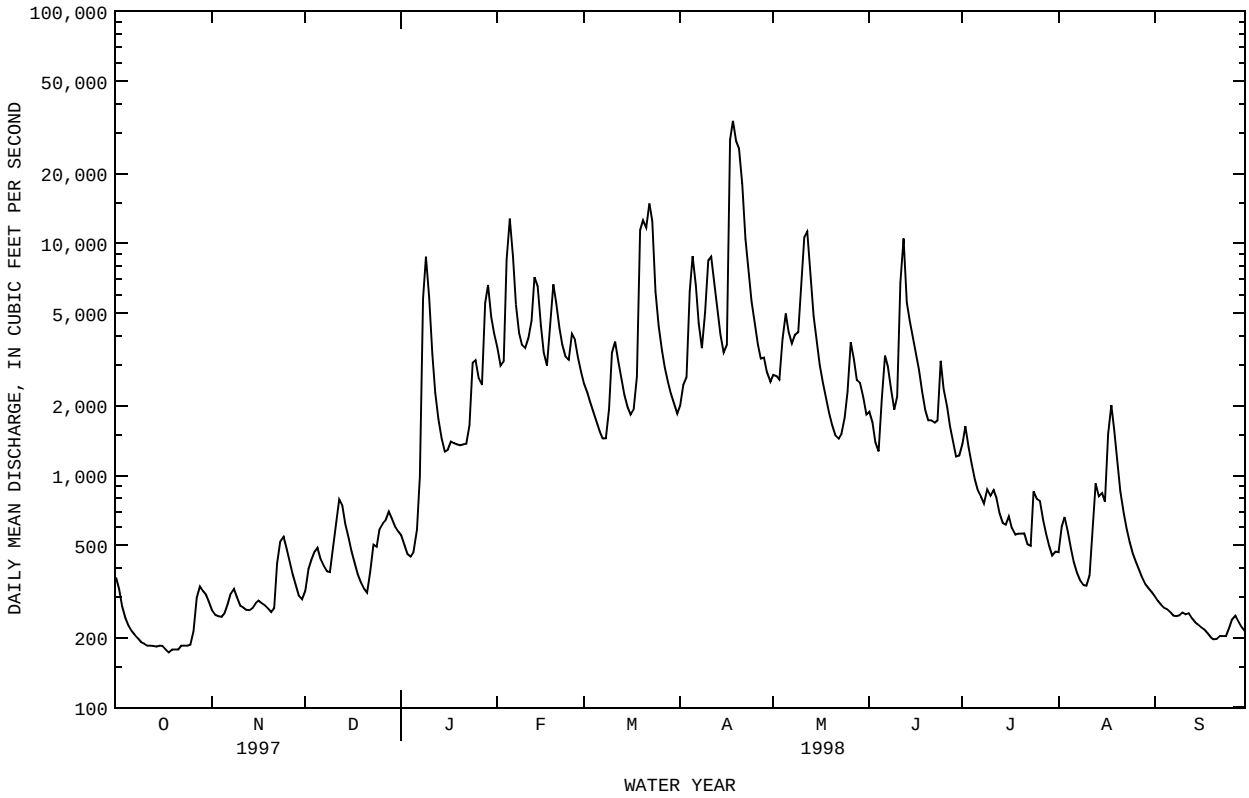
03528000 CLINCH RIVER ABOVE TAZEWELL, TN--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 1998, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	664	1117	2364	3485	4173	4318	3113	2325	1303	958	866	534
MAX	2871	4794	9107	9500	9426	11950	8860	6382	3865	3251	4411	2939
(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

SUMMARY STATISTICS	FOR 1997 CALENDAR YEAR		FOR 1998 WATER YEAR		WATER YEARS 1919 - 1998	
ANNUAL TOTAL	710407		879021			
ANNUAL MEAN	1946		2408		2093	
HIGHEST ANNUAL MEAN					3269	1927
LOWEST ANNUAL MEAN					850	1941
HIGHEST DAILY MEAN	26600	Mar 4	33800	Apr 18	83300	Apr 5 1977
LOWEST DAILY MEAN	173	Oct 18	173	Oct 18	108	Sep 11 1925
ANNUAL SEVEN-DAY MINIMUM	179	Oct 15	179	Oct 15	116	Sep 17 1955
INSTANTANEOUS PEAK FLOW			35900	Apr 18	98100	Apr 5 1977
INSTANTANEOUS PEAK STAGE			16.72	Apr 18	a29.32	Apr 5 1977
INSTANTANEOUS LOW FLOW			171	Oct 18	108	Sep 11 1925
ANNUAL RUNOFF (CFSM)	1.32		1.63		1.42	
ANNUAL RUNOFF (INCHES)	17.93		22.18		19.29	
10 PERCENT EXCEEDS	4640		5610		4690	
50 PERCENT EXCEEDS	1050		988		1120	
90 PERCENT EXCEEDS	225		235		271	

a From floodmarks.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1963-65, 1971-80, April to September 1996.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML) (31501)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
OCT												
07...	1345	406	8.4	20.0	737	13.0	148	K510	K12	100	180	32
NOV												
24...	1230	399	8.3	6.0	744	12.0	99	92	42	5100	170	14
DEC												
15...	1215	406	7.9	2.5	738	13.3	101	K2	<2	70	170	28
JAN												
20...	1300	322	8.5	6.0	739	14.0	116	K73	K54	K8800	140	20
FEB												
10...	1315	307	7.3	8.5	740	13.4	118	95	36	>2000	130	28
MAR												
12...	1230	283	7.4	6.0	750	12.6	103	140	130	K16000	120	15
MAY												
21...	1300	305	8.6	23.0	735	10.1	123	540	40	950	140	23

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2) (00405)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT											
07...	41	19	21	20	.7	2.8	10	161	151	1.2	46
NOV											
24...	43	15	15	16	.5	2.8	5	182	157	1.4	49
DEC											
15...	45	13	18	19	.6	2.2	--	168	138	3.6	53
JAN											
20...	38	9.6	8.7	12	.3	1.6	10	121	115	.7	31
FEB											
10...	36	9.1	8.3	12	.3	1.4	0	123	101	10	25
MAR											
12...	34	8.1	6.1	10	.2	1.3	0	126	103	7.6	23
MAY											
21...	36	12	6.2	9	.2	1.4	5	131	117	.7	29

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)
OCT											
07...	8.2	<.10	2.0	230	229	.31	--	<.010	<.050	<.015	<.20
NOV											
24...	8.2	<.10	1.3	235	230	.32	--	<.010	.202	<.020	<.10
DEC											
15...	8.5	<.10	1.2	231	225	.31	.384	.014	.398	<.020	<.10
JAN											
20...	8.6	<.10	4.3	189	175	.26	.982	.013	.995	<.020	<.10
FEB											
10...	12	<.10	5.4	165	163	.22	--	<.010	1.21	.020	<.10
MAR											
12...	6.1	<.10	3.9	157	148	.21	--	<.010	.625	<.020	<.10
MAY											
21...	3.9	<.10	1.0	174	160	.24	.300	.010	.310	.043	<.10

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

TENNESSEE RIVER BASIN

03528000 CLINCH RIVER ABOVE TAZEWELL, TN--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	SEDIMENT, SUSPENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT											
07...	.48	--	.091	<.010	<.010	8.5	5.0	2.2	.20	--	--
NOV											
24...	.15	.35	.022	.012	.027	19	2.2	1.9	.30	8	93
DEC											
15...	.11	.51	<.010	<.010	.015	21	<4.0	1.6	.20	2	92
JAN											
20...	.12	1.1	.015	<.010	<.010	13	<4.0	1.1	.20	18	84
FEB											
10...	.14	1.3	.024	<.010	.017	<10	<4.0	1.1	.40	--	--
MAR											
12...	.13	.76	<.010	<.010	<.010	13	<4.0	1.0	.50	14	75
MAY											
21...	.14	.45	<.010	<.010	<.010	<10	<4.0	1.2	.30	4	30