03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TN

LOCATION.--Lat 36°07'19", long 87°05'56", Cheatham County, Hydrologic Unit 05130204, on right bank 400 ft upstream from bridge on U.S. Highway 70, 1.7 mi northeast of Kingston Springs, 3.0 mi downstream from Turnbull Creek, and at mile 32.4.

DRAINAGE AREA.--681 mi^2, includes 15 mi^2 without surface drainage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1924 to current year. Prior to July 1925 monthly discharge only, published in WSP 1306.

REVISED RECORDS.--WSP 953: 1927, 1933, 1935-36. WSP 1033: 1927(M), 1932-33(M), 1935(M), 1937(M). WSP 1706: 1945(P). WSP 2110: Drainage area.

GAGE.--Data collection platform. Datum of gage is 448.04 ft above NGVD of 1929. July 8, 1925, to Jan. 22, 1939, nonrecording gage at site 150 ft downstream, and Jan. 22, 1939, to July 26, 1988, water-stage recorder at present site at datum 1.0 ft higher.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1897, that of Jan. 7, 1946. Flood of March 1902 reached a stage about 3 ft lower than that of Jan. 7, 1946.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 19	1000	*17,600	*20.13	Dec 23	0800	10,900	14.29
Nov 30	2300	14,500	17.81	Jan 8	0630	10,600	14.05
Dec 7	1330	17,400	19.99	Apr 30	0630	11,000	14.41
Dec 9	1500	10,900	14.28	Aug 30	1330	10,300	13.72

Minimum discharge, 71 ft^3/s, Aug. 12, 15.

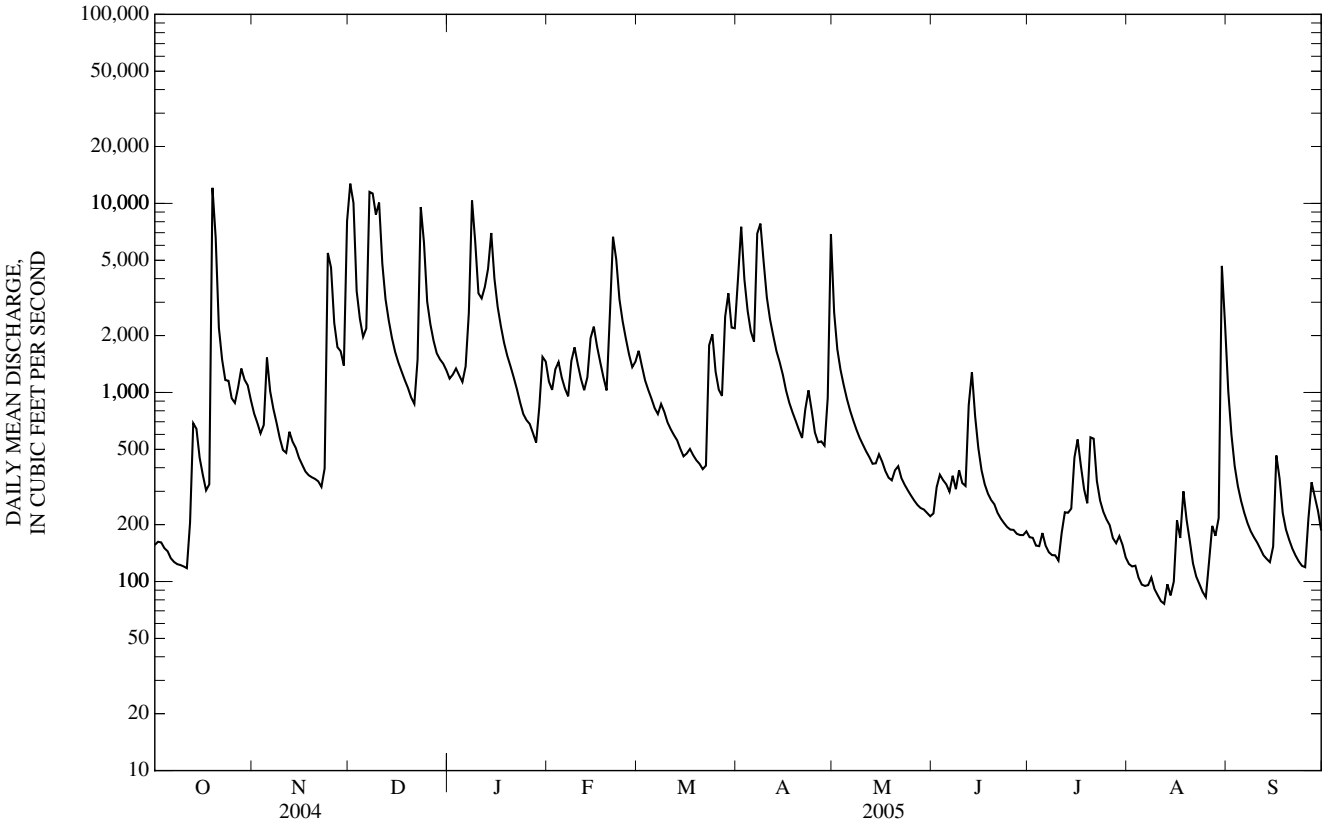
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	774	12,700	1,180	1,140	1,660	3,990	2,650	229	172	124	1,020
2	162	690	10,100	1,240	1,030	1,380	7,520	1,690	316	170	120	597
3	161	608	3,440	1,340	1,330	1,160	3,960	1,320	367	155	121	408
4	150	673	2,450	1,230	1,450	1,030	2,710	1,090	344	154	105	319
5	145	1,530	1,970	1,140	1,200	927	2,100	923	327	180	96	267
6	133	1,020	2,180	1,370	1,050	826	1,860	801	299	155	95	231
7	127	820	11,500	2,630	954	769	6,920	709	363	143	96	204
8	124	691	11,300	10,400	1,470	869	7,820	633	308	138	105	185
9	122	574	8,720	6,260	1,730	790	4,920	574	388	138	91	172
10	120	496	10,100	3,340	1,410	696	3,180	529	332	129	84	161
11	118	479	4,800	3,140	1,180	639	2,430	488	320	180	79	149
12	205	620	3,120	3,620	1,030	596	2,000	455	857	232	76	138
13	687	549	2,410	4,510	1,200	559	1,660	420	1,280	231	97	132
14	642	509	1,950	6,970	1,940	504	1,450	422	750	243	84	127
15	451	451	1,640	3,990	2,230	459	1,240	471	509	453	100	153
16	366	415	1,440	2,830	1,760	475	1,020	430	388	564	211	464
17	303	382	1,290	2,240	1,450	503	883	383	327	410	e170	352
18	327	365	1,160	1,830	1,200	466	786	354	292	308	e300	230
19	12,100	356	1,060	1,560	1,030	438	708	343	270	259	212	189
20	6,600	349	942	1,380	2,540	419	635	388	256	579	164	166
21	2,200	339	870	1,200	6,660	393	575	407	231	570	125	149
22	1,490	317	1,490	1,040	5,050	410	813	352	215	340	106	137
23	1,160	396	9,570	887	3,110	1,780	1,030	325	204	268	97	128
24	1,150	5,470	6,210	769	2,380	2,030	803	304	194	234	88	121
25	931	4,570	3,030	714	1,930	1,290	614	285	188	213	83	119
26	880	2,340	2,300	682	1,590	1,040	545	268	188	199	127	214
27	1,060	1,740	1,880	610	1,360	959	551	254	179	170	197	335
28	1,340	1,650	1,610	543	1,460	2,520	524	245	176	160	175	281
29	1,170	1,390	1,500	841	---	3,340	936	240	176	174	217	236
30	1,090	8,060	1,420	1,540	---	2,200	6,880	231	184	156	4,670	186
31	909	---	1,310	1,460	---	2,190	---	221	---	134	2,280	---
TOTAL	36,579	38,623	125,462	72,486	51,864	33,317	71,063	18,205	10,457	7,611	10,695	7,570
MEAN	1,180	1,287	4,047	2,338	1,852	1,075	2,369	587	349	246	345	252
MAX	12,100	8,060	12,700	10,400	6,660	3,340	7,820	2,650	1,280	579	4,670	1,020
MIN	118	317	870	543	954	393	524	221	176	129	76	119
MED	451	614	2,180	1,380	1,450	826	1,340	420	303	180	106	187
CFSM	1.73	1.89	5.94	3.43	2.72	1.58	3.48	0.86	0.51	0.36	0.51	0.37
IN.	2.00	2.11	6.85	3.96	2.83	1.82	3.88	0.99	0.57	0.42	0.58	0.41

03434500 HARPETH RIVER NEAR KINGSTON SPRINGS, TN—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2005, BY WATER YEAR (WY)												
MEAN	244	632	1,340	1,850	2,094	2,127	1,485	1,045	526	272	215	226
MAX	1,516	2,761	6,274	6,975	6,078	6,806	3,942	5,107	2,849	1,071	1,099	2,530
(WY)	(1976)	(1980)	(1927)	(1937)	(1950)	(1975)	(1927)	(1984)	(1928)	(1989)	(1926)	(1979)
MIN	28.9	63.2	94.9	116	187	279	269	99.3	59.0	62.7	38.5	25.0
(WY)	(1932)	(1955)	(1936)	(1940)	(1941)	(1941)	(1967)	(1941)	(1988)	(1954)	(1954)	(1939)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1925 - 2005	
ANNUAL TOTAL	512,910		483,932			
ANNUAL MEAN	1,401		1,326		1,000	
HIGHEST ANNUAL MEAN					2,000	1973
LOWEST ANNUAL MEAN					249	1941
HIGHEST DAILY MEAN	19,300	Feb 6	12,700	Dec 1	43,100	Feb 14, 1948
LOWEST DAILY MEAN	95	Jul 25	76	Aug 12	16	Sep 28, 1939
ANNUAL SEVEN-DAY MINIMUM	122	Jul 19	87	Aug 9	18	Sep 22, 1939
MAXIMUM PEAK FLOW			17,600	Oct 19	60,000	Jan 7, 1946
MAXIMUM PEAK STAGE			20.13	Oct 19	a32.20	Jan 7, 1946
INSTANTANEOUS LOW FLOW			b71	Aug 12	12	Sep 18, 1939
ANNUAL RUNOFF (CFSM)	2.06		1.95		1.47	
ANNUAL RUNOFF (INCHES)	28.02		26.44		19.95	
10 PERCENT EXCEEDS	3,030		3,110		2,240	
50 PERCENT EXCEEDS	684		579		360	
90 PERCENT EXCEEDS	200		138		72	

a From high-water mark in gage house.
b Also occurred Aug. 15.
e Estimated