03604000 BUFFALO RIVER NEAR FLAT WOODS, TN

LOCATION.--Lat 35°29'45", long 87°49'58", Perry County, Hydrologic Unit 06040004, on right bank 0.4 mi downstream from Little Opossum Creek, 0.5 mi downstream from bridge on State Highway 13, 1.3 mi north of Flat Woods, 3.9 mi upstream from Sinking Creek, and at mile 58.7.

DRAINAGE AREA.--447 mi^2.

PERIOD OF RECORD.--May 1920 to current year.

REVISED RECORDS.--WSP 758: 1933. WSP 803: 1935. WSP 823: Drainage area. WSP 1436: 1921(M), 1922-24, 1925(M), 1927(M), 1934(M), WRD TN-71: 1970.

GAGE.--Data collection platform. Datum of gage is 513.58 ft above NGVD of 1929, determined by levels run by Army Engineers December 1926 and July 1927, from BM-39, datum of 1929. Prior to May 27, 1934, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated discharges, which are poor. 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 May 27, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 6	0815	*29,600	*23.54	Jun 26	1400	4,930	9.13
Mar 6	2145	5,220	9.43				

Minimum daily discharge, 249 ft^3/s, Aug. 19.

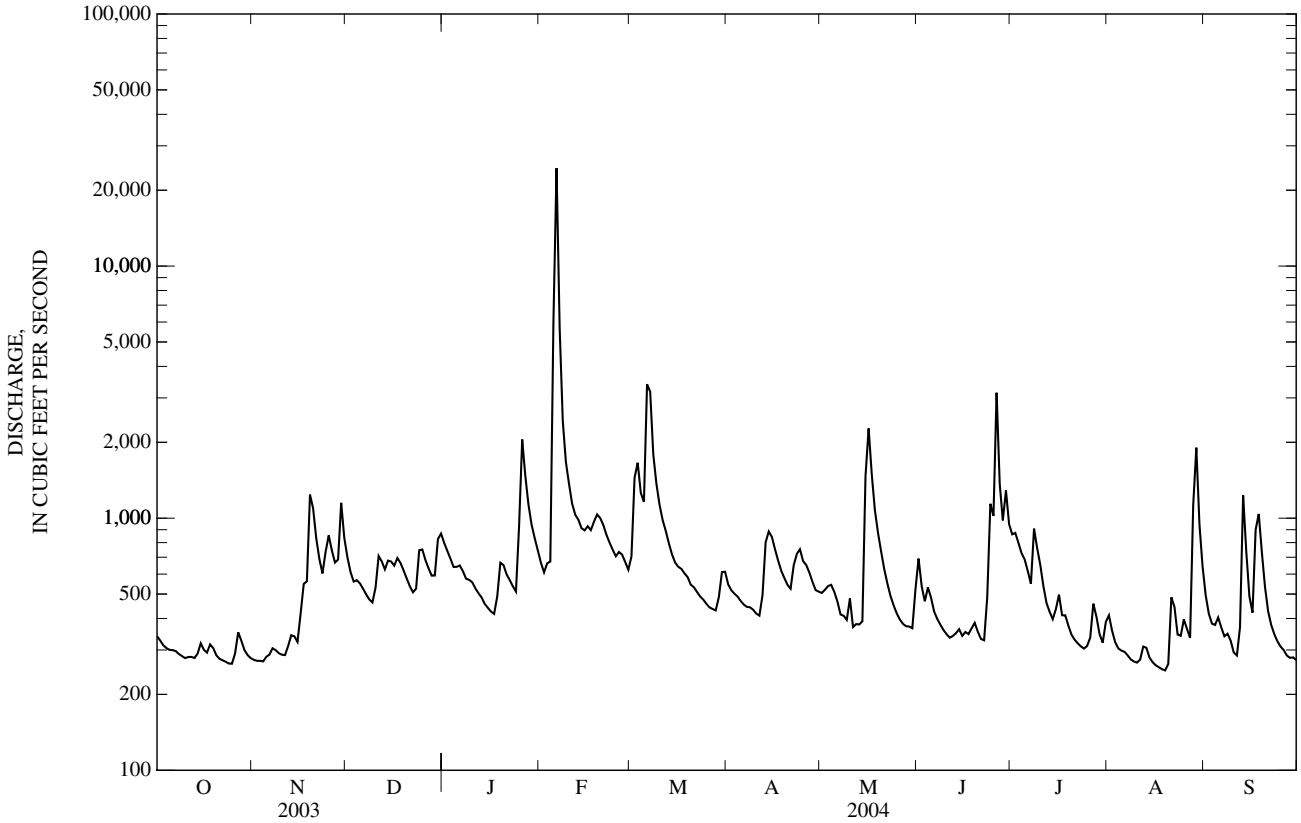
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	274	700	797	665	704	546	e505	691	863	412	494
2	327	272	611	742	610	1,450	518	e520	537	874	358	418
3	313	272	560	691	662	1,660	502	e538	468	798	322	382
4	305	270	567	641	673	1,260	489	544	531	726	304	377
5	300	282	551	641	6,010	1,160	469	e510	483	686	298	404
6	300	288	525	649	24,500	3,400	454	e467	426	616	295	369
7	297	305	498	616	5,680	3,170	445	e415	398	549	286	340
8	289	300	476	576	2,420	1,790	443	e410	378	909	275	348
9	284	292	463	569	1,670	1,370	433	e395	360	761	270	327
10	279	287	530	557	1,370	1,130	418	e480	346	653	267	293
11	281	286	708	527	1,140	983	411	e370	336	538	275	285
12	282	311	674	504	1,030	889	495	e380	341	461	310	370
13	279	343	626	484	985	794	802	379	350	425	306	1,230
14	290	340	679	457	913	718	886	390	363	398	280	740
15	319	323	673	441	894	667	843	1,470	341	436	268	490
16	301	418	648	426	929	642	753	2,270	354	497	261	422
17	293	549	695	417	897	629	679	1,500	347	412	256	900
18	316	561	664	489	969	604	619	1,080	366	412	252	1,040
19	305	1,240	620	666	1,030	584	579	876	384	375	249	731
20	286	1,090	576	652	1,000	545	544	738	354	345	264	534
21	277	833	537	599	938	532	525	628	332	330	485	427
22	273	690	508	568	859	510	651	551	328	319	444	377
23	269	604	525	537	800	490	722	492	486	310	346	346
24	265	734	746	512	749	476	753	451	1,140	304	341	324
25	265	854	751	930	706	458	676	419	1,020	311	397	309
26	291	746	682	2,050	734	443	652	396	3,140	336	364	300
27	353	667	632	1,470	717	436	609	381	1,370	458	335	285
28	327	685	592	1,130	670	431	559	373	980	406	1,130	279
29	300	1,150	592	942	625	486	519	372	1,290	347	1,900	280
30	287	835	826	833	---	611	511	366	948	321	946	274
31	279	---	869	744	---	613	---	522	---	388	643	---
TOTAL	9,172	16,101	19,304	21,857	60,845	29,635	17,505	19,188	19,188	15,564	13,139	13,695
MEAN	296	537	623	705	2,098	956	584	619	640	502	424	456
MAX	353	1,240	869	2,050	24,500	3,400	886	2,270	3,140	909	1,900	1,230
MIN	265	270	463	417	610	431	411	366	328	304	249	274
MED	291	381	620	616	913	642	545	480	391	425	306	373
CFSM	0.66	1.20	1.39	1.58	4.69	2.14	1.31	1.38	1.43	1.12	0.95	1.02
IN.	0.76	1.34	1.61	1.82	5.06	2.47	1.46	1.60	1.60	1.30	1.09	1.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2004, BY WATER YEAR (WY)

MEAN	293	531	927	1,204	1,398	1,463	1,165	901	469	372	291	279
MAX	1,418	2,554	3,568	3,854	4,901	4,405	3,034	5,227	1,642	1,824	1,008	1,286
(WY)	(1933)	(1958)	(1927)	(1937)	(1948)	(1973)	(1964)	(1991)	(1974)	(1932)	(1923)	(1979)
MIN	112	174	213	234	316	458	303	210	146	121	117	94.2
(WY)	(1932)	(1925)	(1964)	(1940)	(1926)	(1966)	(1986)	(1942)	(1941)	(1943)	(1925)	(1925)

03604000 BUFFALO RIVER NEAR FLAT WOODS, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1920 - 2004	
ANNUAL TOTAL	375,698		255,193			
ANNUAL MEAN	1,029		697		771	
HIGHEST ANNUAL MEAN					1,583	1973
LOWEST ANNUAL MEAN					323	1942
HIGHEST DAILY MEAN	28,800	May 7	24,500	Feb 6	75,800	May 27, 1991
LOWEST DAILY MEAN	252	Sep 18	249	Aug 19	65	Sep 9, 1925
ANNUAL SEVEN-DAY MINIMUM	259	Sep 14	261	Aug 14	71	Sep 5, 1925
MAXIMUM PEAK FLOW					a96,300	May 27, 1991
MAXIMUM PEAK STAGE					b32.19	May 27, 1991
INSTANTANEOUS LOW FLOW					65	Sep 9, 1925
ANNUAL RUNOFF (CFSM)	2.30		1.56		1.72	
ANNUAL RUNOFF (INCHES)	31.27		21.24		23.44	
10 PERCENT EXCEEDS	1,480		1,020		1,440	
50 PERCENT EXCEEDS	587		506		401	
90 PERCENT EXCEEDS	289		287		180	

a From rating curve extended above 50,000 ft^3/s, on basis of slope-area and contracted opening measurements and rainfall runoff study.
b From high-water mark in gage house.
e Estimated