03436100 RED RIVER AT PORT ROYAL, TN

LOCATION.--Lat 36°33'14", long 87°08'31", Montgomery County, Hydrologic Unit 05130206, on left bank at county road bridge at Port Royal, 250 ft downstream from Sulphur Fork, and at mile 25.5.

DRAINAGE AREA.--935 mi^2 includes 437 mi^2 without surface drainage.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1961 to September 1991. October 1991 to September 1996, crest-stage partial record station. October 1997 to current year.

GAGE.--Data collection platform, crest-stage gage and satellite telemeter at station. Datum of gage is 376.25 ft above NGVD of 1929. July 13, 1961, to Oct. 9, 1963, nonrecording gage and crest-stage gage at same site and datum.

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 of Jan. 23, 1937, reached a stage of 44.4 ft; from flood profile of U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 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	1200	15,000	26.27	Apr 23	1130	*15,300	*26.61

Minimum discharge, 182 ft^3/s, Nov. 4, 5.

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	644	217	1,380	2,270	1,310	648	1,060	2,170	5,410	476	2,960	365
2	589	205	1,190	2,640	1,240	886	954	2,940	3,000	673	1,140	326
3	540	195	1,030	3,690	2,030	1,080	868	3,590	2,350	562	834	458
4	501	188	984	2,800	2,600	856	806	3,730	1,900	514	697	450
5	462	191	959	2,760	4,840	896	751	2,970	1,700	549	1,150	399
6	427	255	902	3,000	13,700	4,080	708	2,450	1,460	710	1,050	367
7	401	285	815	2,340	7,550	3,350	682	2,060	1,290	1,030	852	322
8	374	286	753	2,060	4,600	2,240	670	1,780	1,160	1,210	659	297
9	350	260	719	1,930	3,640	1,800	644	1,580	1,090	883	570	274
10	344	230	722	1,710	3,100	1,530	613	1,440	1,020	763	510	260
11	333	221	1,030	1,510	2,700	1,330	586	1,330	926	743	482	247
12	311	219	1,020	1,380	2,350	1,180	753	1,220	864	718	457	483
13	298	236	839	1,280	2,050	1,060	2,230	1,170	892	673	428	1,710
14	297	243	1,140	1,160	1,820	960	4,230	1,130	988	713	397	989
15	299	278	1,910	1,080	1,680	907	2,970	3,380	798	756	365	675
16	286	318	1,570	998	1,520	880	2,120	5,680	747	654	343	540
17	281	462	1,580	918	1,370	874	1,690	3,130	759	566	329	487
18	263	900	1,560	1,090	1,250	943	1,430	2,570	759	518	324	478
19	252	4,150	1,390	1,890	1,160	1,130	1,230	2,250	866	473	311	440
20	242	3,130	1,240	1,590	1,120	1,040	1,080	1,770	782	432	366	381
21	234	1,920	1,080	1,320	1,070	1,950	1,210	1,510	683	407	613	347
22	226	1,460	984	1,190	965	1,850	7,500	1,350	646	377	749	322
23	217	1,200	1,140	1,090	886	1,500	14,900	1,220	630	362	504	303
24	216	1,660	2,710	1,010	841	1,310	12,400	1,120	679	346	461	288
25	207	2,450	2,550	1,780	798	1,160	6,310	1,030	614	326	696	276
26	230	1,760	1,970	3,880	751	1,040	4,660	963	575	335	516	258
27	313	1,470	1,670	2,930	715	947	3,740	1,960	532	326	484	248
28	400	1,860	1,490	2,190	681	881	3,050	2,010	493	309	426	236
29	319	1,860	1,440	1,800	655	882	2,560	1,870	469	283	449	227
30	268	1,560	2,970	1,640	---	1,160	2,260	1,520	464	267	610	220
31	240	---	2,960	1,470	---	1,200	---	5,040	---	1,770	435	---
TOTAL	10,364	29,669	43,697	58,396	68,992	41,550	84,665	67,933	34,546	18,724	20,167	12,673
MEAN	334	989	1,410	1,884	2,379	1,340	2,822	2,191	1,152	604	651	422
MAX	644	4,150	2,970	3,880	13,700	4,080	14,900	5,680	5,410	1,770	2,960	1,710
MIN	207	188	719	918	655	648	586	963	464	267	311	220
CFSM	0.36	1.06	1.51	2.01	2.54	1.43	3.02	2.34	1.23	0.65	0.70	0.45
IN.	0.41	1.18	1.74	2.32	2.74	1.65	3.37	2.70	1.37	0.74	0.80	0.50

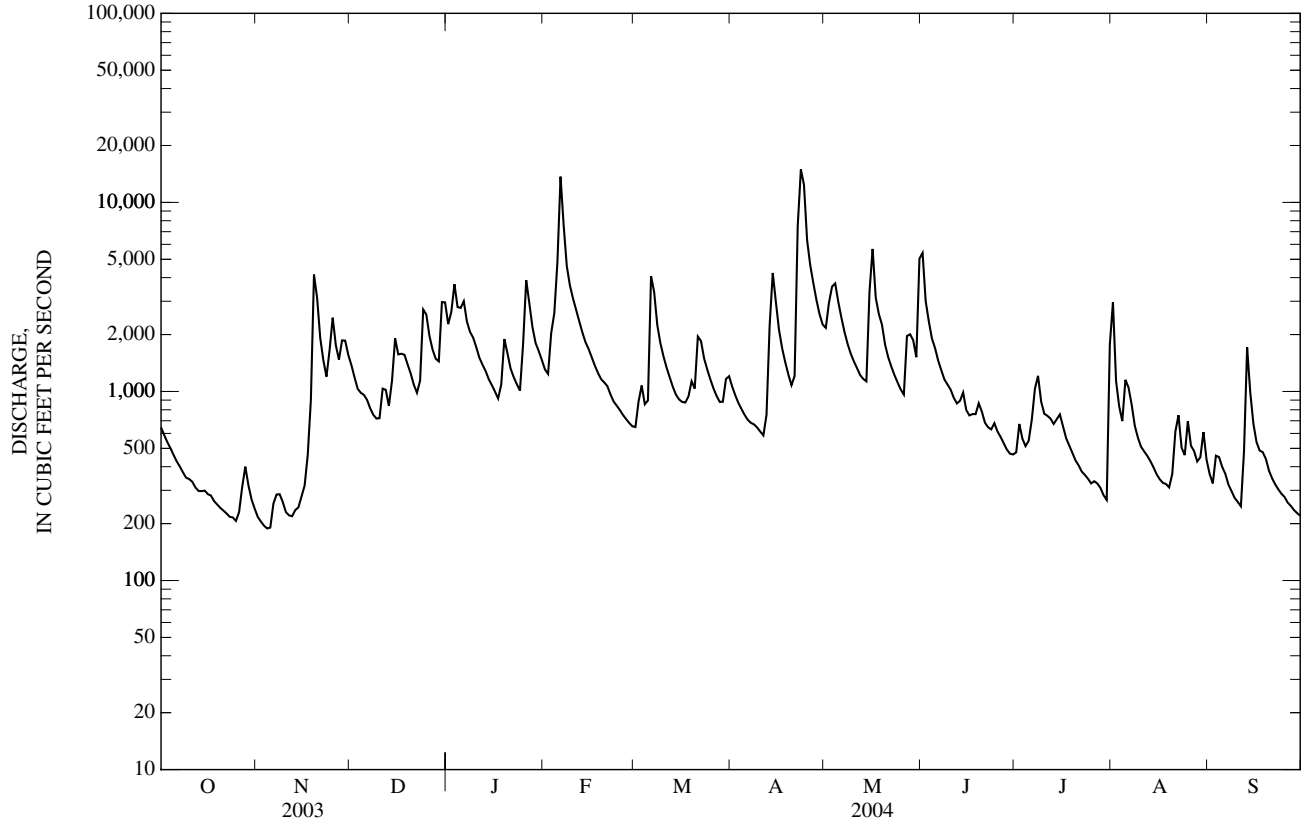
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

MEAN	305	693	1,724	1,966	2,497	2,570	2,035	1,666	1,078	577	322	395
MAX	1,989	3,610	5,054	5,984	7,429	9,874	6,482	7,183	5,467	2,858	809	3,939
(WY)	(2003)	(1980)	(1991)	(1974)	(1989)	(1975)	(1979)	(1983)	(1998)	(1989)	(1998)	(1979)
MIN	68.2	74.4	73.4	91.7	562	724	490	270	140	143	130	83.4
(WY)	(1964)	(1964)	(1964)	(1981)	(1964)	(2000)	(1986)	(1988)	(1988)	(1988)	(1988)	(1999)

03436100 RED RIVER AT PORT ROYAL, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	577,039		491,376			
ANNUAL MEAN	1,581		1,343		1,329	
HIGHEST ANNUAL MEAN					2,594	1979
LOWEST ANNUAL MEAN					514	2000
HIGHEST DAILY MEAN	22,100	Feb 16	14,900	Apr 23	56,600	Mar 13, 1975
LOWEST DAILY MEAN	188	Nov 4	188	Nov 4	52	Sep 14, 2002
ANNUAL SEVEN-DAY MINIMUM	213	Oct 31	213	Oct 31	58	Sep 12, 1964
MAXIMUM PEAK FLOW			15,300	Apr 23	60,300	Mar 13, 1975
MAXIMUM PEAK STAGE			26.61	Apr 23	48.26	Mar 13, 1975
INSTANTANEOUS LOW FLOW			a182	Nov 4	50	Sep 14, 2002
ANNUAL RUNOFF (CFSM)	1.69		1.44		1.42	
ANNUAL RUNOFF (INCHES)	22.96		19.55		19.31	
10 PERCENT EXCEEDS	3,050		2,840		2,990	
50 PERCENT EXCEEDS	1,030		922		613	
90 PERCENT EXCEEDS	295		284		124	

a Also occurred Nov. 5.



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WATER-QUALITY DATA

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)
DEC					
09...	1050	708	396	11.0	21
APR					
08...	0900	677	330	17.0	49
AUG					
11...	1140	484	410	24.0	19

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