

03435305 RED RIVER BELOW HIGHWAY 161 NEAR BARREN PLAINS, TN

LOCATION.--Lat 36°38'32", long 86°59'18", Robertson County, Hydrologic Unit 05130206, on left bank in pump house of Springfield water plant, 0.2 mi south of Kentucky-Tennessee state line, 0.7 mi below Highway 161 bridge, 4.8 mi northwest of Barren Plains.

DRAINAGE AREA.--549 mi², includes 246 mi² without surface drainage.

PERIOD OF RECORD.--October 1994 to January 2005 (discontinued). Occasional low-flow measurements, water years 1966-1967 at site 1.8 mi upstream.

GAGE.-- Data collection platform. Datum of gage is 440.00 ft above NGVD of 1929 (levels based on information provided by City of Springfield).

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 1	0300	7,700	13.59	Jan 8	0915	9,600	15.40
Dec 7	1930	*0,740	*15.54	Jan 14	0445	6,650	12.70
Dec 9	2245	5,700	11.86				

Minimum discharge, 102 ft³/s, Oct. 11, 12.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	127	400	5,600	2,220	---	---	---	---	---	---	---	---
2	129	615	2,680	2,130	---	---	---	---	---	---	---	---
3	124	1,270	2,010	2,810	---	---	---	---	---	---	---	---
4	125	776	1,620	2,070	---	---	---	---	---	---	---	---
5	117	646	1,350	2,300	---	---	---	---	---	---	---	---
6	115	543	1,410	2,630	---	---	---	---	---	---	---	---
7	111	490	5,560	3,150	---	---	---	---	---	---	---	---
8	107	443	4,330	7,260	---	---	---	---	---	---	---	---
9	111	398	3,630	3,740	---	---	---	---	---	---	---	---
10	106	363	4,180	2,780	---	---	---	---	---	---	---	---
11	107	365	2,670	2,350	---	---	---	---	---	---	---	---
12	182	1,590	2,120	2,710	---	---	---	---	---	---	---	---
13	321	1,280	1,800	2,880	---	---	---	---	---	---	---	---
14	250	856	1,520	5,130	---	---	---	---	---	---	---	---
15	204	680	1,320	2,990	---	---	---	---	---	---	---	---
16	185	593	1,170	2,390	---	---	---	---	---	---	---	---
17	165	540	1,060	1,980	---	---	---	---	---	---	---	---
18	233	493	979	1,710	---	---	---	---	---	---	---	---
19	794	465	889	1,540	---	---	---	---	---	---	---	---
20	907	440	793	1,440	---	---	---	---	---	---	---	---
21	624	418	724	1,320	---	---	---	---	---	---	---	---
22	469	383	798	1,190	---	---	---	---	---	---	---	---
23	422	376	3,030	1,050	---	---	---	---	---	---	---	---
24	603	1,100	1,960	931	---	---	---	---	---	---	---	---
25	594	1,540	1,450	866	---	---	---	---	---	---	---	---
26	488	1,000	1,220	819	---	---	---	---	---	---	---	---
27	485	832	1,060	742	---	---	---	---	---	---	---	---
28	462	841	937	668	---	---	---	---	---	---	---	---
29	437	794	958	691	---	---	---	---	---	---	---	---
30	417	1,970	1,450	918	---	---	---	---	---	---	---	---
31	384	---	2,330	847	---	---	---	---	---	---	---	---
TOTAL	9,905	22,500	62,608	66,252	---	---	---	---	---	---	---	---
MEAN	320	750	2,020	2,137	---	---	---	---	---	---	---	---
MAX	907	1,970	5,600	7,260	---	---	---	---	---	---	---	---
MIN	106	363	724	668	---	---	---	---	---	---	---	---
CFSM	0.58	1.37	3.68	3.89	---	---	---	---	---	---	---	---
IN.	0.67	1.52	4.24	4.49	---	---	---	---	---	---	---	---

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2005, BY WATER YEAR (WY)

MEAN	268	492	945	1,131	1,288	1,333	951	1,126	847	322	254	268
MAX	1,096	1,237	2,335	2,718	2,805	4,219	1,594	1,810	3,219	655	507	811
(WY)	(2003)	(2003)	(1997)	(1999)	(2003)	(1997)	(1998)	(2002)	(1998)	(1998)	(1998)	(2003)
MIN	47.3	48.4	166	121	525	406	333	355	200	110	77.1	42.3
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2001)	(2001)	(1999)	(2000)	(1999)	(1999)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		WATER YEARS 1994 - 2005	
ANNUAL TOTAL	331,130			
ANNUAL MEAN	905		746	
HIGHEST ANNUAL MEAN			1,170	1997
LOWEST ANNUAL MEAN			286	2000
HIGHEST DAILY MEAN	8,040	Feb 6	19,800	Mar 3, 1997
LOWEST DAILY MEAN	106	Oct 10	30	Oct 26, 1999
ANNUAL SEVEN-DAY MINIMUM	111	Oct 5	31	Oct 26, 1999
MAXIMUM PEAK FLOW			22,100	Mar 2, 1997
MAXIMUM PEAK STAGE			28.49	Mar 2, 1997
INSTANTANEOUS LOW FLOW			23	Oct 5, 2001
ANNUAL RUNOFF (CFSM)	1.65		1.36	
ANNUAL RUNOFF (INCHES)	22.44		18.47	
10 PERCENT EXCEEDS	1,810		1,640	
50 PERCENT EXCEEDS	609		394	
90 PERCENT EXCEEDS	169		76	

