

03465500 NOLICHUCKY RIVER AT EMBREEVILLE, TN

LOCATION.--Lat 36°10'35", long 82°27'27", Washington County, Hydrologic Unit 06010108, on left bank, at Embreeville, 1,000 ft upstream from bridge on State Highway 81, 3 mi northwest of Erwin, 5.2 mi downstream from North Indian Creek, and at mile 89.0.

DRAINAGE AREA.--805 mi².

PERIOD OF RECORD.--September 1900 to May 1901 (published as "near Chucky Valley"), October 1919 to current year. Monthly discharge only October 1919 to June 1920, published in WSP 1306.

REVISED RECORDS.--WSP 803: 1935(M), WSP 823: Drainage area. WSP 1336: 1921-24, 1931(M).

GAGE.--Data collection platform. Datum of gage is 1,519.30 ft above NGVD of 1929. Sept. 1, 1900 to May 21, 1901, nonrecording gage at site 3 mi downstream at different datum, destroyed by flood of May 21, 1901. July 1, 1920 to Sept. 30, 1931, nonrecording gage at bridge 2,000 ft downstream at datum 6.33 ft lower.

REMARKS.--No estimated daily discharges. Records good. Periodic observation of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 21, 1901, reached a stage of 24 ft, discharge, 120,000 ft³/s, present site and datum, from reports of Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jul 12	0915	9,550	5.04	Aug 30	1845	*15,500	*6.46

Minimum discharge, 489 ft³/s, Sept. 25, 26.

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	2,420	1,020	1,710	1,270	1,120	2,040	2,410	3,160	941	1,380	1,300	2,200
2	2,060	954	1,750	1,190	1,080	1,750	4,030	2,580	1,870	1,430	1,210	1,650
3	1,890	931	1,550	1,180	1,240	1,600	5,370	2,210	1,970	1,250	1,030	1,380
4	1,730	1,590	1,430	1,150	1,420	1,500	4,170	1,950	1,510	1,430	1,070	1,190
5	1,590	2,510	1,330	1,120	1,340	1,510	3,540	1,770	1,270	1,420	985	1,070
6	1,430	1,670	1,320	1,100	1,270	1,550	3,010	1,690	1,120	1,190	954	988
7	1,350	1,370	1,440	1,090	1,230	1,490	2,600	1,570	1,290	1,660	1,000	920
8	1,280	1,230	1,370	1,140	1,210	2,030	2,890	1,460	3,650	4,240	1,330	862
9	1,230	1,090	1,770	1,100	1,230	2,250	3,310	1,380	2,900	2,140	2,420	812
10	1,200	1,010	3,590	1,030	1,310	1,960	2,680	1,370	2,150	1,630	1,840	771
11	1,150	969	4,060	1,010	1,250	1,820	2,350	1,710	1,920	1,490	1,390	739
12	1,070	1,300	3,390	983	1,150	1,750	2,160	1,420	1,760	4,970	1,150	708
13	1,340	2,320	2,510	989	1,150	1,680	2,320	1,290	4,460	2,800	1,020	679
14	1,340	1,730	2,050	5,340	1,430	1,730	3,580	1,330	3,700	2,340	1,120	654
15	1,140	1,480	1,780	3,780	1,540	1,720	3,230	1,640	2,310	2,140	1,140	631
16	1,050	1,340	1,570	2,560	1,450	1,620	2,650	1,660	1,840	3,840	1,050	618
17	992	1,250	1,470	2,070	1,380	1,720	2,310	1,400	1,590	2,660	974	726
18	914	1,170	1,390	1,680	1,270	1,630	2,090	1,280	1,410	2,140	2,240	670
19	979	1,110	1,340	1,540	1,160	1,550	1,920	1,220	1,480	2,550	2,890	605
20	1,270	1,060	1,240	1,530	1,130	1,480	1,780	1,930	1,940	3,820	1,730	570
21	1,060	1,010	1,110	1,430	1,730	1,410	1,670	1,960	2,010	2,660	1,430	552
22	1,000	963	1,250	1,360	2,910	1,350	1,770	1,560	1,500	2,070	1,160	539
23	959	1,010	2,470	1,290	2,190	2,190	2,610	1,490	1,380	1,920	1,220	528
24	993	2,200	3,690	1,040	2,030	2,930	2,280	1,410	1,270	1,600	1,270	516
25	991	5,040	2,280	1,290	2,050	2,240	2,050	1,270	1,130	1,410	1,080	499
26	921	3,030	1,910	1,210	1,850	1,990	1,940	1,190	1,070	1,300	978	513
27	910	2,260	1,680	1,140	1,680	1,810	1,920	1,110	1,360	1,200	930	657
28	943	2,010	1,520	1,040	1,750	4,270	1,830	1,060	2,110	1,210	914	600
29	1,090	1,760	1,400	1,020	---	4,700	3,260	1,040	1,760	1,280	876	536
30	1,300	1,560	1,350	1,140	---	3,460	4,110	988	1,580	1,360	4,370	550
31	1,150	---	1,300	1,200	---	2,790	---	948	---	1,250	4,860	---
TOTAL	38,742	47,947	58,020	46,012	41,550	63,520	81,840	48,046	56,251	63,780	46,931	23,933
MEAN	1,250	1,598	1,872	1,484	1,484	2,049	2,728	1,550	1,875	2,057	1,514	798
MAX	2,420	5,040	4,060	5,340	2,910	4,700	5,370	3,160	4,460	4,970	4,860	2,200
MIN	910	931	1,110	983	1,080	1,350	1,670	948	941	1,190	876	499
MED	1,150	1,320	1,550	1,180	1,330	1,750	2,510	1,420	1,670	1,630	1,150	664
CFSM	1.55	1.99	2.32	1.84	1.84	2.55	3.39	1.93	2.33	2.56	1.88	0.99
IN.	1.79	2.22	2.68	2.13	1.92	2.94	3.78	2.22	2.60	2.95	2.17	1.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2005, BY WATER YEAR (WY)

MEAN	803	1,019	1,286	1,690	2,035	2,324	2,032	1,564	1,133	954	922	820
MAX	2,630	4,720	3,073	4,020	4,494	5,102	4,169	3,171	3,196	2,525	4,876	6,170
(WY)	(1930)	(1978)	(1962)	(1995)	(1957)	(1963)	(1983)	(1984)	(1992)	(1949)	(1940)	(2004)
MIN	246	294	353	382	635	649	699	586	376	351	182	187
(WY)	(1954)	(1940)	(1940)	(1940)	(1941)	(1988)	(1986)	(2001)	(1988)	(1988)	(1925)	(1925)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1920 - 2005	
ANNUAL TOTAL	645,023		616,572		1,378	
ANNUAL MEAN	1,762		1,689		1,948	
HIGHEST ANNUAL MEAN					1,948 1974	
LOWEST ANNUAL MEAN					694 1988	
HIGHEST DAILY MEAN	42,500	Sep 8	5,370	Apr 3	50,800	Nov 6, 1977
LOWEST DAILY MEAN	447	Aug 20	499	Sep 25	88	Sep 8, 1925
ANNUAL SEVEN-DAY MINIMUM	491	Aug 16	531	Sep 20	121	Sep 3, 1925
MAXIMUM PEAK FLOW			15,500	Aug 30	a110,000	Nov 6, 1977
MAXIMUM PEAK STAGE			6.46	Aug 30	21.52	Nov 6, 1977
INSTANTANEOUS LOW FLOW			b489	Sep 25	c85	Sep 8, 1925
ANNUAL RUNOFF (CFSM)	2.19		2.10		1.71	
ANNUAL RUNOFF (INCHES)	29.81		28.49		23.25	
10 PERCENT EXCEEDS	2,410		2,840		2,560	
50 PERCENT EXCEEDS	1,260		1,420		1,010	
90 PERCENT EXCEEDS	748		957		399	

- a From rating curve extended above 48,000 ft³/s on basis of contracted opening and slope-area measurements of peak flow.
- b Also occurred on Sept. 26.
- c Also occurred on Sept. 9, 1925.

