Water-Data Report 2012

03404000 CUMBERLAND RIVER AT WILLIAMSBURG, KY

Upper Cumberland Basin
Upper Cumberland Subbasin

LOCATION.--Lat 36°44′36″, long 84°09′22″ referenced to North American Datum of 1927, Whitley County, KY, Hydrologic Unit 05130101, on right bank 100 feet upstream from bridge on State Highway 296E at Williamsburg, 2.0 miles downstream from Clear Fork, and at mile 590.4.

DRAINAGE AREA.--1,607 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1950 to current year. Gage-height records collected in this vicinity since 1908 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 1436: Drainage area.

GAGE.--Water-stage recorder with telemetry and crest-stage gages. Datum of gage is 891.52 feet above NGVD of 1929. Prior to July 2, 1951, nonrecording gage at same site and datum. Prior to June 26, 1990, water-stage recorder located 600 feet downstream at same datum.

COOPERATION.--National Streamflow Information Program.

REMARKS.--Records good except for those estimated, which are fair. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28,600 ft^3/s, November 30, gage height, 25.85 feet.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 03404000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/03404000.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	957	2,610	17,700	4,450	4,440	9,310	2,790	1,350	637	182	354	249
2	775	2,140	8,770	4,000	4,640	12,800	2,920	1,170	648	174	326	227
3	648	1,800	5,170	3,490	4,580	18,700	2,800	1,040	2,110	169	525	245
4	624	2,110	4,160	3,050	4,240	19,300	4,230	940	1,380	165	738	301
5	557	2,810	3,570	2,770	5,770	15,900	4,760	1,140	989	177	1,090	362
6	514	2,890	3,590	2,580	8,610	9,030	4,020	1,550	831	196	1,730	404
7	469	2,540	8,090	2,400	7,960	5,670	3,610	1,430	793	307	2,740	697
8	440	2,160	16,400	2,240	5,980	5,510	3,040	1,210	711	393	2,420	753
9	415	1,880	16,200	2,150	4,770	17,600	2,630	1,330	654	318	1,620	649
10	412	1,700	11,200	2,200	4,010	20,100	2,340	1,280	603	617	1,530	545
11	393	1,560	6,440	3,370	3,560	17,100	2,100	1,090	496	1,230	2,330	430
12	403	1,390	4,870	9,080	3,210	10,000	1,880	895	443	882	1,870	372
13	452	1,260	4,100	8,960	2,750	5,970	1,690	773	440	595	1,280	313
14	565	1,160	3,570	7,500	2,510	4,860	1,510	891	425	606	885	267
15	702	1,120	3,200	5,690	2,430	4,180	1,410	3,300	398	948	739	239
16	754	1,920	3,240	4,480	2,360	5,220	1,320	3,860	354	1,580	1,020	223
17	654	9,220	4,180	3,780	2,430	7,520	1,260	2,750	327	1,260	867	237
18	540	12,400	4,500	3,980	2,550	7,760	1,230	1,930	315	977	676	2,480
19	1,870	8,110	4,140	4,180	2,590	9,010	1,170	1,480	326	1,390	540	7,790
20	7,360	4,960	3,720	3,850	3,480	8,010	1,200	1,220	321	2,770	476	5,030
21	6,450	4,290	4,080	4,570	4,450	6,070	1,120	1,020	296	3,380	432	2,370
22	3,840	5,110	7,480	7,590	5,690	4,840	1,030	1,750	276	2,230	387	1,590
23	2,630	6,740	e14,400	8,860	10,600	4,270	1,010	1,850	259	1,370	353	1,190
24	2,010	9,350	e13,700	13,400	12,700	4,960	981	1,380	261	1,140	323	764
25	1,640	8,020	e8,900	11,100	9,830	6,310	961	1,180	267	945	292	605
26	1,410	5,640	e6,590	7,510	6,710	6,480	1,080	993	246	753	274	536
27	1,260	4,500	e7,400	13,500	5,090	5,310	1,540	919	225	676	257	494
28	1,310	13,600	e8,250	15,900	4,230	4,360	2,160	743	207	722	249	465
29	2,170	26,400	e7,670	10,700	4,170	3,750	2,080	651	195	577	242	426
30	3,280	27,000	6,490	6,860	---	3,320	1,630	773	189	463	256	451
31	3,220	---	5,270	5,220	---	3,040	---	692	---	392	244	---
Total	48,724	176,390	227,040	189,410	146,340	266,260	61,502	42,580	15,622	27,584	27,065	30,704
Mean	1,572	5,880	7,324	6,110	5,046	8,589	2,050	1,374	521	890	873	1,023
Max	7,360	27,000	17,700	15,900	12,700	20,100	4,760	3,860	2,110	3,380	2,740	7,790
Min	393	1,120	3,200	2,150	2,360	3,040	961	651	189	165	242	223

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	647	1,760	3,455	4,097	4,708	5,147	4,300	2,978	1,724	840	792	807
Max	4,413	5,880	9,751	8,015	12,920	10,400	11,520	9,572	8,305	1,684	2,297	4,544
(WY)	(1990)	(2012)	(1992)	(1994)	(1994)	(1994)	(1998)	(1984)	(1989)	(1989)	(2010)	(2004)
Min	103	141	300	203	1,021	1,193	730	943	277	211	191	86.2
(WY)	(2008)	(1999)	(1981)	(1981)	(2007)	(1988)	(1986)	(1986)	(1988)	(1988)	(2002)	(1999)

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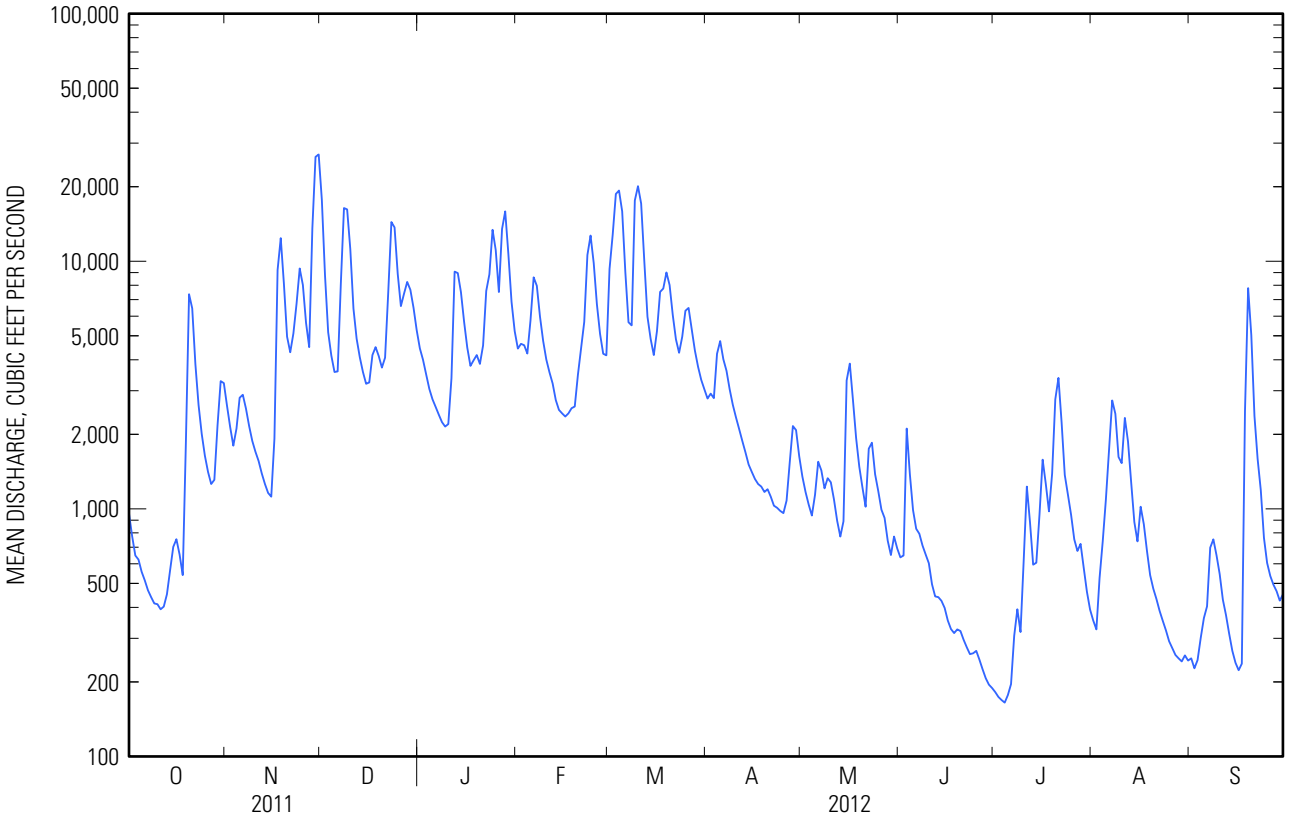
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1980 - 2012	
Annual total	1,632,303		1,259,221			
Annual mean	4,472		3,440		2,594	
Highest annual mean					4,390	1994
Lowest annual mean					1,159	1988
Highest daily mean	27,000	Nov 30	27,000	Nov 30	38,500	Feb 13, 1994
Lowest daily mean	247	Sep 4	165	Jul 4	62	Oct 18, 1980
Annual seven-day minimum	294	Aug 29	179	Jun 29	63	Oct 17, 1980
Maximum peak flow			28,600	Nov 30	49,700	Jan 31, 1957
Maximum peak stage			25.85	Nov 30	35.03	Apr 7, 1977
Instantaneous low flow			162	Jul 4	6.1	Oct 23, 1953
10 percent exceeds	12,400		8,660		5,960	
50 percent exceeds	2,300		1,870		1,270	
90 percent exceeds	665		322		201