Water-Data Report 2012

03401000 CUMBERLAND RIVER NEAR HARLAN, KY

Upper Cumberland Basin
Upper Cumberland Subbasin

LOCATION.--Lat 36°50′48″, long 83°21′21″ referenced to North American Datum of 1927, Harlan County, KY, Hydrologic Unit 05130101, on right downstream side of bridge on State Highway 840 at Loyall, 1.6 miles upstream from Fourmile Branch, 1.8 miles west of Harlan, 2.3 miles downstream from confluence of Poor and Clover Forks, and at mile 691.9.

DRAINAGE AREA.--374 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1940 to September 2005. October 2006 to current year.

REVISED RECORDS.--WSP 953: 1940(M). WSP 1173: 1947(M).

GAGE.--Water-stage recorder with telemetry. Datum of gage is 1,139.10 feet above NGVD of 1929. Prior to August 28, 1984, datum of gage 1.00 foot higher. Prior to November 4, 1941, nonrecording gage at same site and datum.

COOPERATION.--National Streamflow Information Program and U.S. Army Corps of Engineers, Nashville District.

REMARKS.--Records good. Flow slightly regulated by Martins Fork Dam (station 03400798) beginning January 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,890 ft^3/s, March 3, gage height, 10.79 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 03401000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/03401000.2012.pdf

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	246	677	1,590	1,100	1,130	3,760	649	524	1,220	78	568	88
2	246	507	1,340	1,000	1,150	4,580	632	471	1,190	84	691	94
3	210	504	1,170	905	1,040	7,000	863	430	640	82	686	147
4	182	940	1,050	831	1,130	3,250	1,340	482	506	88	534	136
5	163	993	961	782	2,290	2,260	1,310	478	539	120	529	242
6	151	803	1,590	721	2,130	1,790	1,230	435	487	235	968	469
7	172	669	5,500	698	1,640	1,540	981	413	452	114	1,130	450
8	160	586	4,250	665	1,360	1,990	840	384	404	96	853	201
9	157	533	2,450	661	1,180	6,080	747	370	251	189	839	218
10	151	507	1,830	634	1,050	2,940	673	327	235	299	930	168
11	156	465	1,510	740	978	2,120	611	283	226	232	814	123
12	208	427	1,320	1,310	847	1,740	499	259	223	233	463	104
13	214	407	1,170	1,360	772	1,510	463	249	195	249	351	98
14	349	396	1,060	1,200	720	1,310	435	1,420	169	326	392	89
15	316	406	986	1,050	706	1,350	417	1,810	159	495	399	88
16	244	3,660	1,060	927	785	2,570	398	1,120	156	274	305	87
17	217	5,030	1,170	951	851	1,660	380	805	159	291	235	98
18	209	2,420	1,110	1,120	837	2,350	426	637	153	293	228	2,100
19	969	1,720	1,020	1,060	939	2,150	406	482	140	621	206	1,450
20	1,310	1,400	934	1,010	1,070	1,660	360	410	132	1,020	193	1,010
21	923	1,350	1,170	1,350	1,210	1,380	354	383	150	603	173	770
22	700	1,400	1,750	1,470	1,720	1,240	373	411	149	430	147	328
23	574	3,660	3,270	2,310	3,920	1,140	378	419	134	401	130	279
24	510	2,510	2,250	2,280	2,700	1,220	366	412	116	368	121	251
25	472	1,840	1,710	1,720	1,940	1,230	481	467	108	487	116	236
26	441	1,510	1,400	1,470	1,590	1,100	681	317	99	523	113	171
27	433	1,320	1,510	2,410	1,380	983	1,400	290	91	276	105	138
28	549	1,470	1,660	2,050	1,220	906	1,010	277	87	214	105	154
29	1,150	2,730	1,500	1,640	1,540	833	748	287	84	191	138	179
30	1,060	2,040	1,350	1,380	---	708	607	245	82	169	98	173
31	842	---	1,220	1,200	---	687	---	192	---	148	90	---
Total	13,684	42,880	51,861	38,005	39,825	65,037	20,058	15,489	8,736	9,229	12,650	10,139
Mean	441	1,429	1,673	1,226	1,373	2,098	669	500	291	298	408	338
Max	1,310	5,030	5,500	2,410	3,920	7,000	1,400	1,810	1,220	1,020	1,130	2,100
Min	151	396	934	634	706	687	354	192	82	78	90	87
Cfsm	1.18	3.82	4.47	3.28	3.67	5.61	1.79	1.34	0.78	0.80	1.09	0.90
In.	1.36	4.27	5.16	3.78	3.96	6.47	2.00	1.54	0.87	0.92	1.26	1.01

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	204	510	885	1,009	1,211	1,304	1,089	826	457	249	235	217
Max	1,129	1,532	2,704	1,783	3,259	2,684	2,986	2,003	1,789	453	534	1,018
(WY)	(1990)	(1997)	(1992)	(1994)	(1994)	(1994)	(1998)	(1984)	(1989)	(1991)	(1996)	(2004)
Min	30.0	51.1	88.9	63.5	328	334	211	302	96.1	57.3	52.7	38.3
(WY)	(1998)	(1999)	(1981)	(1981)	(2007)	(1988)	(1986)	(2008)	(1988)	(1988)	(1988)	(1999)

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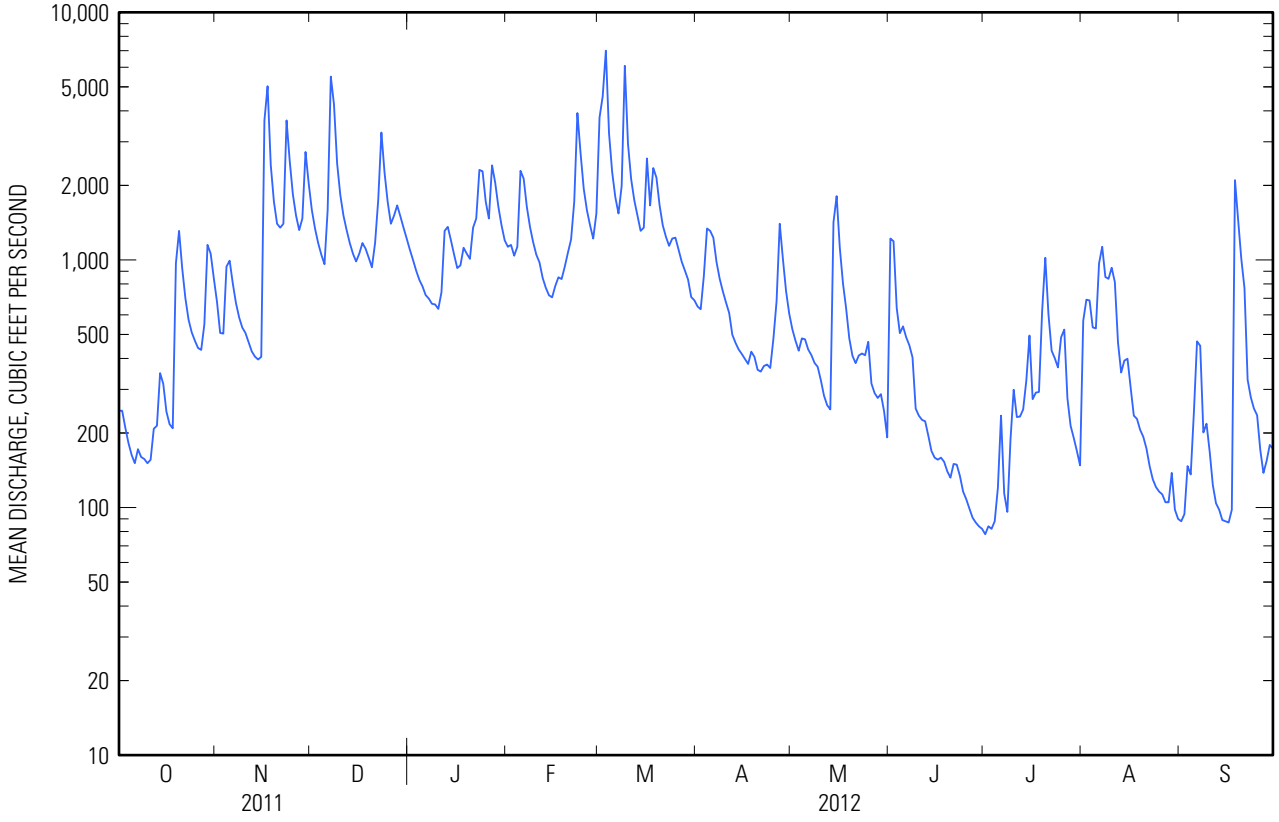
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1980 - 2012	
Annual total	395,467		327,593			
Annual mean	1,083		895		680	
Highest annual mean					1,130	1994
Lowest annual mean					333	1988
Highest daily mean	8,880	Apr 16	7,000	Mar 3	21,300	Mar 18, 2002
Lowest daily mean	116	Sep 3	78	Jul 1	16	Oct 9, 1997
Annual seven-day minimum	136	Aug 29	84	Jun 28	17	Oct 4, 1997
Maximum peak flow					64,500	Apr 5, 1977
Maximum peak stage					30.20	Apr 5, 1977
Instantaneous low flow					76	Oct 21, 2010
Annual runoff (cfsm)	2.90		2.39		1.82	
Annual runoff (inches)	39.34		32.58		24.71	
10 percent exceeds	2,440		1,820		1,500	
50 percent exceeds	677		633		385	
90 percent exceeds	208		139		72