03282120 KENTUCKY RIVER AT LOCK 12 NEAR IRVINE, KY

Kentucky Basin
Lower Kentucky Subbasin

LOCATION.--Lat 37°40′42″, long 83°56′54″ referenced to North American Datum of 1983, Estill County, KY, Hydrologic Unit 05100205, on right upstream bank of Lock 12 at Irvine, 2.4 miles upstream from station Camp Creek, 4.7 miles downstream from Millers Creek, and at mile 220.9.

DRAINAGE AREA.--2,916 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2000 to current year.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 590.53 feet above NGVD of 1929 or 593.00 feet above Kentucky River Datum.

COOPERATION.--Kentucky River Authority and U.S. Army Corps of Engineers, Louisville District.

REMARKS.--Records fair except for periods of estimated records and flow less than 150 ft^3/s, which are poor. Flow regulated by Buckhorn Lake beginning December 1960 (station 03280800), and by Carr Fork Lake beginning January 1976 (station 03277446). Small diversions by City of Lexington waterworks.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,880	5,160	1,570	2,640	2,100	2,730	1,880	2,600	449	371	883	88
2	2,990	5,780	1,590	3,690	2,100	17,300	1,740	2,360	414	417	662	83
3	2,640	7,920	1,490	4,310	2,000	21,300	1,690	2,330	391	350	501	81
4	2,170	6,440	1,370	4,010	1,770	13,800	2,220	2,690	418	285	404	e85
5	1,720	4,770	1,250	3,700	1,630	9,530	3,440	4,150	590	355	375	e81
6	1,450	3,530	1,120	6,190	1,300	7,640	3,890	8,690	807	407	378	e95
7	1,270	2,980	1,070	9,010	1,140	6,180	3,380	8,650	889	337	391	e82
8	1,210	3,200	1,060	13,800	1,250	4,730	2,900	6,160	989	295	348	e77
9	1,080	9,030	973	14,400	1,250	3,990	2,530	4,430	808	268	307	e75
10	949	10,300	891	12,000	1,250	3,520	2,240	3,450	643	239	268	e79
11	861	8,170	884	9,550	1,050	2,970	2,040	2,790	525	235	235	e91
12	1,260	6,490	890	7,260	960	2,440	1,980	2,330	457	228	204	e147
13	1,320	5,390	879	5,760	1,120	2,100	3,900	2,060	417	221	179	e235
14	1,070	4,530	934	4,820	1,430	2,160	4,990	1,770	365	257	163	e215
15	1,060	3,880	959	4,520	1,400	2,350	12,600	1,510	322	294	152	e158
16	1,030	4,450	954	4,790	1,290	2,560	26,600	1,390	298	265	142	e117
17	1,470	8,510	905	5,400	1,170	2,620	24,100	1,490	280	250	134	e97
18	2,810	9,490	844	5,430	1,110	3,490	14,200	1,530	272	239	130	e93
19	3,120	7,550	814	4,960	1,040	3,940	10,600	1,400	263	227	123	e89
20	4,620	6,000	776	4,320	1,120	3,360	9,260	1,210	253	242	122	e87
21	3,720	4,890	767	3,960	1,390	3,090	7,770	1,030	256	258	187	e83
22	2,850	3,880	1,150	5,400	1,680	2,910	6,090	899	270	257	187	e78
23	2,240	3,260	3,240	8,180	2,240	2,660	4,940	831	257	267	145	e78
24	1,840	2,890	5,500	8,040	2,530	2,460	3,880	774	252	260	125	e85
25	1,590	2,660	5,280	6,720	2,210	2,280	3,200	707	264	251	109	e88
26	1,390	2,360	5,160	5,420	2,340	2,130	2,970	643	258	247	102	e89
27	3,270	2,020	4,310	4,390	2,300	2,000	2,710	575	258	396	98	e88
28	14,300	1,880	3,820	3,800	2,210	2,030	2,890	509	273	1,060	94	e90
29	16,000	1,770	3,310	3,260	---	2,200	3,490	480	264	1,620	93	e85
30	10,100	1,660	2,870	2,860	---	2,130	3,110	472	284	1,690	97	e78
31	6,770	---	2,560	2,470	---	2,110	---	467	---	1,200	93	---
Total	101,050	150,840	59,190	185,060	44,380	144,710	177,230	70,377	12,486	13,288	7,431	2,997
Mean	3,260	5,028	1,909	5,970	1,585	4,668	5,908	2,270	416	429	240	99.9
Max	16,000	10,300	5,500	14,400	2,530	21,300	26,600	8,690	989	1,690	883	235
Min	861	1,660	767	2,470	960	2,000	1,690	467	252	221	93	75
Med	1,840	4,650	1,120	4,960	1,390	2,730	3,410	1,510	310	267	163	88
Ac-ft	200,400	299,200	117,400	367,100	88,030	287,000	351,500	139,600	24,770	26,360	14,740	5,940
Cfsm	1.12	1.72	0.65	2.05	0.54	1.60	2.03	0.78	0.14	0.15	0.08	0.03
In.	1.29	1.92	0.76	2.36	0.57	1.85	2.26	0.90	0.16	0.17	0.09	0.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,369	3,006	4,310	5,609	6,778	5,611	6,913	4,494	3,379	1,590	1,091	1,876
Max	3,260	6,608	10,230	9,677	16,440	9,091	11,430	8,365	9,066	3,023	2,525	7,487
(WY)	(2007)	(2004)	(2005)	(2004)	(2003)	(2002)	(2003)	(2002)	(2003)	(2004)	(2003)	(2004)
Min	267	284	682	2,694	1,585	2,821	2,661	1,040	416	429	240	99.9
(WY)	(2006)	(2002)	(2006)	(2003)	(2007)	(2006)	(2001)	(2001)	(2007)	(2007)	(2007)	(2007)

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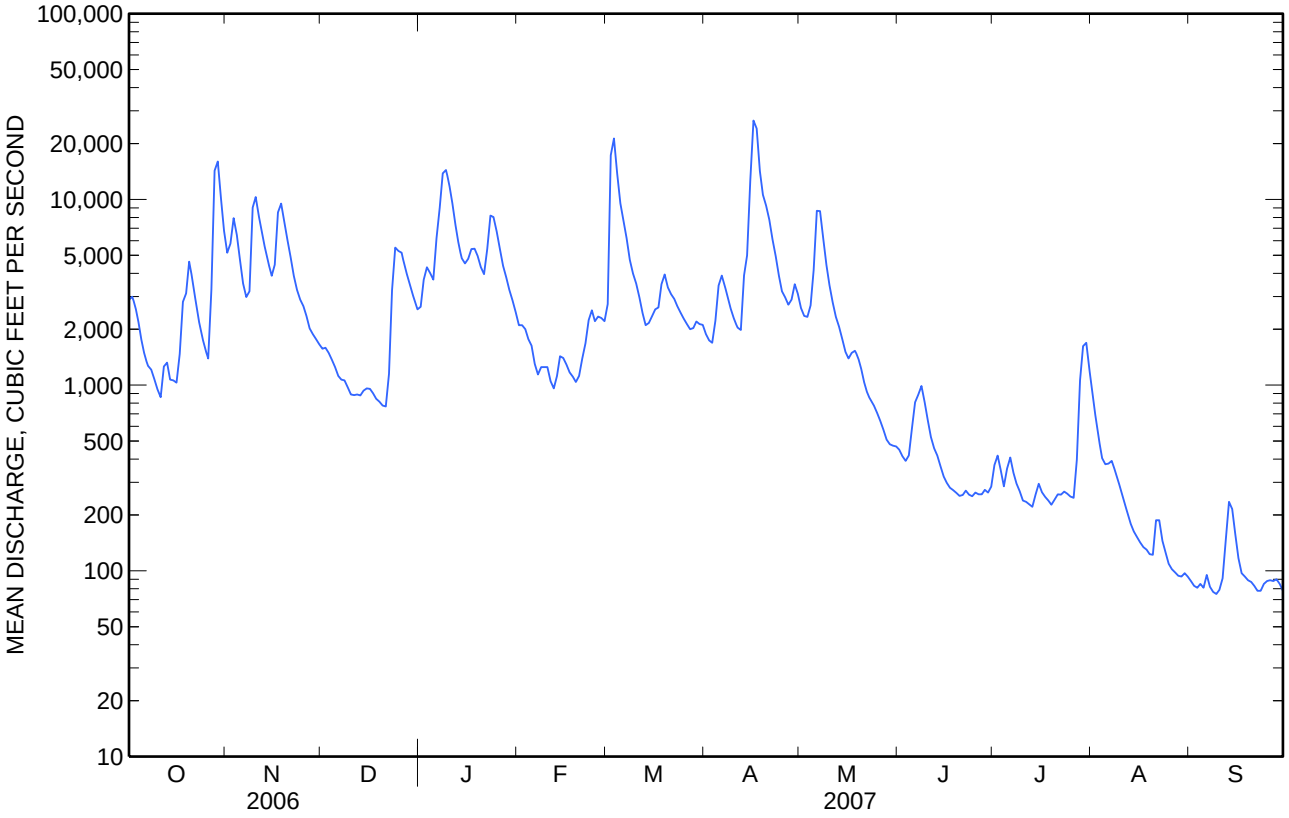
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 2001 - 2007	
Annual total	1,030,454		969,039			
Annual mean	2,823		2,655		3,813	
Highest annual mean					6,018	2004
Lowest annual mean					2,098	2006
Highest daily mean	24,400	Jan 24	26,600	Apr 16	57,900	Feb 18, 2003
Lowest daily mean	234	Aug 8	75	Sep 9	56	Sep 16, 2002
Annual seven-day minimum	265	Aug 4	82	Sep 4	82	Sep 4, 2007
Maximum peak flow			28,500	Apr 16	58,600	Feb 18, 2003
Maximum peak stage			21.35	Apr 16	35.02	Feb 18, 2003
Annual runoff (ac-ft)	2,044,000		1,922,000		2,762,000	
Annual runoff (cfsm)	0.97		0.910		1.31	
Annual runoff (inches)	13.15		12.36		17.77	
10 percent exceeds	6,510		6,290		9,430	
50 percent exceeds	1,760		1,490		1,810	
90 percent exceeds	556		128		299