

Water-Data Report 2010

03294500 OHIO RIVER AT LOUISVILLE, KY

Lower Ohio-Salt Basin
Silver-Little Kentucky Subbasin

LOCATION.--Lat 38°16'49", long 85°47'57" referenced to North American Datum of 1927, Jefferson County, KY, Hydrologic Unit 05140101, on left bank at downstream end of lock guide wall in lower pool at McAlpine Locks at Louisville, 5.3 miles downstream from Beargrass Creek, and at mile 607.3.

DRAINAGE AREA.--91170.0 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1928 to current year. Prior to October 1935 monthly discharge only, published in WSP 1305. Gage-height records collected in this vicinity since 1871 are published in reports of National Weather Service.

REVISED RECORDS.--WSP 893: 1939, KY-92-1 peak.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 373.18 feet above NGVD of 1929 or 374.00 feet Ohio River datum. Prior to October 1, 1939, and October 1, 1943 to September 30, 1946, various combinations of gages near Louisville were used. October 1, 1939 to September 30, 1943, water-stage recorders at Louisville and Kosmosdale, downstream from McAlpine Dam (4 miles and 20.1 miles, respectively), were used to determine discharge. October 1, 1946 to September 30, 1961, nonrecording gage at site 0.3 mile upstream at same datum. October 1, 1952 to September 30, 1970, upper nonrecording gage at dam 43, 25.9 miles downstream used as an auxiliary gage. Since October 1, 1970, auxiliary water-stage recorder at Kosmosdale, 19.8 miles downstream. Datum of auxiliary gage is 372.75 feet above NGVD of 1929 or 373.67 feet above Ohio River Datum.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District.

REMARKS.--Records good except for estimated periods and those below 20,000 ft³/s, which are poor. Flow regulated by Ohio River system of locks, dams, and reservoirs.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	47,200	174,000	51,900	e151,000	325,000	149,000	245,000	110,000	66,100	59,500	23,500	21,400
2	42,000	153,000	44,900	131,000	249,000	124,000	236,000	143,000	54,800	47,000	23,200	26,700
3	54,900	127,000	54,700	130,000	186,000	116,000	195,000	298,000	63,900	34,000	25,300	22,500
4	42,800	125,000	83,000	123,000	155,000	113,000	156,000	412,000	84,100	29,500	20,900	13,300
5	38,700	122,000	93,900	101,000	144,000	114,000	123,000	471,000	103,000	21,200	e8,500	7,970
6	23,300	99,300	117,000	91,000	149,000	114,000	101,000	478,000	89,200	28,000	e35,000	22,800
7	39,300	77,300	120,000	79,500	229,000	113,000	107,000	434,000	114,000	16,000	21,400	19,300
8	31,700	55,400	98,000	81,500	285,000	117,000	109,000	310,000	142,000	11,100	26,200	29,000
9	161,000	60,800	160,000	64,100	304,000	118,000	107,000	169,000	158,000	9,460	38,900	19,300
10	158,000	55,500	257,000	65,600	250,000	133,000	88,300	109,000	165,000	22,500	30,000	14,300
11	112,000	48,900	311,000	58,700	187,000	e158,000	97,600	94,800	149,000	38,900	20,600	14,700
12	90,200	41,700	347,000	49,200	170,000	177,000	87,700	117,000	147,000	31,500	35,800	18,900
13	64,900	44,700	325,000	49,300	160,000	248,000	86,400	169,000	223,000	25,400	34,500	15,500
14	43,100	61,100	268,000	49,100	134,000	328,000	65,800	187,000	217,000	57,000	42,700	15,500
15	52,500	74,100	201,000	49,100	112,000	424,000	67,900	199,000	221,000	75,900	39,600	21,600
16	46,100	71,300	177,000	48,900	108,000	470,000	57,700	196,000	237,000	51,600	61,300	22,000
17	36,000	56,100	172,000	59,000	95,900	483,000	49,000	171,000	211,000	37,700	41,300	3,090
18	54,800	42,200	158,000	91,600	94,100	477,000	58,300	171,000	161,000	49,700	29,400	26,700
19	61,200	43,300	142,000	160,000	91,100	448,000	57,100	213,000	131,000	43,300	35,600	21,800
20	63,500	52,300	137,000	223,000	85,700	398,000	59,900	253,000	85,600	51,900	29,000	8,420
21	49,400	42,900	140,000	255,000	101,000	333,000	37,800	230,000	78,200	86,900	32,600	877
22	41,800	38,000	132,000	278,000	105,000	279,000	46,300	257,000	77,500	144,000	32,800	32,300
23	45,300	52,500	121,000	277,000	146,000	246,000	55,700	265,000	65,000	128,000	45,100	14,700
24	67,800	58,400	116,000	262,000	146,000	228,000	32,800	223,000	73,300	91,400	34,600	11,400
25	66,400	35,200	119,000	289,000	160,000	241,000	62,100	179,000	59,600	48,700	24,700	7,330
26	60,800	55,200	141,000	356,000	174,000	288,000	58,800	148,000	45,000	34,100	31,300	1,970
27	84,600	46,100	187,000	413,000	170,000	310,000	69,000	113,000	47,600	65,700	29,300	34,400
28	120,000	47,800	235,000	452,000	166,000	288,000	83,700	95,200	77,800	49,000	24,200	4,200
29	126,000	35,600	244,000	464,000	---	281,000	108,000	73,700	89,800	38,400	23,300	31,700
30	101,000	35,800	232,000	448,000	---	240,000	122,000	70,700	e57,300	35,600	19,800	4,910
31	126,000	---	199,000	405,000	---	265,000	---	70,500	---	35,800	20,000	---
Total	2,152,300	2,032,500	5,184,400	5,754,600	4,681,800	7,821,000	2,830,900	6,429,900	3,493,800	1,498,760	940,400	508,567
Mean	69,430	67,750	167,200	185,600	167,200	252,300	94,360	207,400	116,500	48,350	30,340	16,950
Max	161,000	174,000	347,000	464,000	325,000	483,000	245,000	478,000	237,000	144,000	61,300	34,400
Min	23,300	35,200	44,900	48,900	85,700	113,000	32,800	70,500	45,000	9,460	8,500	877

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	39,900	72,080	125,700	169,300	192,900	240,900	202,800	147,100	88,570	56,100	44,260	36,290
Max	169,200	245,900	321,300	595,800	430,400	524,300	403,300	392,900	234,400	163,400	151,300	207,000
(WY)	(2007)	(1986)	(1973)	(1937)	(1939)	(1945)	(1948)	(1996)	(1981)	(1958)	(1958)	(2004)
Min	4,377	6,660	14,090	21,630	38,010	69,390	66,480	29,350	16,400	8,035	4,924	6,005
(WY)	(1931)	(1931)	(1931)	(1931)	(1934)	(1969)	(1986)	(1941)	(1988)	(1930)	(1930)	(1930)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1929 - 2010	
Annual total	42,556,460		43,328,927			
Annual mean	116,600		118,700		117,600	
Highest annual mean					184,400	2004
Lowest annual mean					57,390	1954
Highest daily mean	411,000	May 10	483,000	Mar 17	1,110,000	Jan 27, 1937
Lowest daily mean	8,040	Jul 18	877	Sep 21	877	Sep 21, 2010
Annual seven-day minimum	17,200	Sep 14	11,000	Sep 20	3,530	Oct 15, 1930
Maximum peak flow			508,000	Mar 17	1,110,000	Jan 27, 1937
Maximum peak stage			48.47	Mar 18	85.44	Jan 27, 1937
10 percent exceeds	233,000		265,000		282,000	
50 percent exceeds	99,300		85,700		74,400	
90 percent exceeds	27,600		23,300		17,000	

