

Water-Data Report 2013

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 those estimated and for discharges less than 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 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	33,300	173,000	28,600	174,000	289,000	167,000	142,000	134,000	54,100	159,000	40,700	110,000
2	34,200	228,000	22,100	153,000	385,000	187,000	134,000	128,000	60,600	182,000	37,700	87,300
3	34,200	241,000	29,800	133,000	438,000	195,000	130,000	125,000	62,300	179,000	39,800	73,500
4	26,900	210,000	31,400	124,000	449,000	176,000	132,000	101,000	59,900	170,000	40,100	59,500
5	27,300	174,000	38,100	109,000	431,000	153,000	136,000	74,300	54,300	217,000	39,800	49,400
6	31,100	148,000	41,300	101,000	373,000	125,000	124,000	165,000	50,300	266,000	37,800	51,900
7	32,400	122,000	66,200	84,200	308,000	154,000	106,000	183,000	51,000	332,000	39,800	56,000
8	32,300	110,000	109,000	64,800	255,000	199,000	103,000	153,000	58,000	296,000	57,100	28,500
9	34,300	93,800	147,000	70,300	215,000	224,000	102,000	147,000	70,700	239,000	73,700	36,400
10	25,700	77,900	224,000	81,000	192,000	220,000	95,800	179,000	74,200	220,000	96,900	36,800
11	12,700	66,100	259,000	87,300	179,000	207,000	86,900	238,000	87,000	208,000	99,800	24,800
12	15,900	69,000	297,000	110,000	156,000	242,000	109,000	227,000	88,400	238,000	125,000	33,500
13	18,600	57,600	326,000	160,000	142,000	e231,000	152,000	200,000	87,600	270,000	122,000	38,000
14	21,700	54,000	312,000	264,000	142,000	216,000	187,000	184,000	112,000	285,000	115,000	55,600
15	26,000	84,900	268,000	312,000	145,000	205,000	225,000	167,000	174,000	250,000	133,000	13,300
16	20,500	86,600	197,000	325,000	146,000	222,000	249,000	139,000	215,000	185,000	114,000	38,400
17	17,800	95,500	147,000	331,000	132,000	211,000	242,000	117,000	215,000	131,000	109,000	46,900
18	e22,000	68,100	121,000	368,000	119,000	231,000	246,000	103,000	167,000	103,000	86,800	31,700
19	e20,000	52,100	128,000	406,000	99,100	292,000	268,000	98,600	127,000	90,300	48,900	16,300
20	18,200	46,800	177,000	410,000	87,000	337,000	292,000	87,500	104,000	79,900	65,300	30,300
21	17,300	43,600	238,000	369,000	85,900	351,000	286,000	75,700	114,000	108,000	74,600	73,600
22	26,600	43,600	248,000	303,000	86,000	339,000	254,000	68,900	108,000	111,000	57,400	50,800
23	30,400	43,400	248,000	237,000	85,600	285,000	214,000	70,900	73,000	121,000	79,600	60,900
24	30,600	43,400	257,000	170,000	89,200	217,000	178,000	72,300	44,900	123,000	72,800	65,500
25	30,700	44,100	248,000	131,000	74,500	174,000	171,000	78,600	44,600	144,000	101,000	73,500
26	29,900	35,800	215,000	96,200	73,400	181,000	149,000	88,200	54,300	157,000	68,000	52,900
27	29,100	27,600	207,000	85,200	104,000	208,000	131,000	64,500	94,000	136,000	33,800	50,000
28	28,800	34,500	218,000	75,100	129,000	209,000	121,000	55,400	113,000	81,800	41,500	42,900
29	28,300	39,000	249,000	74,700	---	201,000	121,000	55,000	108,000	76,800	46,100	27,200
30	37,300	40,400	251,000	122,000	---	187,000	127,000	50,400	136,000	88,700	75,300	26,600
31	101,000	---	216,000	215,000	---	162,000	---	47,300	---	73,800	95,600	---
Total	895,100	2,653,800	5,564,500	5,745,800	5,409,700	6,708,000	5,013,700	3,677,600	2,862,200	5,321,300	2,267,900	1,442,000
Mean	28,870	88,460	179,500	185,300	193,200	216,400	167,100	118,600	95,410	171,700	73,160	48,070
Max	101,000	241,000	326,000	410,000	449,000	351,000	292,000	238,000	215,000	332,000	133,000	110,000
Min	12,700	27,600	22,100	64,800	73,400	125,000	86,900	47,300	44,600	73,800	33,800	13,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	40,280	73,420	128,300	169,500	192,400	242,900	203,500	148,600	88,050	57,160	44,170	36,630
Max	169,200	245,900	321,300	595,800	430,400	524,300	417,400	392,900	234,400	171,700	151,300	207,000
(WY)	(2007)	(1986)	(1973)	(1937)	(1939)	(1945)	(2011)	(1996)	(1981)	(2013)	(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 2012		Water Year 2013		Water Years 1929 - 2013	
Annual total	39,679,220		47,561,600			
Annual mean	108,400		130,300		118,400	
Highest annual mean					184,400	2004
Lowest annual mean					57,390	1954
Highest daily mean	421,000	Mar 6	449,000	Feb 4	1,110,000	Jan 27, 1937
Lowest daily mean	5,410	Aug 28	12,700	Oct 11	877	Sep 21, 2010
Annual seven-day minimum	12,800	Aug 22	19,000	Oct 11	3,530	Oct 15, 1930
Maximum peak flow			453,000	Feb 4	1,110,000	Jan 27, 1937
Maximum peak stage			46.81	Feb 4	85.44	Jan 27, 1937
10 percent exceeds	268,000		254,000		284,000	
50 percent exceeds	58,000		108,000		75,000	
90 percent exceeds	18,200		32,100		17,200	

