

Water-Data Report 2009

03611500 OHIO RIVER AT METROPOLIS, IL

Lower Ohio Basin
Lower Ohio Subbasin

LOCATION.--Lat 37°08'51", long 88°44'27" referenced to North American Datum of 1927, Massac County, IL, Hydrologic Unit 05140206, near center of span on downstream side of pier of Paducah & Illinois Railroad bridge at Metropolis, 9.5 miles downstream from Tennessee River, 37 miles upstream from mouth, and at mile 944.1.

DRAINAGE AREA.--203000 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1928 to current year. Prior to April 1928 monthly discharge only, published in WSP 1305. Gage-height records collected 9.6 miles upstream at Paducah since 1890 are contained in reports of National Weather Service. Occasional discharge measurements from 1881 to 1924 in reports of Mississippi River Commission.

GAGE.--Water-stage recorder with telemetry. Datum of gage is 276.27 feet above NGVD of 1929. Prior to December 22, 1936, water-stage recorders (temporary installations) at Paducah, Kentucky, Metropolis and Joppa, Illinois, and Dam 52. Auxiliary water-stage recorder near Grand Chain, 0.5 miles upstream from Dam 53, and 18 miles downstream from base gage. Prior to May 29, 1936, auxiliary nonrecording gage at Dam 53.

COOPERATION.--U.S. Army Corps of Engineers, Louisville District and National Stream Quality Accounting Network.

REMARKS.--Records fair except those below 100,000 ft³/s and those estimated, which are poor. Flow regulated by many dams and reservoirs. Maximum daily discharge includes overflow through Bay Creek and Cache River Valleys.

03611500 OHIO RIVER AT METROPOLIS, IL—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

[e, estimated; $\times 10^6$, million]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e28,300	e39,700	66,700	475,000	481,000	333,000	407,000	287,000	270,000	e160,000	258,000	93,700
2	e37,800	e44,300	54,800	455,000	517,000	345,000	413,000	295,000	255,000	e140,000	302,000	97,000
3	e49,500	e45,000	55,300	403,000	513,000	328,000	420,000	342,000	240,000	e129,000	342,000	81,100
4	e30,900	e30,700	57,900	381,000	443,000	326,000	459,000	468,000	259,000	e140,000	351,000	89,600
5	e43,700	e32,900	e64,800	334,000	339,000	329,000	475,000	583,000	241,000	e111,000	344,000	86,400
6	e52,700	e30,800	70,700	256,000	294,000	332,000	498,000	662,000	e223,000	e98,300	344,000	71,600
7	e37,300	e32,100	53,000	271,000	282,000	316,000	505,000	694,000	e206,000	e124,000	359,000	69,100
8	e33,600	e33,400	47,800	331,000	277,000	264,000	511,000	710,000	211,000	e122,000	336,000	104,000
9	e28,300	e32,000	65,200	346,000	257,000	215,000	e514,000	754,000	227,000	e130,000	277,000	112,000
10	e21,600	e39,700	98,100	435,000	296,000	202,000	511,000	794,000	220,000	e137,000	206,000	103,000
11	e36,500	e31,800	154,000	468,000	e343,000	216,000	490,000	823,000	195,000	e90,300	158,000	74,900
12	e44,000	e53,800	193,000	467,000	e413,000	229,000	473,000	819,000	194,000	e99,500	140,000	67,600
13	e47,500	e43,700	281,000	542,000	451,000	280,000	467,000	791,000	249,000	e107,000	167,000	65,900
14	e31,600	e34,400	312,000	587,000	459,000	336,000	484,000	792,000	320,000	e91,400	160,000	64,400
15	e34,400	e36,800	363,000	589,000	445,000	384,000	501,000	796,000	357,000	e104,000	162,000	66,600
16	e30,500	e34,300	425,000	e558,000	467,000	394,000	502,000	796,000	345,000	e83,900	170,000	67,700
17	e22,300	e47,200	429,000	e408,000	473,000	325,000	473,000	e731,000	347,000	e99,500	165,000	75,100
18	e22,600	e56,900	379,000	343,000	483,000	320,000	453,000	e687,000	308,000	e94,800	140,000	120,000
19	e22,800	e63,600	303,000	273,000	487,000	338,000	465,000	e590,000	261,000	102,000	111,000	127,000
20	e23,300	e57,700	285,000	e191,000	476,000	364,000	494,000	e544,000	271,000	e74,400	89,300	133,000
21	e23,400	e60,900	318,000	e173,000	445,000	353,000	501,000	e483,000	293,000	e116,000	95,600	179,000
22	e31,100	e63,600	328,000	e180,000	418,000	308,000	498,000	e419,000	286,000	e95,700	111,000	231,000
23	e49,200	e47,900	353,000	140,000	398,000	267,000	487,000	e386,000	295,000	e102,000	107,000	211,000
24	e47,900	e37,300	359,000	e155,000	376,000	241,000	478,000	e346,000	294,000	e140,000	121,000	227,000
25	e30,100	e43,800	383,000	e170,000	343,000	281,000	472,000	e333,000	278,000	e143,000	132,000	240,000
26	e21,300	e43,400	396,000	e164,000	299,000	260,000	464,000	e316,000	217,000	120,000	120,000	255,000
27	e22,000	e38,300	443,000	e159,000	284,000	267,000	432,000	e294,000	e196,000	e120,000	105,000	255,000
28	e23,300	68,500	491,000	e151,000	303,000	284,000	401,000	e282,000	e175,000	e127,000	109,000	284,000
29	e26,900	78,000	475,000	e188,000	---	333,000	366,000	e270,000	e203,000	145,000	88,200	340,000
30	e41,400	72,000	474,000	e284,000	---	373,000	286,000	e258,000	e180,000	173,000	83,400	353,000
31	e52,700	---	481,000	e407,000	---	389,000	---	253,000	---	227,000	73,100	---
Total	1,048,500	1,374,500	8,259,300	10.28 $\times 10^6$	11.06 $\times 10^6$	9,532,000	13.90 $\times 10^6$	16.59 $\times 10^6$	7,616,000	3,746,800	5,726,600	4,344,700
Mean	33,820	45,820	266,400	331,700	395,100	307,500	463,300	535,400	253,900	120,900	184,700	144,800
Max	52,700	78,000	491,000	589,000	517,000	394,000	514,000	823,000	357,000	227,000	359,000	353,000
Min	21,300	30,700	47,800	140,000	257,000	202,000	286,000	253,000	175,000	74,400	73,100	64,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	107,300	170,000	297,400	401,000	465,000	517,100	453,700	341,800	221,800	153,100	122,700	105,500
Max	335,600	450,300	717,500	1,022,000	1,217,000	1,039,000	896,400	917,800	596,400	441,200	331,100	383,500
(WY)	(1980)	(1986)	(1973)	(1937)	(1937)	(1997)	(1994)	(1983)	(1997)	(1928)	(1958)	(1979)
Min	22,710	33,400	48,610	71,650	77,380	154,700	129,900	75,180	53,840	23,350	25,390	29,330
(WY)	(1931)	(1931)	(1931)	(1940)	(1934)	(1941)	(1986)	(1941)	(1936)	(1930)	(1930)	(1930)

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SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1928 - 2009	
Annual total	109,704,800		93,492,400			
Annual mean	299,700		256,100		278,100	
Highest annual mean					436,600	1979
Lowest annual mean					120,300	1931
Highest daily mean	988,000	Apr 11	823,000	May 11	1,850,000	Feb 1, 1937
Lowest daily mean	16,900	Sep 28	21,300	Oct 26	15,000	Jul 20, 1930
Annual seven-day minimum	25,000	Sep 25	25,100	Oct 16	16,600	Jul 20, 1930
Maximum peak flow			831,000	May 11	1,850,000	Feb 1, 1937
Maximum peak stage					66.60	Feb 2, 1937
10 percent exceeds	780,000		485,000		634,000	
50 percent exceeds	222,000		255,000		194,000	
90 percent exceeds	31,700		40,700		68,100	

