

Water-Data Report 2011

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, at TVA Shawnee Steam Plant river coal loading facility at river mile 946.2, about 2.1 miles downstream of previous location on railroad bridge at river mile 944.1 at Metropolis, IL.

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 for those estimated and for those less than 100,000 ft³/s, 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 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

[e, estimated; ×10⁶, million]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e41,600	74,000	208,000	125,000	155,000	660,000	584,000	1,050,000	485,000	288,000	144,000	66,400
2	e60,900	e64,700	243,000	139,000	161,000	690,000	512,000	1,140,000	457,000	265,000	134,000	66,800
3	e63,400	e53,300	306,000	171,000	207,000	709,000	432,000	1,220,000	394,000	218,000	121,000	67,000
4	e65,400	50,700	351,000	216,000	249,000	700,000	396,000	1,250,000	326,000	193,000	112,000	80,600
5	e60,400	51,900	385,000	285,000	284,000	707,000	377,000	1,260,000	254,000	190,000	122,000	86,000
6	e54,200	50,400	405,000	320,000	306,000	735,000	346,000	1,260,000	223,000	180,000	131,000	105,000
7	e51,000	52,100	380,000	334,000	308,000	785,000	389,000	1,260,000	190,000	168,000	130,000	137,000
8	e38,000	56,400	373,000	328,000	291,000	806,000	455,000	1,250,000	175,000	166,000	134,000	172,000
9	e48,400	60,600	339,000	301,000	268,000	836,000	501,000	1,230,000	194,000	176,000	138,000	175,000
10	e46,300	57,600	285,000	268,000	247,000	880,000	536,000	1,200,000	179,000	181,000	131,000	185,000
11	e64,000	64,500	247,000	239,000	222,000	903,000	571,000	1,180,000	165,000	158,000	135,000	196,000
12	e46,000	67,200	232,000	193,000	198,000	924,000	610,000	1,140,000	171,000	141,000	122,000	195,000
13	e56,100	49,400	219,000	167,000	182,000	941,000	633,000	1,090,000	176,000	147,000	117,000	160,000
14	e51,700	66,500	203,000	126,000	168,000	937,000	652,000	1,050,000	165,000	151,000	104,000	120,000
15	e51,600	47,000	177,000	128,000	119,000	956,000	650,000	998,000	158,000	140,000	102,000	144,000
16	e35,800	55,100	193,000	140,000	129,000	968,000	680,000	945,000	155,000	131,000	100,000	129,000
17	e46,100	60,300	206,000	139,000	125,000	e978,000	741,000	893,000	145,000	126,000	99,500	e110,000
18	e49,000	92,400	207,000	121,000	131,000	e975,000	790,000	843,000	132,000	97,100	102,000	e92,300
19	e42,500	94,000	201,000	113,000	146,000	e972,000	816,000	791,000	150,000	119,000	111,000	e117,000
20	e57,500	84,400	181,000	120,000	141,000	e968,000	844,000	717,000	187,000	122,000	99,200	e126,000
21	e66,800	88,200	187,000	122,000	140,000	951,000	849,000	660,000	210,000	119,000	83,700	e123,000
22	e48,800	86,100	183,000	134,000	166,000	951,000	841,000	624,000	246,000	111,000	96,400	e114,000
23	e46,900	86,800	168,000	140,000	199,000	933,000	870,000	597,000	278,000	95,000	84,100	e107,000
24	e52,100	104,000	165,000	144,000	271,000	903,000	935,000	584,000	286,000	91,600	83,900	e110,000
25	e29,600	95,100	162,000	132,000	387,000	865,000	e957,000	559,000	258,000	98,200	81,000	e135,000
26	e26,600	114,000	153,000	117,000	458,000	820,000	e964,000	542,000	247,000	99,800	99,200	e161,000
27	62,800	152,000	133,000	128,000	551,000	774,000	e968,000	538,000	281,000	84,000	99,700	e193,000
28	69,600	147,000	129,000	138,000	603,000	730,000	974,000	537,000	309,000	95,900	82,600	e203,000
29	64,300	151,000	106,000	153,000	---	690,000	964,000	530,000	326,000	155,000	96,100	185,000
30	71,100	181,000	116,000	180,000	---	652,000	986,000	525,000	354,000	151,000	88,800	e158,000
31	53,200	---	126,000	167,000	---	623,000	---	510,000	---	135,000	71,100	---
Total	1,621,700	2,457,700	6,969,000	5,528,000	6,812,000	25.92×10 ⁶	20.82×10 ⁶	27.97×10 ⁶	7,276,000	4,592,600	3,355,300	4,019,100
Mean	52,310	81,920	224,800	178,300	243,300	836,200	694,100	902,400	242,500	148,100	108,200	134,000
Max	71,100	181,000	405,000	334,000	603,000	978,000	986,000	1,260,000	485,000	288,000	144,000	203,000
Min	26,600	47,000	106,000	113,000	119,000	623,000	346,000	510,000	132,000	84,000	71,100	66,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	108,700	170,300	298,300	398,100	463,300	519,600	454,100	351,100	221,800	152,800	122,100	105,300
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 2010		Water Year 2011		Water Years 1928 - 2011	
Annual total	90,439,500		117,349,400			
Annual mean	247,800		321,500		278,900	
Highest annual mean					436,600	1979
Lowest annual mean					120,300	1931
Highest daily mean	924,000	May 5	1,260,000	May 5	1,850,000	Feb 1, 1937
Lowest daily mean	26,600	Oct 26	26,600	Oct 26	15,000	Jul 20, 1930
Annual seven-day minimum	46,900	Oct 20	46,900	Oct 20	16,600	Jul 20, 1930
Maximum peak flow			1,280,000	May 6	1,850,000	Feb 1, 1937
Maximum peak stage			61.65	May 6	66.60	Feb 2, 1937
10 percent exceeds	587,000		903,000		636,000	
50 percent exceeds	175,000		168,000		195,000	
90 percent exceeds	55,100		63,200		68,000	

