Water-Data Report 2013

03270000 MAD RIVER NEAR DAYTON OH

Great Miami Basin
Upper Great Miami Subbasin

LOCATION.--Lat 39°47′50″, long 84°05′19″ referenced to North American Datum of 1927, Greene County, OH, Hydrologic Unit 05080001, on left bank in retarding basin 300 ft upstream from Huffman Dam, 2.3 mi downstream from Mud Run, 6.2 mi northeast of Dayton, and at mile 6.1.

DRAINAGE AREA.--635 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1914 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 453: 1915. WSP 743: 1929-32. WSP 1305: 1916(M), 1925(M) 1930-32(M). WSP 1908: Drainage area. WDR-OH-82-1: 1980.

GAGE.--Water-stage recorder. Datum of gage is 777.06 ft NGVD 1929. Jan. 21, 1959-Dec. 14, 1967, at site 900 ft downstream at datum 77.01 ft lower. See WSP 1725 for history of changes prior to Jan. 21, 1959. Water-quality data collected at this site 1947-1948, 1962-1963, 1966-1980.

COOPERATION.--Base data furnished by Miami Conservancy District.

REMARKS.--Records fair. Flood flows affected by backwater from Huffman retarding dam beginning in 1921, some regulation by C. J. Brown Reservoir 26 mi upstream on Buck Creek since 1974. Water-quality data was formerly collected on left bank 900 ft downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft^3/s Jan. 22, 1959 (based on Huffman retarding basin outflow records); maximum gage height, 87.9 ft Feb. 26, 1929, at site and datum then in use; minimum daily discharge, 94 ft^3/s Aug. 6, 1934, but may have been less during 1921-1924.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 25, 1913, reached a stage of 14.0 ft, original site and datum; discharge 75,700 ft^3/s, computed by Miami Conservancy District.

03270000 MAD RIVER NEAR DAYTON OH—Continued

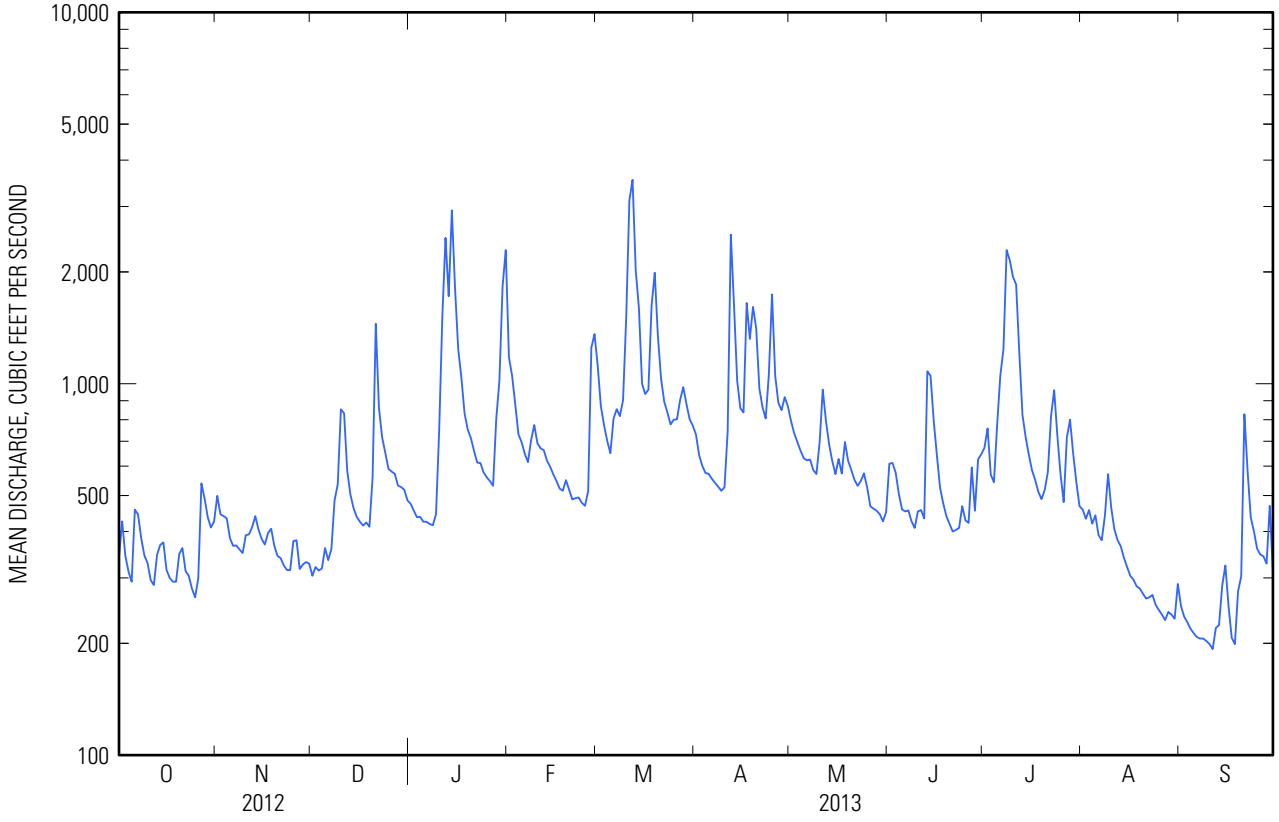
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	342	499	304	475	1,180	1,120	730	793	609	672	458	252
2	426	445	321	455	1,050	871	642	735	612	758	433	236
3	344	440	314	437	880	774	601	696	576	569	457	228
4	312	434	318	438	731	702	575	660	505	543	420	219
5	293	384	361	425	696	650	572	630	459	773	442	213
6	458	366	335	425	648	805	555	622	453	1,050	391	208
7	445	367	359	419	615	854	541	625	456	1,240	379	206
8	384	358	485	416	705	818	528	586	426	2,290	441	206
9	345	350	536	445	774	903	515	571	409	2,150	571	203
10	329	391	853	749	691	1,510	526	694	453	1,940	463	199
11	296	393	833	1,520	670	3,120	743	964	457	1,850	405	193
12	287	411	582	2,470	662	3,540	2,520	795	434	1,210	379	220
13	346	440	503	1,720	621	2,020	1,630	687	1,080	824	365	224
14	368	405	462	2,930	598	1,600	1,020	619	1,050	718	e340	286
15	374	382	438	1,810	570	1,000	859	571	795	644	321	324
16	315	369	425	1,240	547	938	837	627	642	585	304	252
17	300	396	415	1,040	522	964	1,650	573	525	551	297	207
18	293	407	423	833	515	1,620	e1,320	697	476	512	285	199
19	293	366	412	753	550	1,990	e1,610	620	440	489	281	276
20	348	344	560	714	518	1,340	1,410	586	419	517	272	303
21	361	339	1,450	659	488	1,030	971	551	400	578	264	828
22	313	324	861	613	492	894	864	531	404	817	266	584
23	304	315	717	612	494	836	806	547	409	961	270	437
24	281	315	652	577	478	777	1,060	574	468	725	254	401
25	266	377	590	560	469	800	1,740	526	429	571	246	360
26	299	379	580	547	514	802	1,050	468	422	480	239	347
27	539	317	572	531	1,250	904	888	461	595	716	231	343
28	491	326	532	804	1,360	979	849	455	455	800	243	328
29	437	331	527	1,020	---	882	920	445	626	647	239	469
30	410	328	518	1,830	---	803	869	426	646	542	233	311
31	426	---	485	2,290	---	771	---	452	---	468	289	---
Total	11,025	11,298	16,723	29,757	19,288	36,617	29,401	18,787	16,130	27,190	10,478	9,062
Mean	356	377	539	960	689	1,181	980	606	538	877	338	302
Max	539	499	1,450	2,930	1,360	3,540	2,520	964	1,080	2,290	571	828
Min	266	315	304	416	469	650	515	426	400	468	231	193
Cfsm	0.56	0.59	0.85	1.51	1.08	1.86	1.54	0.95	0.85	1.38	0.53	0.48
In.	0.65	0.66	0.98	1.74	1.13	2.15	1.72	1.10	0.94	1.59	0.61	0.53

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	453	549	758	893	897	1,072	993	965	789	617	429	413
Max	1,425	1,175	2,387	3,502	1,839	2,744	2,372	2,941	1,745	1,525	1,235	1,528
(WY)	(1987)	(1986)	(2012)	(2005)	(1975)	(2007)	(2011)	(2011)	(1981)	(1993)	(1979)	(1979)
Min	198	188	208	239	287	344	444	268	192	211	172	178
(WY)	(2000)	(2000)	(2000)	(1977)	(1992)	(1983)	(1976)	(1988)	(1988)	(1988)	(1988)	(1999)

03270000 MAD RIVER NEAR DAYTON OH—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1974 - 2013	
Annual total	224,661		235,756			
Annual mean	614		646		735	
Highest annual mean					1,070	2011
Lowest annual mean					336	1988
Highest daily mean	6,380	Jan 27	3,540	Mar 12	10,700	Jan 6, 2005
Lowest daily mean	143	Aug 30	193	Sep 11	112	Jul 17, 1988
Annual seven-day minimum	147	Aug 26	204	Sep 5	124	Jul 11, 1988
Maximum peak flow			4,890	Jul 8	11,600	Jan 6, 2005
Maximum peak stage			10.96	Jul 8	19.22	Jan 6, 2005
Instantaneous low flow			185	Sep 12	112	Jul 17, 1988
Annual runoff (cfsm)	0.97		1.02		1.16	
Annual runoff (inches)	13.16		13.81		15.73	
10 percent exceeds	1,120		1,050		1,400	
50 percent exceeds	440		518		520	
90 percent exceeds	207		293		263