Water-Data Report 2013

07025400 NORTH FORK OBION RIVER NEAR MARTIN, TN

Hatchie-Obion Basin
South Fork Obion Subbasin

LOCATION.--Lat 36°24'18.89", long 88°51'16.95" referenced to North American Datum of 1927, Weakley County, TN, Hydrologic Unit 08010203, on right bank on U.S. Highway 45E, 4.0 miles north of Martin.

DRAINAGE AREA.--372 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2001 to current year. Annual maximum at unknown datum, 1939 to 1967. Periodic measurements of discharge and miscellaneous water-quality data, 1979 to 1987. Annual maximum at present datum, 1997 to 2001.

REVISED RECORDS.--On May 20, 2013, the maximum peak flow for water year 2002 was revised and is documented in the 2012 report http://wdr.water.usgs.gov/wy2012/pdfs/07025400.2012.pdf

GAGE.--Data collection platform, operated in cooperation with the Memphis District Corps of Engineers. Datum of gage is 303.46 ft above NGVD of 1929, determined by the Memphis District Corps of Engineers.

COOPERATION.--Gage operated jointly with the Memphis District U.S. Army Corps of Engineers.

REMARKS.--Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge for years 1939-2001, 30,300 ft^3/s, Nov. 19, 1957, stage 23.05; minimum discharge, 40 ft^3/s, Feb. 7, 1946 from reports by Memphis District U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 13	1500	7,790	19.36
Jan 30	0800	6,800	18.55
Apr 11	1800	7,310	18.99
Apr 28	0000	*8,920	*19.82
May 4	0900	6,170	17.77
Jun 1	1700	6,050	17.62
Aug 3	1300	7,210	18.91
Aug 10	1100	7,230	18.93
Aug 12	2200	6,910	18.67

Minimum discharge, 149 ft^3/s, on several days.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 07025400, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/07025400.2013.pdf

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	163	174	179	294	767	407	348	1,230	3,230	404	251	420
2	185	173	181	281	438	371	291	567	4,550	520	185	450
3	167	172	181	235	368	334	269	753	1,690	290	4,070	272
4	155	173	184	221	324	309	265	5,090	484	243	4,450	232
5	151	173	199	214	307	503	294	1,390	323	231	649	214
6	158	175	191	213	284	569	276	638	563	225	2,620	209
7	157	179	199	207	266	358	259	514	342	950	1,730	206
8	152	179	218	203	279	313	253	414	272	507	804	203
9	150	176	375	201	280	294	247	354	294	274	589	290
10	150	175	1,860	235	478	306	248	411	2,190	233	4,540	407
11	150	175	494	3,450	685	2,300	4,720	527	653	219	5,790	245
12	1,260	417	278	765	362	1,020	6,720	365	339	210	3,740	281
13	577	336	232	5,730	361	480	3,600	309	271	200	5,890	367
14	228	219	217	6,530	376	356	782	286	239	204	2,060	223
15	196	200	210	2,540	305	323	499	272	222	224	577	206
16	181	196	211	657	269	308	418	259	212	194	373	201
17	174	193	204	429	252	288	377	283	554	185	1,820	198
18	283	187	196	341	286	1,480	393	293	1,190	241	1,180	198
19	235	188	190	305	1,510	1,240	4,630	271	440	435	490	197
20	187	185	224	284	512	492	1,590	253	292	225	344	713
21	178	183	264	268	960	369	577	574	254	411	288	2,110
22	179	181	214	256	3,780	323	419	4,500	238	2,580	268	369
23	173	182	203	249	1,030	298	363	1,010	229	1,890	259	251
24	170	183	200	250	528	393	791	423	223	417	285	226
25	169	184	198	252	403	516	691	319	219	243	231	804
26	185	185	396	255	1,870	338	411	283	216	205	221	563
27	209	193	387	248	991	303	5,090	263	995	192	215	279
28	189	194	269	251	517	286	8,220	247	559	182	211	224
29	179	187	470	260	---	282	7,690	235	292	172	207	306
30	175	183	306	5,530	---	290	6,290	225	246	175	205	582
31	175	---	246	3,270	---	369	---	337	---	201	203	---
Total	7,040	5,900	9,376	34,424	18,788	15,818	57,021	22,895	21,821	12,882	44,745	11,446
Mean	227	197	302	1,110	671	510	1,901	739	727	416	1,443	382
Max	1,260	417	1,860	6,530	3,780	2,300	8,220	5,090	4,550	2,580	5,890	2,110
Min	150	172	179	201	252	282	247	225	212	172	185	197
Cfsm	0.61	0.53	0.81	2.99	1.80	1.37	5.11	1.99	1.96	1.12	3.88	1.03
In.	0.70	0.59	0.94	3.44	1.88	1.58	5.70	2.29	2.18	1.29	4.47	1.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	303	504	924	742	736	759	879	875	346	241	324	312
Max	679	1,106	2,832	1,395	1,885	1,563	2,235	1,836	727	416	1,443	788
(WY)	(2003)	(2002)	(2002)	(2007)	(2003)	(2008)	(2011)	(2011)	(2013)	(2013)	(2013)	(2002)
Min	157	183	204	318	323	325	280	197	170	175	146	148
(WY)	(2011)	(2009)	(2011)	(2011)	(2012)	(2007)	(2012)	(2012)	(2012)	(2007)	(2007)	(2010)

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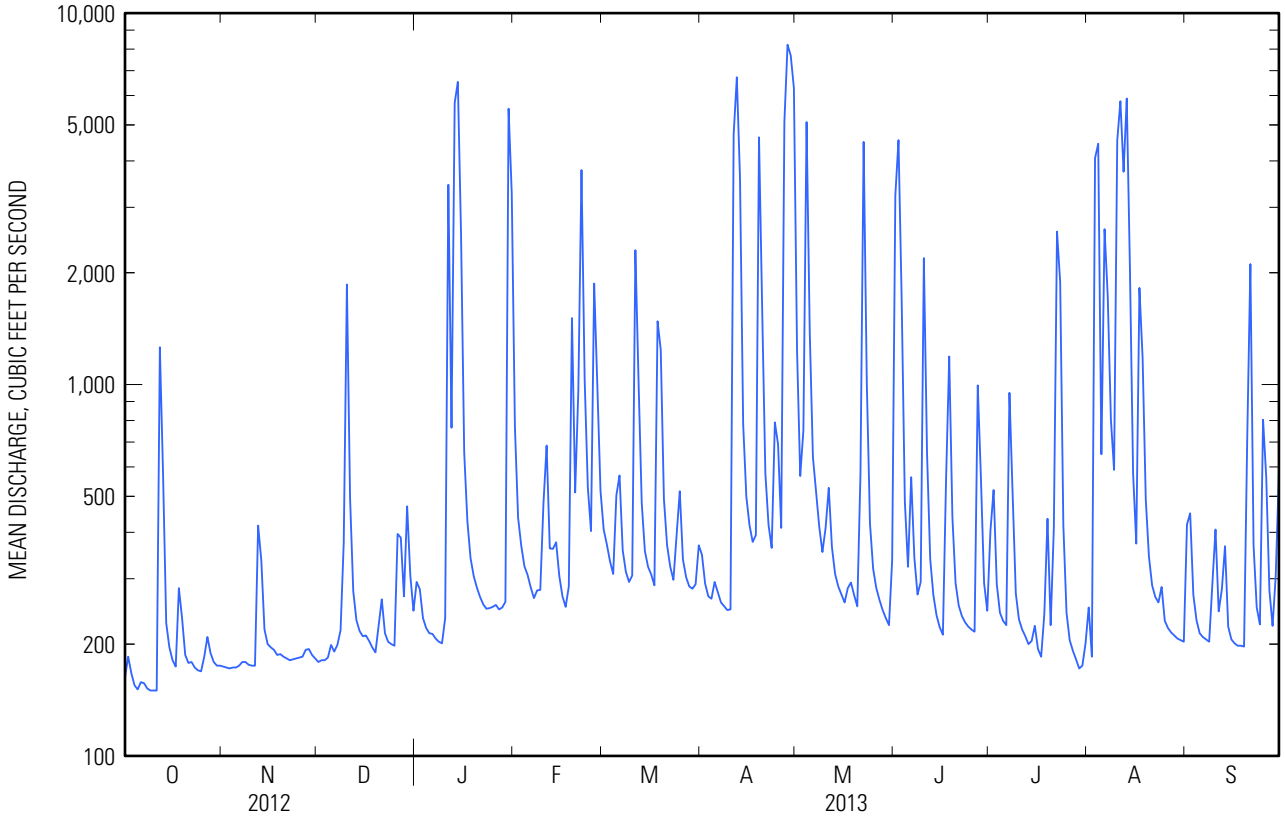
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 2002 - 2013	
Annual total	115,111		262,156			
Annual mean	315		718		578	
Highest annual mean					918	2002
Lowest annual mean					393	2006
Highest daily mean	6,890	Mar 9	8,220	Apr 28	12,300	Dec 1, 2001
Lowest daily mean	144	Sep 23	[a]150	Oct 9	140	Aug 25, 2007
Annual seven-day minimum	147	Sep 20	153	Oct 5	141	Aug 22, 2007
Maximum peak flow			8,920	Apr 28	14,400	Dec 1, 2001
Maximum peak stage			19.82	Apr 28	20.96	May 4, 2011
Instantaneous low flow			[b] 149	Oct 5	[c]140	Aug 25, 2007
Annual runoff (cfsm)	0.845		1.93		1.55	
Annual runoff (inches)	11.51		26.22		21.12	
10 percent exceeds	398		1,710		1,030	
50 percent exceeds	193		283		252	
90 percent exceeds	151		181		163	

[a] Also occurred Oct. 10-11.
[b] Occurred on several days.
[c] Also occurred Sept. 7, 2010, Jul. 8, 2012.