Water-Data Report 2013

02040000 APPOMATTOX RIVER AT MATTOAX, VA

James Basin
Appomattox Subbasin

LOCATION.--Lat 37°25′17″, long 77°51′33″ referenced to North American Datum of 1927, Amelia County, VA, Hydrologic Unit 02080207, on right bank 75 ft upstream from Norfolk Southern Railway bridge at Mattoax, 0.3 mi upstream from Skinquarter Creek, and 3.7 mi upstream from Flat Creek.

DRAINAGE AREA.--725 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1900 to December 1905, March 1926 to current year.

REVISED RECORDS.--WSP 892: 1938. WSP 972: 1928, 1932, 1934-38. WSP 1303: 1901(M). OFR 2006-1308: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 174.51 ft NGVD of 1929. August 1900 to December 1905, non-recording gage at present site, different datum. March 1926 to October 1936, nonrecording gage at present site and datum.

COOPERATION.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

REMARKS.--Records good except those for estimated daily discharges, which are fair. National Weather Service gage-height telemeter at station. Maximum discharge, 35,000 ft^3/s, from rating curve extended above 20,000 ft^3/s on basis of records for stations at Farmville and near Petersburg. Water-quality records for some prior periods have been collected at this location.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 19	--	unknown	unknown
Jul 14	--	unknown	unknown

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 02040000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/02040000.2013.pdf

02040000 APPOMATTOX RIVER AT MATTOAX, VA—Continued

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

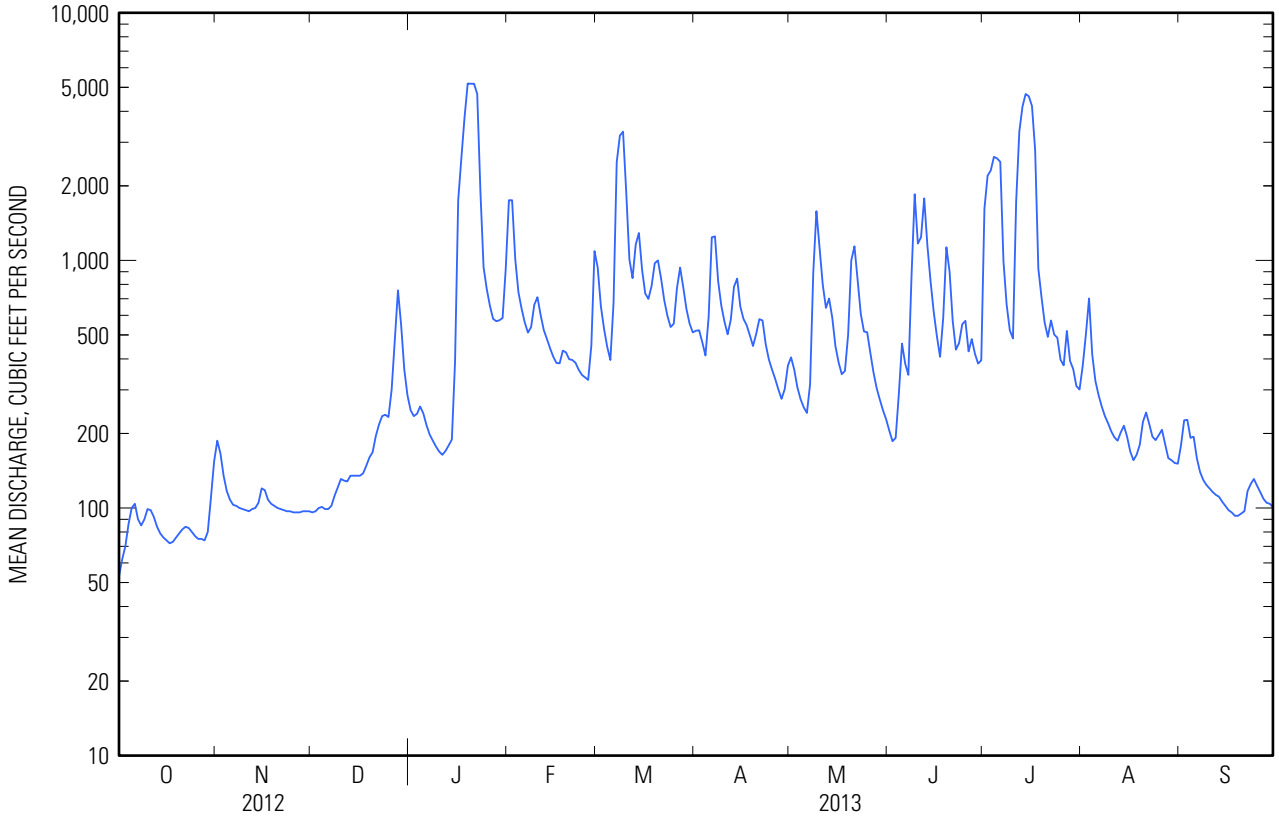
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	53	187	e96	e248	e1,750	937	520	406	205	1,620	375	179
2	62	166	e97	e235	e1,750	654	522	362	186	e2,200	502	226
3	70	135	e100	e240	e1,010	530	467	307	192	e2,310	702	227
4	86	117	e101	e257	e744	448	413	275	289	e2,620	417	192
5	100	108	99	e241	e638	396	591	255	461	2,580	326	194
6	104	103	99	e216	e561	672	1,240	242	383	2,500	286	159
7	90	102	102	e198	e511	2,490	1,250	316	345	992	257	140
8	85	100	112	e187	e538	3,190	824	888	866	663	235	130
9	90	99	121	e177	e662	3,310	656	1,580	1,850	522	220	124
10	99	98	131	e169	e710	1,890	565	1,120	1,170	484	204	120
11	98	97	129	e164	e602	1,010	503	798	1,240	1,720	193	116
12	92	99	128	e170	e523	848	577	643	1,780	3,310	187	113
13	84	e100	135	e179	481	1,160	783	701	1,150	4,180	202	111
14	79	e105	135	e189	441	1,290	844	587	825	e4,700	215	106
15	76	e120	135	e388	408	918	650	450	620	e4,600	194	102
16	74	e118	135	e1,750	385	735	580	387	494	e4,200	169	98
17	72	e108	e138	e2,590	384	699	547	347	408	2,780	156	96
18	73	e104	e148	e3,780	432	788	498	358	587	927	164	93
19	76	e102	e160	e5,180	425	974	451	501	1,130	711	180	93
20	79	e100	e168	e5,170	399	1,000	505	1,000	901	560	223	95
21	82	e99	e195	e5,170	396	845	579	1,140	568	491	243	97
22	e84	e98	e217	e4,700	386	690	572	833	436	572	218	117
23	e83	e97	e235	e1,910	362	597	459	607	464	502	194	125
24	80	e97	e238	e940	345	538	398	516	552	487	188	131
25	77	e96	e233	e767	337	555	362	513	570	397	197	123
26	75	e96	e300	e656	329	771	332	424	429	377	207	116
27	75	e96	e476	e581	453	935	301	353	481	519	181	109
28	74	e97	e757	e568	1,090	778	276	305	420	393	159	105
29	80	e97	e548	e573	---	636	302	274	383	364	156	104
30	110	e97	e362	e585	---	555	376	248	395	311	152	101
31	154	---	e285	e928	---	512	---	228	---	301	151	---
Total	2,616	3,238	6,315	39,106	17,052	31,351	16,943	16,964	19,780	48,893	7,453	3,842
Mean	84.4	108	204	1,261	609	1,011	565	547	659	1,577	240	128
Max	154	187	757	5,180	1,750	3,310	1,250	1,580	1,850	4,700	702	227
Min	53	96	96	164	329	396	276	228	186	301	151	93
Cfsm	0.12	0.15	0.28	1.74	0.84	1.39	0.78	0.75	0.91	2.18	0.33	0.18
In.	0.13	0.17	0.32	2.01	0.87	1.61	0.87	0.87	1.01	2.51	0.38	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	453	578	756	984	1,070	1,198	1,024	652	469	368	399	414
Max	3,932	2,728	2,630	3,650	3,605	3,566	2,975	2,202	4,369	1,918	4,566	3,045
(WY)	(1972)	(1986)	(2010)	(1978)	(1998)	(1993)	(1983)	(2003)	(1972)	(1938)	(1940)	(2003)
Min	32.7	79.1	123	207	200	260	246	208	50.2	25.7	15.0	30.0
(WY)	(1931)	(2002)	(1966)	(1966)	(2002)	(2006)	(2002)	(1926)	(2002)	(2002)	(2002)	(1932)

02040000 APPOMATTOX RIVER AT MATTOAX, VA—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1926 - 2013	
Annual total	102,261		213,553			
Annual mean	279		585		697	
Highest annual mean					1,553	1972
Lowest annual mean					154	2002
Highest daily mean	2,670	Mar 26	[a]5,180	Jan 19	34,300	Aug 18, 1940
Lowest daily mean	25	Aug 21[b]	53	Oct 1	2.6	Aug 25, 2002
Annual seven-day minimum	28	Aug 19	76	Oct 14	4.0	Aug 21, 2002
Maximum peak flow			(c)		35,000	Aug 18, 1940
Maximum peak stage			(c)		[d]35.30	Aug 18, 1940
Instantaneous low flow			51	Oct 1	2.4	Aug 25, 2002[e]
Annual runoff (cfsm)	0.385		0.807		0.961	
Annual runoff (inches)	5.25		10.96		13.06	
10 percent exceeds	566		1,150		1,550	
50 percent exceeds	166		347		377	
90 percent exceeds	50		97		110	

[a] Estimated.
[b] Also Aug. 23, 2012.
[c] Not determined, probably occurred Jan. 19, 2013.
[d] From high-water mark in gage house.
[e] Also Aug. 26, 2012.