01613000 POTOMAC RIVER AT HANCOCK, MD

Potomac Basin
Conococheague-Opequon Subbasin

LOCATION.--Lat 39°41'51.2", long 78°10'40.4" referenced to North American Datum of 1983, Washington County, MD, Hydrologic Unit 02070004, on left bank, 0.2 mi downstream from Little Tonoloway Creek, 0.5 mi downstream from bridge on U.S. Highway 522 at Hancock, 1.1 mi upstream from Tonoloway Creek (formerly called Great or Big Tonoloway Creek), and at mile 239.

DRAINAGE AREA.--4,064 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1932 to current year. Gage-height records collected at same site since June 1925 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 781: 1933(M). WDR WV-97-1: Drainage area. OFR 95-292 (Second edition, 2006): Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 383.68 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1932, to Jan. 5, 1935, Mar. 18, 1936, to Jan. 20, 1937, nonrecording gage, on former highway bridge just upstream at same datum.

REMARKS.--Records fair except those for estimated daily discharges (ice effect), which are poor. Slight regulation at low flow from power plants upstream. Low flow affected slightly by Stony River Reservoir prior to July 1981, since December 1950 by Savage River Reservoir (see station 01597500), and since July 1981 by Jennings Randolph Lake. National Weather Service gage-height telemeter at station. U.S. Army Corps of Engineers satellite collection platform at station. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known prior to 1932, about 40 ft in May 1889, discharge, about 220,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 23,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 6	0345	*46,300	*19.25
Apr 21	2245	29,700	15.09
May 13	0045	45,100	18.98

Minimum discharge, 423 ft^3/s, Oct. 14.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	728	1,430	1,070	4,830	3,350	4,120	3,090	10,400	5,760	1,470	960	1,330
2	599	1,240	1,070	4,850	5,170	4,070	2,950	8,740	6,270	1,480	1,000	1,320
3	538	1,090	1,120	4,440	7,980	3,850	2,800	7,300	5,180	1,310	1,280	951
4	516	984	1,540	3,620	7,830	3,710	2,690	7,290	4,470	1,250	1,990	836
5	499	904	1,960	3,300	7,030	26,400	2,830	7,740	9,380	1,590	1,970	768
6	483	865	1,870	3,050	7,860	38,300	2,980	6,290	11,800	2,900	1,370	754
7	465	810	1,760	2,860	10,500	19,600	2,970	5,600	8,140	2,510	1,130	720
8	468	721	1,620	3,010	11,200	15,000	3,800	4,820	5,560	2,880	1,010	685
9	467	687	1,630	3,470	9,570	13,000	4,320	4,380	4,310	3,940	915	717
10	886	722	2,890	3,310	8,160	10,500	4,030	4,910	3,540	3,700	859	748
11	879	751	6,520	4,710	6,970	8,730	3,770	13,400	3,060	2,940	812	788
12	543	785	7,510	9,670	5,700	7,580	4,080	30,800	2,740	2,090	777	751
13	437	824	6,370	10,500	5,150	6,640	6,010	38,600	2,490	1,710	752	777
14	431	944	7,350	8,300	5,080	5,840	5,740	22,300	2,330	1,570	713	854
15	770	1,040	8,180	6,770	4,990	5,420	4,880	14,500	2,750	1,940	733	898
16	1,310	1,100	7,070	5,710	5,050	5,360	4,220	11,500	3,000	1,720	712	818
17	615	1,470	8,540	4,790	4,840	5,110	3,750	19,500	2,960	1,480	702	734
18	486	1,410	8,800	4,370	4,800	5,010	3,400	16,000	3,270	1,300	680	678
19	862	1,640	6,780	3,970	5,410	5,450	3,130	13,100	3,290	1,150	664	644
20	616	1,460	5,590	3,480	5,350	9,300	3,350	11,800	2,680	1,040	649	621
21	725	1,330	4,590	3,010	4,800	11,700	19,400	15,700	2,120	977	617	597
22	568	1,240	4,060	2,700	4,470	10,800	22,100	15,700	1,900	972	592	1,020
23	490	1,180	3,510	e2,550	4,160	9,080	16,000	12,500	1,840	1,250	586	1,240
24	543	1,120	3,750	e2,450	3,990	7,520	12,700	9,650	2,460	1,890	577	638
25	618	1,050	4,770	e2,330	3,910	6,350	9,680	7,050	2,390	2,630	562	555
26	884	1,010	5,000	e2,200	3,940	5,570	7,830	5,930	1,950	1,950	553	558
27	1,290	995	4,510	e2,100	4,140	4,850	9,520	5,230	1,700	1,580	541	590
28	2,600	984	4,140	2,040	4,680	4,560	11,200	5,130	1,540	1,290	656	1,330
29	3,260	1,020	4,140	1,980	4,440	4,260	15,600	4,720	1,450	1,110	943	3,180
30	2,330	1,010	4,780	2,090	---	3,770	13,500	4,140	1,440	999	1,780	2,650
31	1,760	---	4,700	2,550	---	3,340	---	4,010	---	926	1,640	---
Total	27,666	31,816	137,190	125,010	170,520	274,790	212,320	348,730	111,770	55,544	28,725	28,750
Mean	892	1,061	4,425	4,033	5,880	8,864	7,077	11,250	3,726	1,792	927	958
Max	3,260	1,640	8,800	10,500	11,200	38,300	22,100	38,600	11,800	3,940	1,990	3,180
Min	431	687	1,070	1,980	3,350	3,340	2,690	4,010	1,440	926	541	555
Cfsm	0.22	0.26	1.09	0.99	1.45	2.18	1.74	2.77	0.92	0.44	0.23	0.24
In.	0.25	0.29	1.26	1.14	1.56	2.52	1.94	3.19	1.02	0.51	0.26	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,968	2,611	4,028	5,074	6,413	9,300	7,658	5,572	3,153	1,587	1,568	1,588
Max	13,270	20,090	15,160	17,180	17,560	32,280	19,170	13,260	13,390	6,677	9,479	15,100
(WY)	(1977)	(1986)	(1973)	(1996)	(1998)	(1936)	(1993)	(1988)	(1972)	(1949)	(1955)	(1996)
Min	309	399	463	751	955	1,897	2,286	1,344	622	357	342	329
(WY)	(1942)	(1966)	(1966)	(1956)	(2002)	(2006)	(1995)	(1941)	(1969)	(1966)	(1944)	(1946)

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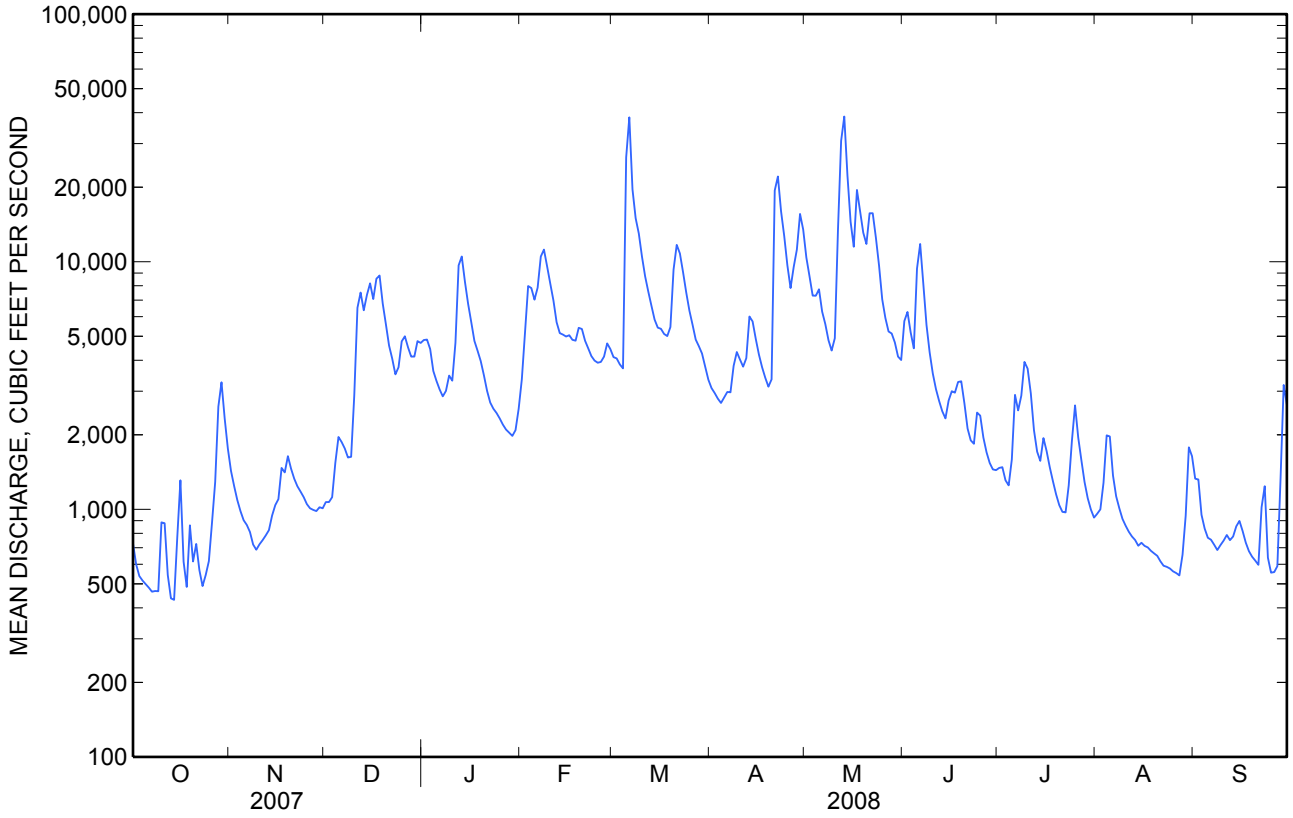
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1933 - 2008	
Annual total	1,207,983		1,552,831			
Annual mean	3,310		4,243		4,199	
Highest annual mean					7,932	1996
Lowest annual mean					1,770	1969
Highest daily mean	51,800	Apr 16	38,600	May 13	261,000	Mar 18, 1936
Lowest daily mean	431	Oct 14	431	Oct 14	184	Oct 3, 1932
Annual seven-day minimum	491	Oct 3	491	Oct 3	215	Sep 7, 1966
Maximum peak flow			46,300	Mar 6	[a]340,000	Mar 18, 1936
Maximum peak stage			19.25	Mar 6	47.60	Mar 18, 1936
Instantaneous low flow			423	Oct 14	180	Oct 4, 1932
Annual runoff (cfsm)	0.814		1.04		1.03	
Annual runoff (inches)	11.06		14.21		14.04	
10 percent exceeds	7,540		9,590		9,590	
50 percent exceeds	1,540		2,840		2,200	
90 percent exceeds	628		679		554	

[a] From rating curve extended above 120,000 ft³/s on basis of slope-area measurement of peak flow.