



Water-Data Report 2006

**01651800 WATTS BRANCH AT WASHINGTON, D.C.**

Potomac Basin  
Middle Potomac-Anacostia-Occoquan Subbasin

LOCATION.--Lat 38°54'04.0", long 76°56'31.9" referenced to North American Datum of 1983, Washington, DC, Hydrologic Unit 02070010, on right bank 5 ft downstream from footbridge, 200 ft upstream from Minnesota Ave., and 1.0 mi upstream from mouth.

DRAINAGE AREA.--3.28 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--June 1992 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and cobblestone control. Datum of gage is 16.52 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those above 30 ft<sup>3</sup>/s, and those for estimated daily discharges (gage heights above maximum recordable stages) which are fair. U.S. Geological Survey gage-height telemeter at station. Several measurements of water temperature were made during the year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft<sup>3</sup>/s and (or) maximum (\*):

[e, estimated]

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Oct 08	0445	741	5.46
Oct 08	0905	367	4.07
Oct 08	1140	430	4.34
Feb 04	1520	480	4.54
May 11	1930	590	4.95
Jun 25	2330	*e2,220	*e8.85
Jul 06	0030	511	4.66

Minimum discharge, 0.36 ft<sup>3</sup>/s, Jan 21.

## 01651800 WATTS BRANCH AT WASHINGTON, D.C.—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.63	1.4	2.1	2.4	2.3	1.5	1.0	0.89	1.0	3.0	1.2	40
2	0.67	1.4	1.3	8.0	2.0	1.9	1.0	1.1	0.72	2.2	1.5	20
3	0.94	1.3	1.3	8.7	8.7	1.5	10	1.0	0.76	1.8	2.0	1.5
4	0.63	1.3	4.6	3.4	35	1.4	2.1	1.0	0.58	5.7	1.4	1.0
5	0.58	1.3	2.2	3.1	6.9	1.3	1.1	1.0	0.53	20	0.84	44
6	0.60	1.2	3.2	2.7	3.0	1.3	1.0	1.0	0.55	45	0.74	2.3
7	48	1.1	1.6	2.4	2.3	1.3	2.5	1.2	0.56	2.7	9.6	1.4
8	129	1.1	1.5	2.4	2.0	1.3	11	1.7	0.58	1.9	1.1	1.2
9	3.0	1.3	8.7	2.0	1.9	1.3	1.6	1.1	2.2	1.7	0.75	0.89
10	1.5	1.1	2.5	2.0	1.7	1.3	1.2	1.0	0.78	1.7	0.82	0.83
11	2.4	1.1	2.1	5.1	4.1	1.3	1.1	30	0.53	1.7	0.77	0.85
12	2.1	1.2	1.9	2.4	6.8	1.3	1.3	5.3	4.4	9.4	0.64	0.80
13	4.9	1.1	1.4	1.9	4.3	1.4	1.3	6.7	0.69	3.1	0.67	0.78
14	1.6	1.2	1.3	16	3.7	1.4	1.3	3.2	0.74	1.4	0.63	14
15	1.2	1.3	22	2.9	5.1	1.3	1.3	1.5	0.85	1.3	0.59	2.2
16	1.0	9.2	25	2.7	4.0	1.3	1.3	1.0	1.3	1.1	0.64	1.4
17	0.92	2.6	3.8	2.0	3.1	1.6	3.3	0.90	1.1	1.4	0.73	1.1
18	0.91	1.3	3.1	24	2.5	1.3	1.5	5.5	0.58	0.92	0.80	0.91
19	0.92	1.2	3.1	3.2	2.2	1.3	1.3	2.3	24	0.95	0.55	0.91
20	0.90	1.1	2.5	2.2	2.0	1.1	1.3	1.0	1.9	1.0	0.62	0.89
21	1.2	11	2.2	2.0	1.9	1.1	4.7	0.80	0.73	0.99	0.60	0.92
22	12	7.2	2.2	2.8	4.6	1.0	13	0.75	0.64	9.4	0.53	0.79
23	1.8	2.1	2.1	43	2.0	1.0	3.7	0.67	11	2.7	0.83	0.78
24	6.7	2.0	2.2	4.7	1.7	1.0	1.4	0.67	2.4	1.2	0.72	0.78
25	22	1.7	23	3.6	1.6	1.0	1.2	0.67	e187	1.2	0.63	0.83
26	4.2	1.6	5.9	2.8	1.6	1.0	1.3	1.4	112	1.2	0.53	0.93
27	3.4	1.5	3.5	2.5	1.6	1.0	1.0	0.84	15	1.0	0.51	0.81
28	1.7	1.4	2.9	2.4	1.6	1.0	1.0	0.68	16	1.1	0.57	18
29	1.6	6.1	7.7	2.4	---	1.0	0.93	1.2	3.7	0.81	0.58	2.8
30	1.5	3.7	2.9	2.6	---	1.0	0.89	0.61	3.4	0.79	0.64	1.1
31	1.4	---	2.6	7.5	---	1.0	---	0.94	---	0.86	0.55	---
<b>Total</b>	259.90	72.1	152.4	175.8	120.2	38.5	76.62	77.62	396.22	129.22	33.28	164.70
<b>Mean</b>	8.38	2.40	4.92	5.67	4.29	1.24	2.55	2.50	13.2	4.17	1.07	5.49
<b>Max</b>	129	11	25	43	35	1.9	13	30	187	45	9.6	44
<b>Min</b>	0.58	1.1	1.3	1.9	1.6	1.0	0.89	0.61	0.53	0.79	0.51	0.78
<b>Cfsm</b>	2.56	0.73	1.50	1.73	1.31	0.38	0.78	0.76	4.03	1.27	0.33	1.67
<b>In.</b>	2.95	0.82	1.73	1.99	1.36	0.44	0.87	0.88	4.49	1.47	0.38	1.87

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	3.31	4.09	4.45	5.42	5.23	7.27	4.66	4.71	4.85	3.98	2.95	4.16
<b>Max</b>	9.08	7.38	9.57	9.71	11.3	15.7	7.20	8.78	13.2	9.99	7.10	13.0
<b>(WY)</b>	(1996)	(2004)	(1997)	(1996)	(1998)	(1994)	(2005)	(2003)	(2006)	(2004)	(2004)	(1999)
<b>Min</b>	0.73	1.32	1.37	1.25	0.74	1.24	2.36	1.59	1.81	1.35	1.07	0.66
<b>(WY)</b>	(1999)	(2002)	(2002)	(2002)	(2002)	(2006)	(1995)	(1999)	(2002)	(2002)	(2006)	(2005)

01651800 WATTS BRANCH AT WASHINGTON, D.C.—Continued

SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1992 - 2006	
<b>Annual total</b>	1,744.58		1,696.56			
<b>Annual mean</b>	4.78		4.65		4.60	
<b>Highest annual mean</b>					7.25	2003
<b>Lowest annual mean</b>					1.76	2002
<b>Highest daily mean</b>	129	Oct 8	<sup>e</sup> 187	Jun 25	204	Sep 16, 1999
<b>Lowest daily mean</b>	0.43	Aug 25	0.51	Aug 27	<sup>e</sup> 0.14	Oct 7, 2002 <sup>a</sup>
<b>Annual seven-day minimum</b>	0.53	Aug 30	0.57	Aug 25	0.19	Oct 3, 2002
<b>Maximum peak flow</b>			<sup>e</sup> 2,220	Jun 25	<sup>b,c</sup> 2,220	Jun 25, 2006
<b>Maximum peak stage</b>			<sup>e</sup> 8.85	Jun 25	<sup>e</sup> 8.85	Jun 25, 2006
<b>Instantaneous low flow</b>			<sup>e</sup> 0.36	Jan 21	<sup>c,d</sup> 0.24	Sep 6, 2002 <sup>f</sup>
<b>Annual runoff (cfsm)</b>	1.46		1.42		1.40	
<b>Annual runoff (inches)</b>	19.79		19.24		19.06	
<b>10 percent exceeds</b>	7.1		8.3		9.3	
<b>50 percent exceeds</b>	2.1		1.4		2.0	
<b>90 percent exceeds</b>	0.64		0.72		0.72	

<sup>e</sup> Estimated.

<sup>a</sup> Sept. 7, 12, 20, 2002.

<sup>b</sup> From rating curve extended above 260 ft<sup>3</sup>/s.

<sup>c</sup> Unknown source or ice effect.

<sup>d</sup> Value is from estimated daily discharges, may have been lower since this period was affected by backwater.

<sup>f</sup> Oct. 7, 9, 2002.

