Water-Data Report 2013

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD

Upper Chesapeake Basin
Gunpowder-Patapsco Subbasin

LOCATION.--Lat 39°18'37.1", long 76°47'32.7" referenced to North American Datum of 1983, Baltimore County, MD, Hydrologic Unit 02060003, on left bank at upstream side of highway bridge at Hollofield, 0.3 mi downstream from Dogwood Run, 3.0 mi north of Ellicott City, and 28 mi upstream from mouth.

DRAINAGE AREA.--285 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1944 to January 1992, March 1994 to September 1995, January 2000 to September 2004, April 2010 to current year.

GAGE.--Water stage recorder and crest-stage gage. Datum of gage is 186.9 ft above North American Vertical Datum of 1988, from digital elevation model. Prior to June 22, 1972, water-stage recorder at site on opposite bank at same gage datum. Prior to May 1, 2010, at site on downstream side of bridge at same gage datum.

REMARKS.--Records good except those for estimated daily discharges (ice effect, erroneous or missing record), which are poor. Flow regulated by Liberty Reservoir, 11 mi upstream, beginning July 22, 1954, usable capacity, 42,070,000,000 gal; dead storage, 1,260,000,000 gal. Diversions upstream from station for municipal supply of Westminster (sewage effluent discharged into Little Pipe Creek), and from Liberty Reservoir beginning Feb. 26, 1953, for municipal supply of Baltimore, and beginning February 1970 for a small municipal supply for part of Carroll County. U.S. Geological Survey satellite data-collection platform at station. Several measurements of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 80,600 ft^3/s, June 22, 1972, gage height, 31.30 ft; minimum discharge, 5.7 ft^3/s, Aug. 22, 23, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,900 ft^3/s, Jan. 31, gage height, 12.29 ft; minimum discharge, 38 ft^3/s, Sept. 18, 19.

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 01589000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/01589000.2013.pdf

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD—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	42	822	80	232	e2,200	287	249	217	86	163	80	56
2	605	497	80	214	e1,000	260	233	185	88	146	67	58
3	228	344	82	179	e700	253	214	169	153	157	65	55
4	107	259	81	161	e525	238	201	153	101	156	73	49
5	78	213	80	149	e425	206	205	141	84	124	58	46
6	64	164	76	140	e360	348	195	132	84	110	65	44
7	60	145	78	136	327	429	186	187	432	100	86	42
8	58	140	81	121	326	378	186	326	337	106	1,040	44
9	56	116	95	119	337	307	178	231	216	95	279	45
10	55	105	101	116	268	273	177	212	1,040	102	225	43
11	52	100	91	114	320	253	169	511	2,170	122	133	43
12	50	97	82	136	322	876	220	496	678	161	112	49
13	48	165	79	123	283	807	253	311	501	149	109	49
14	49	147	77	122	311	564	220	247	454	135	95	42
15	68	119	77	183	287	418	193	222	319	119	82	41
16	72	110	77	693	323	379	183	205	252	85	78	42
17	56	102	80	527	298	343	178	187	219	77	72	42
18	53	96	84	383	252	322	186	163	228	69	71	40
19	229	93	79	299	246	391	237	153	277	66	72	40
20	138	91	77	263	260	328	773	157	224	65	72	41
21	73	89	434	230	235	308	417	141	181	67	67	61
22	63	86	172	210	214	274	306	128	150	66	65	124
23	60	86	125	158	218	261	254	236	140	122	64	59
24	59	85	112	165	238	252	232	466	137	75	68	45
25	59	84	120	e145	213	302	220	221	124	63	61	43
26	60	81	294	e142	210	350	194	163	158	60	59	43
27	61	89	1,060	e140	403	323	177	128	224	89	59	41
28	61	90	527	127	327	284	164	118	173	109	58	42
29	2,950	82	401	134	---	263	184	113	177	99	73	41
30	5,260	82	359	406	---	249	236	103	187	71	65	42
31	1,790	---	265	e7,200	---	238	---	91	---	62	57	---
Total	12,664	4,779	5,506	13,467	11,428	10,764	7,020	6,513	9,594	3,190	3,630	1,452
Mean	409	159	178	434	408	347	234	210	320	103	117	48.4
Max	5,260	822	1,060	7,200	2,200	876	773	511	2,170	163	1,040	124
Min	42	81	76	114	210	206	164	91	84	60	57	40
Cfsm	1.43	0.56	0.62	1.52	1.43	1.22	0.82	0.74	1.12	0.36	0.41	0.17
In.	1.65	0.62	0.72	1.76	1.49	1.40	0.92	0.85	1.25	0.42	0.47	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 – 1992, 1994 –1995, 2000 – 2004, 2010 – 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	126	148	198	214	263	277	279	243	218	142	112	142
Max	857	590	913	770	724	804	1,071	1,102	2,024	601	516	1,493
(WY)	(1980)	(1953)	(2004)	(1949)	(1951)	(1953)	(1952)	(1952)	(1972)	(1956)	(1971)	(1975)
Min	14.7	35.2	32.7	33.3	50.2	74.3	70.1	58.3	33.5	20.3	20.1	19.4
(WY)	(1987)	(1966)	(1966)	(1966)	(2002)	(1981)	(2002)	(1963)	(1986)	(2002)	(1966)	(1986)

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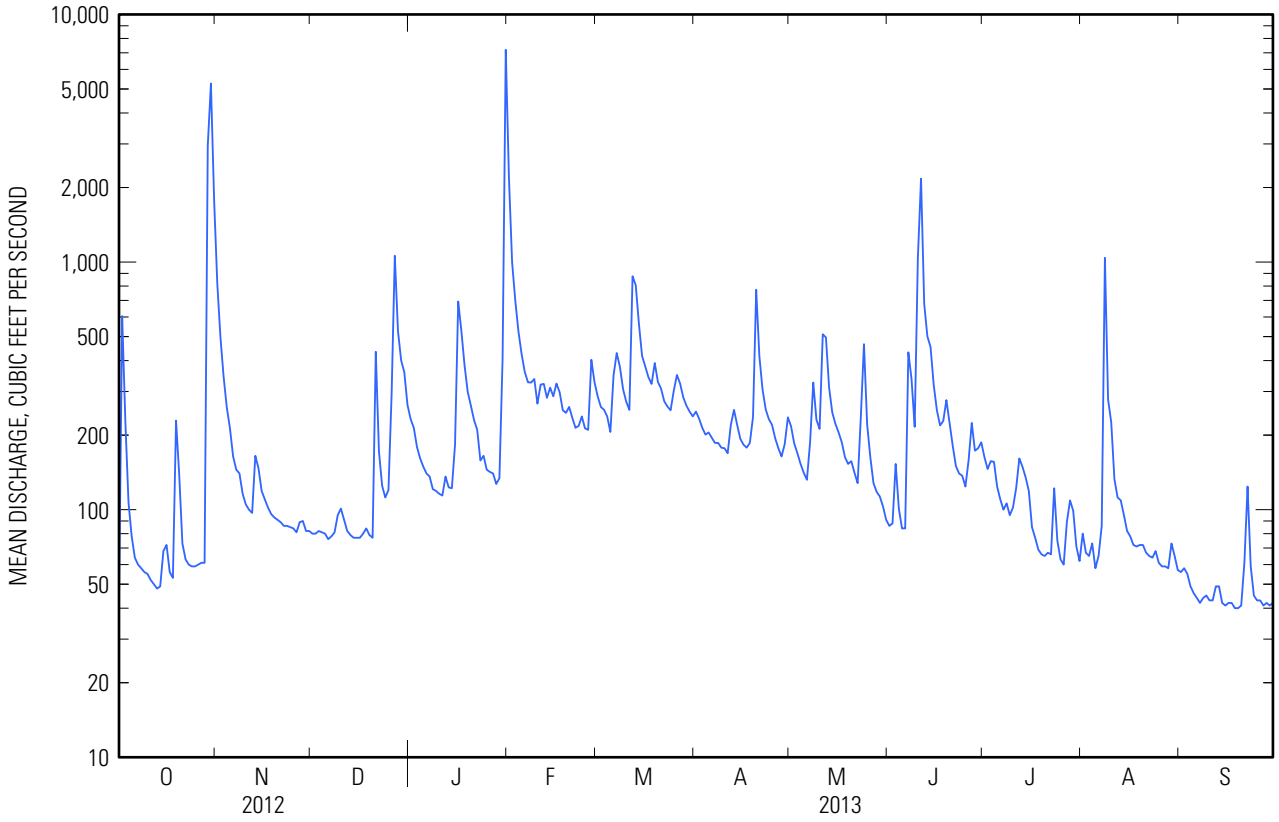
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1944 – 1992, 1994 – 1995, 2000 – 2004, 2010 – 2013	
Annual total	58,081		90,007			
Annual mean	159		247		198	
Highest annual mean					524	1972
Lowest annual mean					49.8	2002
Highest daily mean	5,260	Oct 30	[e]7,200	Jan 31	30,000	Jun 22, 1972
Lowest daily mean	29	Sep 16[a]	40	Sep 18[b]	5.9	Aug 22, 2002
Annual seven-day minimum	31	Sep 11	41	Sep 14	6.4	Aug 17, 2002
Maximum peak flow			17,900	Jan 31	[c]80,600	Jun 22, 1972
Maximum peak stage			12.29	Jan 31	[d]31.30	Jun 22, 1972
Instantaneous low flow			38	Sep 18[b]	5.7	Aug 22, 2002[f]
Annual runoff (cfsm)	0.557		0.865		0.694	
Annual runoff (inches)	7.58		11.75		9.44	
10 percent exceeds	256		402		409	
50 percent exceeds	95		145		112	
90 percent exceeds	44		58		39	

[e] Estimated.
[a] Sept. 16, 17.
[b] Sept. 18, 19.
[c] From rating curve extended above 27,000 ft³/s on basis of slope-area measurement of peak flow.
[d] From floodmarks.
[f] Aug. 22, 23, 2002.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1967 to September 1989. October 2010 to current year.

PERIOD OF DAILY RECORD.--
TURBIDITY: October 2010 to current year.
SEDIMENT CONCENTRATION: October 2010 to current year.
SEDIMENT LOAD: October 2010 to current year.

INSTRUMENTATION.--Automatic sampler October 2010 to current year.

REMARKS.--Sediment discharge loads and concentrations were estimated for days of estimated daily discharges. Turbidity values that were determined to be a result of debris on the sensor; a function of incident sun angle; or other phenomena that did not appear to be correlated to suspended-sedimentconcentration were removed by the hydrographer. Extended periods of missing data are due to equipment malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD.--
TURBIDITY: Maximum, 1,570 Nephelometric Turbidity Units (NTU) September 7, 2011; minimum 0.2 NTU February 2, 2012.
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 2,660 mg/L (estimated), January 31, 2013; minimum daily mean, 0.8 mg/L February 15, 2012.
SEDIMENT LOAD: Maximum daily mean 65,200 tons (estimated), January 31, 2013; minimum daily mean 0.21 tons July 24, 2011, August 2, 2012.

EXTREMES FOR CURRENT YEAR.--
TURBIDITY: Maximum, 1,550 Nephelometric Turbidity Units (NTU) June 11; minimum 0.6 NTU September 1-4, and 12.
SUSPENDED-SEDIMENT CONCENTRATION: Maximum daily mean, 2,660 mg/L (estimated), January 31; minimum daily mean, 1 mg/L June 1.
SEDIMENT LOAD: Maximum daily mean 65,200 tons (estimated), January 31; minimum daily mean 0.22 tons September 15, 29-30.

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TURBIDITY, WATER, UNFILT, 400-680 NM, DETECT ANGLE 90 DEG TO INCIDENT LIGHT, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
	October			November			December			January		
1	4.2	1.4	2.7	---	---	---	5.3	1.5	1.7	3.3	2.7	2.9
2	930	2.6	260	---	---	---	2.9	1.5	1.7	3.4	2.3	2.8
3	200	20	59	---	---	---	2.0	1.4	1.6	2.5	1.9	2.1
4	21	6.6	11	---	---	---	2.7	1.4	1.6	2.7	1.9	2.1
5	7.7	3.9	5.7	---	---	---	4.9	1.3	1.6	2.6	1.9	2.2
6	7.5	3.7	5.4	---	---	---	2.2	1.3	1.5	2.6	1.8	2.1
7	6.9	3.3	4.9	---	---	---	2.0	1.3	1.4	2.6	2.0	2.3
8	5.9	2.8	4.1	---	---	---	1.7	1.2	1.4	2.3	1.6	2.0
9	5.0	2.7	3.7	---	---	---	6.0	1.3	1.8	2.0	1.5	1.7
10	4.8	2.4	3.5	---	---	---	2.8	1.5	1.8	2.2	1.6	1.9
11	4.0	1.8	2.8	---	---	---	2.6	1.5	1.7	2.3	1.8	2.1
12	3.6	1.7	2.5	---	---	---	7.4	1.3	1.7	3.1	2.1	2.5
13	3.6	1.8	2.7	---	---	---	6.5	1.3	1.5	3.0	2.0	2.4
14	3.6	1.7	2.6	---	---	---	1.6	1.3	1.4	2.5	1.7	2.0
15	15	1.8	5.3	---	---	---	9.6	1.3	1.5	5.8	1.9	3.4
16	6.3	3.0	4.0	---	---	---	1.8	1.3	1.5	63	3.8	45
17	3.4	1.6	2.3	---	---	---	2.9	1.3	1.6	33	6.0	13
18	2.9	1.5	2.2	---	---	---	6.4	1.3	1.6	6.0	3.0	4.2
19	350	2.5	67	---	---	---	2.0	1.4	1.6	3.0	2.5	2.8
20	180	5.8	37	---	---	---	3.2	1.4	1.6	3.1	2.4	2.8
21	6.0	3.0	4.3	---	---	---	90	3.2	51	3.5	2.2	2.7
22	4.4	2.2	3.3	---	---	---	50	17	37	2.7	2.1	2.3
23	4.8	1.8	2.9	---	---	---	19	4.0	9.4	12	1.8	3.2
24	4.5	1.8	3.1	---	---	---	---	---	---	---	---	---
25	3.8	1.6	2.7	---	---	---	---	---	---	15	2.0	5.7
26	4.4	1.7	2.8	---	---	---	---	---	---	6.5	1.9	2.7
27	4.2	1.7	2.8	---	---	---	---	---	---	6.8	1.9	2.9
28	5.6	2.0	3.0	---	---	---	19	6.5	10	2.4	1.9	2.1
29	---	---	---	---	---	---	6.5	3.9	5.0	2.8	2.0	2.4
30	---	---	---	---	---	---	8.5	3.8	5.1	470	2.2	58
31	---	---	---	---	---	---	3.9	2.7	3.3	---	---	---
Month	---	---	---	---	---	---	---	---	---	---	---	---

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD—Continued

TURBIDITY, WATER, UNFILT, 400-680 NM, DETECT ANGLE 90 DEG TO INCIDENT LIGHT, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

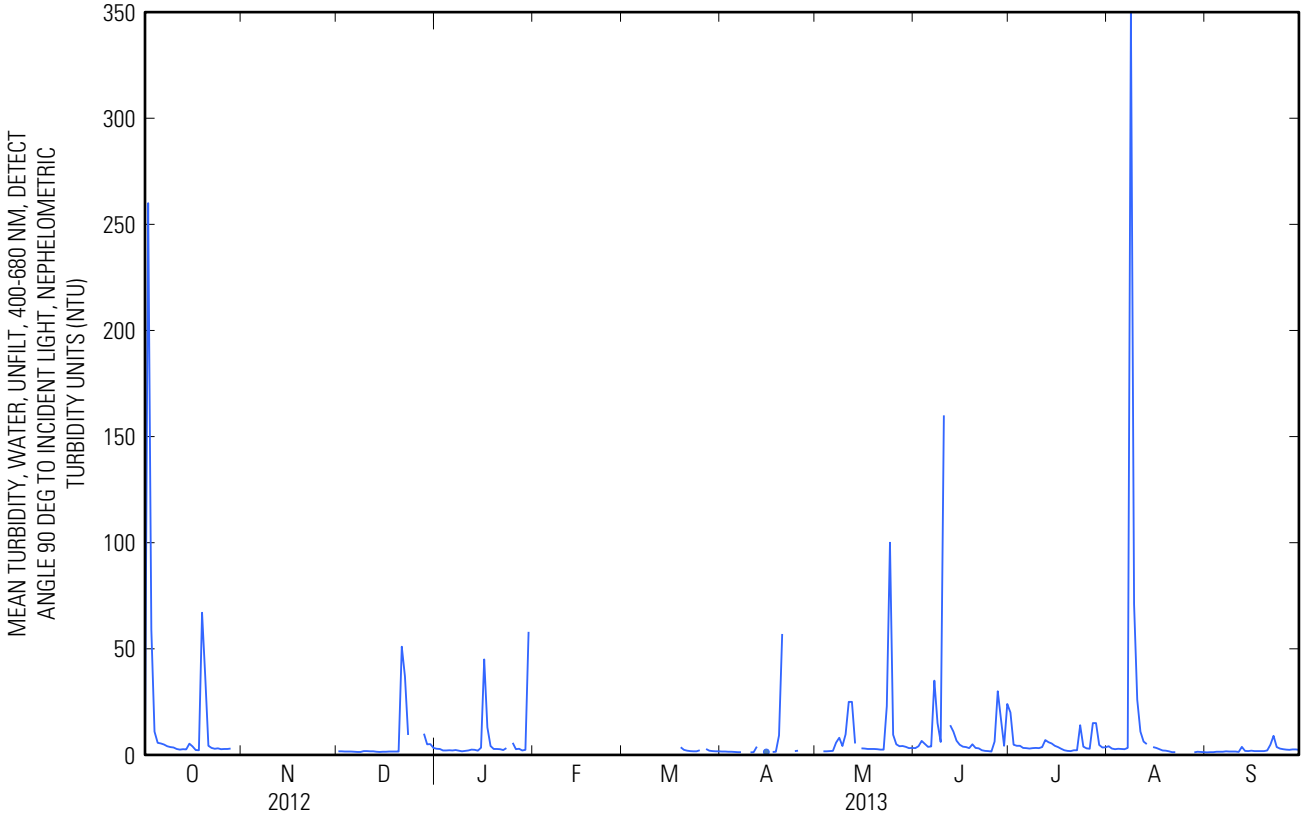
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	---	---	---	---	---	---	2.9	1.4	1.6	---	---	---
2	---	---	---	---	---	---	6.1	1.4	1.6	---	---	---
3	---	---	---	---	---	---	4.5	1.4	1.5	3.1	1.5	1.7
4	---	---	---	---	---	---	5.3	1.2	1.5	2.0	1.5	1.7
5	---	---	---	---	---	---	7.1	1.2	1.4	2.7	1.6	1.8
6	---	---	---	---	---	---	1.4	1.1	1.3	4.0	1.6	1.9
7	---	---	---	---	---	---	1.5	1.1	1.3	18	1.8	5.8
8	---	---	---	---	---	---	---	---	---	10	6.5	8.1
9	---	---	---	---	---	---	---	---	---	6.5	2.6	4.2
10	---	---	---	---	---	---	1.7	1.1	1.2	100	1.9	9.7
11	---	---	---	---	---	---	1.5	1.0	1.3	74	11	25
12	---	---	---	---	---	---	16	1.3	3.9	38	9.5	25
13	---	---	---	---	---	---	---	---	---	9.5	3.7	5.4
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	3.3	1.2	1.4	3.7	2.6	3.1
16	---	---	---	---	---	---	---	---	---	3.5	2.4	3.0
17	---	---	---	---	---	---	7.8	1.1	1.4	3.6	2.2	2.8
18	---	---	---	---	---	---	2.9	1.3	1.5	4.5	2.2	2.8
19	---	---	---	4.6	2.9	3.6	130	1.5	9.2	3.2	2.4	2.8
20	---	---	---	3.1	1.9	2.4	170	9.5	57	3.4	2.1	2.7
21	---	---	---	2.5	1.8	2.0	---	---	---	3.1	1.9	2.5
22	---	---	---	2.0	1.7	1.8	---	---	---	3.1	2.0	2.5
23	---	---	---	1.9	1.6	1.7	---	---	---	490	2.3	23
24	---	---	---	1.9	1.5	1.7	6.2	1.5	1.8	330	16	100
25	---	---	---	3.7	1.6	2.2	4.0	1.6	2.0	16	6.3	9.5
26	---	---	---	---	---	---	---	---	---	6.5	3.9	5.0
27	---	---	---	8.9	1.7	2.8	---	---	---	4.7	3.4	4.1
28	---	---	---	9.3	1.5	2.0	---	---	---	4.8	3.7	4.2
29	---	---	---	7.8	1.4	1.8	---	---	---	4.7	3.0	3.8
30	---	---	---	8.4	1.4	1.7	---	---	---	4.3	2.5	3.2
31	---	---	---	8.4	1.4	1.7	---	---	---	4.4	2.4	3.3
Month	---	---	---	---	---	---	---	---	---	---	---	---

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD—Continued

TURBIDITY, WATER, UNFILT, 400-680 NM, DETECT ANGLE 90 DEG TO INCIDENT LIGHT, NEPHELOMETRIC TURBIDITY UNITS
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	4.2	2.4	3.2	57	5.7	20	8.2	2.1	4.1	2.2	0.6	1.2
2	14	2.4	4.1	7.9	3.1	4.8	5.1	1.6	3.0	2.8	0.6	1.3
3	9.3	4.9	6.6	5.7	3.4	4.3	4.5	1.4	2.7	2.1	0.6	1.3
4	8.3	3.4	5.2	6.0	3.2	4.3	4.3	1.6	2.9	9.6	0.6	1.5
5	4.5	3.1	3.8	4.6	2.3	3.3	4.4	1.4	2.8	3.0	0.7	1.5
6	5.5	3.1	4.0	4.4	2.2	3.2	4.1	1.5	2.7	2.6	0.7	1.5
7	180	5.0	35	6.7	1.9	3.0	9.9	1.6	3.3	3.4	0.7	1.7
8	26	7.6	15	4.5	2.1	3.2	1,180	9.9	350	2.8	0.9	1.6
9	7.8	4.8	6.1	4.7	2.3	3.3	550	20	71	2.5	0.9	1.6
10	690	5.4	160	4.4	2.2	3.2	64	16	26	2.9	0.8	1.6
11	1,550	23	---	5.1	2.6	3.7	17	8.0	11	2.1	0.7	1.4
12	23	9.7	14	10	4.9	7.0	8.5	4.5	6.3	12	0.6	3.8
13	27	7.1	11	8.7	4.2	6.0	7.3	4.1	5.1	4.5	0.9	1.9
14	11	4.3	6.7	6.9	4.1	5.4	---	---	---	2.6	1.0	1.8
15	6.1	3.5	4.8	5.8	3.3	4.3	5.0	2.7	3.7	3.2	1.1	2.0
16	4.9	3.0	3.9	4.9	2.8	3.7	4.8	2.4	3.3	2.8	1.1	1.8
17	4.5	2.9	3.7	4.7	1.7	2.9	4.2	1.9	2.7	2.8	1.1	1.8
18	4.3	2.3	3.2	8.9	1.2	2.2	3.1	1.4	2.1	3.4	1.0	1.8
19	6.6	4.0	5.0	3.8	0.9	1.9	2.9	1.4	2.0	2.4	1.1	1.8
20	5.1	2.2	3.3	3.4	0.9	1.8	2.4	1.3	1.7	6.5	1.2	2.1
21	8.5	2.2	3.1	3.7	1.1	2.2	1.8	0.9	1.3	54	1.8	4.8
22	3.0	1.6	2.2	3.9	1.2	2.2	7.1	0.8	1.3	43	5.1	9.0
23	2.4	1.6	1.9	66	3.9	14	---	---	---	5.6	2.3	3.7
24	3.2	1.3	1.8	7.1	2.2	3.9	---	---	---	4.5	1.9	3.0
25	2.8	1.0	1.6	4.9	1.8	3.1	---	---	---	3.8	2.0	2.7
26	32	1.4	6.3	4.5	1.6	2.9	---	---	---	3.6	1.7	2.5
27	110	3.1	30	190	1.7	15	---	---	---	3.2	1.6	2.4
28	80	5.7	17	34	7.1	15	1.8	0.8	1.2	9.5	1.6	2.6
29	8.1	2.3	4.3	8.5	3.0	4.7	6.8	0.9	1.5	5.6	1.6	2.6
30	150	2.4	24	5.4	1.9	3.5	2.0	0.8	1.4	3.1	1.6	2.4
31	---	---	---	5.2	2.1	3.6	1.9	0.7	1.3	---	---	---
Month	1,550	1.0	---	190	0.9	5.2	---	---	---	54	0.6	2.4

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD—Continued



01589000 PATAPSCO RIVER AT HOLLOFIELD, MD—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
[e, estimated]

Day	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)
		October			November			December	
1	42	5	0.56	822	34	77	80	33	7.2
2	605	337	1,210	497	50	66	80	27	5.9
3	228	45	35	344	84	78	82	21	4.6
4	107	8	2.3	259	105	73	81	15	3.2
5	78	5	1.1	213	110	63	80	8	1.8
6	64	6	1.0	164	114	50	76	4	0.73
7	60	5	0.74	145	119	46	78	4	0.77
8	58	5	0.75	140	123	46	81	4	0.92
9	56	5	0.76	116	128	40	95	5	1.2
10	55	5	0.74	105	127	36	101	5	1.5
11	52	5	0.70	100	120	32	91	6	1.4
12	50	5	0.67	97	114	30	82	6	1.4
13	48	5	0.64	165	107	48	79	7	1.5
14	49	4	0.59	147	100	40	77	8	1.6
15	68	5	1.1	119	94	30	77	8	1.7
16	72	5	1.0	110	87	26	77	9	1.8
17	56	4	0.57	102	80	22	80	9	2.0
18	53	4	0.52	96	73	19	84	10	2.3
19	229	47	37	93	67	17	79	15	3.2
20	138	14	6.1	91	63	16	77	13	2.8
21	73	6	1.2	89	66	16	434	65	85
22	63	4	0.70	86	69	16	172	39	17
23	60	4	0.65	86	72	17	125	62	21
24	59	4	0.69	85	75	17	112	85	26
25	59	5	0.74	84	71	16	120	109	35
26	60	4	0.64	81	65	14	294	129	103
27	61	4	0.66	89	58	14	1,060	175	614
28	61	4	0.71	90	52	13	527	20	29
29	2,950	482	8,750	82	46	10	401	21	23
30	5,260	1,060	20,600	82	40	8.8	359	20	20
31	1,790	67	336	---	---	---	265	18	13
Total	12,664	---	30,993.83	4,779	---	996.8	5,506	---	1,033.52

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
[e, estimated]

Day	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)
		January			February			March	
1	232	16	10	e2,200	e245	e1,460	287	48	37
2	214	15	8.4	e1,000	e229	e989	260	42	30
3	179	13	6.1	e700	e214	e491	253	38	26
4	161	11	4.7	e525	e211	e349	238	33	21
5	149	9	3.6	e425	e208	e266	206	28	16
6	140	9	3.5	e360	e77	e81	348	54	61
7	136	12	4.5	327	68	60	429	79	92
8	121	15	4.9	326	59	52	378	67	68
9	119	18	5.8	337	50	46	307	58	48
10	116	21	6.5	268	42	30	273	48	35
11	114	24	7.3	320	38	33	253	38	26
12	136	27	9.8	322	37	32	876	266	1,100
13	123	30	9.8	283	35	27	807	206	463
14	122	32	11	311	34	29	564	119	183
15	183	46	23	287	33	25	418	80	91
16	693	67	127	323	31	27	379	65	66
17	527	20	29	298	30	24	343	61	56
18	383	20	20	252	29	20	322	56	49
19	299	23	19	246	27	18	391	52	55
20	263	26	18	260	26	18	328	50	44
21	230	22	14	235	25	16	308	49	40
22	210	14	8.1	214	23	14	274	47	35
23	158	11	4.6	218	22	13	261	46	32
24	165	8	3.4	238	22	14	252	44	30
25	e145	e5	e2.2	213	23	13	302	46	38
26	e142	e14	e6.5	210	25	14	350	55	52
27	e140	e15	e9.0	403	58	63	323	56	49
28	127	9	3.1	327	54	48	284	51	39
29	134	9	3.3	---	---	---	263	46	32
30	406	82	355	---	---	---	249	40	27
31	e7,200	e2,660	e65,200	---	---	---	238	35	23
Total	13,467	---	65,941.1	11,428	---	4,272	10,764	---	2,964

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
[e, estimated]

Day	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)
		April			May			June	
1	249	33	23	217	5	2.9	86	1	0.34
2	233	30	19	185	4	2.2	88	4	0.99
3	214	27	16	169	4	1.8	153	9	3.6
4	201	14	7.5	153	4	1.7	101	13	3.6
5	205	7	3.8	141	4	1.5	84	13	2.9
6	195	4	2.4	132	4	1.4	84	7	1.8
7	186	4	2.0	187	9	5.9	432	53	65
8	186	4	2.0	326	15	13	337	27	27
9	178	4	1.8	231	7	4.5	216	11	6.6
10	177	3	1.5	212	12	9.8	1,040	317	1,550
11	169	2	1.1	511	40	57	2,170	459	5,300
12	220	7	4.3	496	41	58	678	22	44
13	253	5	3.5	311	11	9.3	501	17	26
14	220	6	3.3	247	7	4.7	454	9	11
15	193	6	3.1	222	6	3.8	319	16	14
16	183	6	3.0	205	6	3.6	252	13	9.0
17	178	6	2.9	187	6	3.0	219	12	7.2
18	186	6	2.8	163	6	2.5	228	25	16
19	237	19	21	153	5	1.9	277	30	23
20	773	93	230	157	3	1.4	224	20	12
21	417	12	14	141	2	0.84	181	14	7.0
22	306	8	6.6	128	2	0.68	150	8	3.5
23	254	6	4.1	236	34	84	140	6	2.4
24	232	5	3.1	466	123	224	137	8	3.1
25	220	5	3.0	221	29	17	124	11	3.8
26	194	5	2.5	163	25	11	158	27	12
27	177	4	2.0	128	16	5.6	224	41	26
28	164	5	2.1	118	9	3.0	173	25	12
29	184	4	2.1	113	6	1.9	177	13	6.2
30	236	5	3.0	103	4	1.1	187	28	18
31	---	---	---	91	3	0.64	---	---	---
Total	7,020	---	396.5	6,513	---	539.66	9,594	---	7,218.03

01589000 PATAPSCO RIVER AT HOLLOFIELD, MD—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
[e, estimated]

Day	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)	Mean discharge (ft³/s)	Mean concen-tration (mg/L)	Sediment discharge (tons/day)
		July			August			September	
1	163	22	10	80	4	0.98	56	4	0.59
2	146	14	5.4	67	3	0.51	58	3	0.54
3	157	15	6.4	65	2	0.42	55	3	0.45
4	156	10	4.2	73	2	0.49	49	3	0.34
5	124	7	2.2	58	3	0.42	46	2	0.26
6	110	8	2.5	65	3	0.50	44	2	0.24
7	100	10	2.7	86	5	1.3	42	2	0.23
8	106	11	3.2	1,040	449	2,690	44	2	0.24
9	95	12	3.0	279	76	75	45	2	0.24
10	102	12	3.3	225	31	21	43	2	0.23
11	122	12	3.9	133	14	5.2	43	2	0.23
12	161	12	5.1	112	11	3.4	49	4	0.64
13	149	12	4.6	109	14	4.1	49	3	0.39
14	135	11	4.2	95	7	1.9	42	2	0.23
15	119	11	3.6	82	5	1.2	41	2	0.22
16	85	11	2.6	78	4	0.86	42	2	0.25
17	77	11	2.3	72	4	0.74	42	2	0.28
18	69	11	2.0	71	4	0.70	40	3	0.29
19	66	9	1.7	72	3	0.67	40	3	0.32
20	65	8	1.4	72	3	0.63	41	3	0.33
21	67	6	1.2	67	3	0.55	61	5	1.4
22	66	5	0.97	65	3	0.59	124	10	3.7
23	122	16	5.5	64	4	0.67	59	4	0.66
24	75	5	0.99	68	4	0.80	45	3	0.36
25	63	4	0.63	61	5	0.81	43	3	0.34
26	60	3	0.49	59	5	0.86	43	2	0.28
27	89	14	6.4	59	6	0.93	41	2	0.23
28	109	14	4.3	58	6	0.89	42	2	0.23
29	99	5	1.4	73	5	1.0	41	2	0.22
30	71	4	0.74	65	5	0.84	42	2	0.22
31	62	3	0.53	57	4	0.67	---	---	---
Total	3,190	---	97.45	3,630	---	2,818.63	1,452	---	14.18

	Total discharge (ft³/s)	Total suspended sediment discharge (tons)
Year	90,007	117,285.70