01652500 FOURMILE RUN AT ALEXANDRIA, VA

LOCATION.--Lat 38°50'36", long 77°05'09", NAD83, Arlington County, Hydrologic Unit 02070010, on left bank at upstream side of bridge on Shirlington Road, at Arlington County-Alexandria City line, 0.1 mi upstream from I-395, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--13.8 mi^2.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 28.57 ft NGVD of 1929. May 4, 1951 to Sept. 30, 1969, water stage recorder, Oct. 1, 1969 to Sept. 27, 1973, nonrecording gage, at site 0.4 mi downstream at datum 6.02 lower (annual maximum only). Sept. 28, 1973 to Sept. 26, 1975, water-stage recorder. Sept. 27, 1975 to Sept. 30, 1977, nonrecording gage, at present site and datum (annual maximum only). July 1979 to September 1982, water stage recorder. October 1982 to September 1998, nonrecording gage (annual maximum only). October 1998 to present, water stage recorder.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge, 14,600 ft^3/s, from rating curve extended above 670 ft^3/s on basis of slope-area measurement of peak flow at gage height, 11.6 ft, site and datum then in use. Several measurements of water temperature were made during the year. Water-quality records for some periods have been collected at this location.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 23	1445	2,410	7.98	May 20	1030	1,990	7.47
Jan 14	0450	3,030	8.73	Jun 7	0110	2,320	7.87
Mar 28	1710	2,550	8.15	Jun 29	2045	*3,490	*9.28
Apr 2	1145	2,720	8.35	Jul 8	0645	2,640	8.25
May 14	2025	1,940	7.41	Jul 15	1720	3,370	9.14

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	7.6	48	5.7	7.5	40	33	47	8.2	6.6	7.1	5.8
2	46	8.2	7.4	5.2	7.3	14	496	10	7.8	7.5	7.0	5.9
3	6.5	8.7	6.7	5.9	8.5	11	151	9.0	102	4.7	6.9	5.7
4	6.3	262	5.8	6.3	9.6	11	23	8.5	11	4.4	6.6	5.5
5	5.4	16	5.9	16	8.2	11	19	8.5	8.9	19	10	5.7
6	5.3	8.2	5.9	6.5	8.7	10	14	7.7	20	58	6.5	5.9
7	5.7	7.2	52	4.8	7.6	11	19	7.7	157	22	5.9	5.6
8	5.6	6.7	26	17	7.9	139	45	7.6	11	584	50	5.8
9	6.4	6.4	108	4.8	8.0	13	12	7.5	13	11	31	5.9
10	6.6	6.4	58	5.0	15	10	11	7.4	11	6.4	8.3	6.1
11	7.3	6.7	25	7.0	7.3	11	11	7.4	8.8	5.8	7.1	5.9
12	6.5	363	9.9	8.3	7.2	9.6	9.7	7.5	8.4	15	6.9	6.0
13	6.1	44	8.7	17	6.8	8.4	9.3	6.6	14	8.6	6.3	6.1
14	6.6	9.6	7.4	467	44	8.1	9.2	173	11	51	6.2	8.7
15	13	7.3	6.9	17	14	7.7	8.6	24	8.4	264	6.1	6.2
16	8.4	6.7	e7.0	11	9.5	7.7	7.7	9.5	8.0	117	12	7.5
17	6.7	6.4	e6.7	8.5	7.7	7.7	8.0	8.1	7.3	30	9.1	5.7
18	6.1	7.5	e6.7	7.2	6.9	7.7	8.6	8.1	6.8	12	5.4	5.3
19	23	6.0	e12	7.7	6.6	7.7	8.7	8.2	6.4	10	41	5.4
20	18	11	e7.0	10	6.8	49	8.6	529	6.6	9.1	7.0	5.2
21	30	8.3	5.8	7.2	35	10	14	24	6.9	8.7	6.0	4.8
22	7.0	6.0	6.3	6.5	13	7.8	26	13	8.0	8.8	5.5	4.9
23	6.2	6.0	172	e5.8	7.6	358	53	14	7.8	8.1	5.2	5.4
24	8.5	29	14	e6.0	26	27	12	56	6.7	7.3	5.2	4.9
25	6.4	22	7.5	7.3	25	16	8.5	18	6.7	22	5.0	4.8
26	6.4	6.7	e6.4	10	14	11	8.2	12	6.6	7.7	6.2	7.3
27	6.4	6.1	e5.7	6.3	11	11	8.6	9.9	7.8	69	16	7.4
28	6.2	29	5.4	5.1	28	316	7.6	9.0	8.0	13	20	4.6
29	9.4	6.5	6.2	5.7	---	e40	7.6	8.5	192	10	6.5	4.3
30	7.0	6.1	5.5	19	---	e20	154	8.4	24	7.8	6.2	3.8
31	7.1	---	5.7	11	---	e15	---	8.7	---	7.0	6.3	---
TOTAL	302.7	931.3	661.5	727.8	364.7	1,226.4	1,211.9	1,083.8	710.1	1,415.5	334.5	172.1
MEAN	9.76	31.0	21.3	23.5	13.0	39.6	40.4	35.0	23.7	45.7	10.8	5.74
MAX	46	363	172	467	44	358	496	529	192	584	50	8.7
MIN	5.3	6.0	5.4	4.8	6.6	7.7	7.6	6.6	6.4	4.4	5.0	3.8
CFSM	0.71	2.25	1.55	1.70	0.94	2.87	2.93	2.53	1.72	3.31	0.78	0.42
IN.	0.82	2.51	1.78	1.96	0.98	3.31	3.27	2.92	1.91	3.82	0.90	0.46

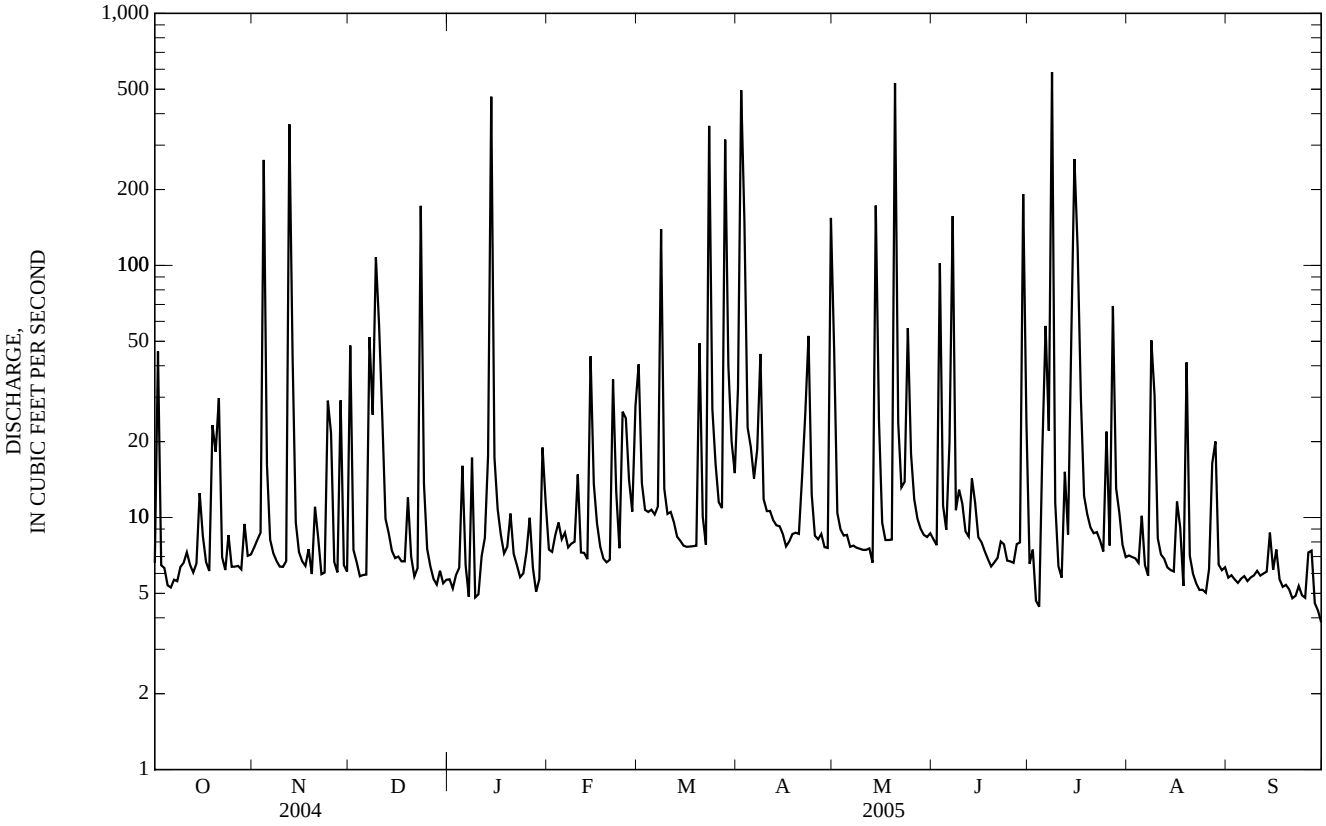
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2005, BY WATER YEAR (WY)

MEAN	11.6	14.2	16.4	15.3	18.9	24.2	19.0	18.0	18.0	18.2	19.4	18.9
MAX	39.0	38.5	47.6	35.6	59.7	44.3	42.0	52.3	51.4	56.2	64.3	85.0
(WY)	(1980)	(2004)	(2004)	(1964)	(2003)	(1953)	(1952)	(1953)	(2003)	(2003)	(1967)	(1999)
MIN	2.54	2.57	3.07	3.84	4.84	6.05	6.79	6.90	5.22	1.78	2.01	1.94
(WY)	(1964)	(1966)	(1966)	(1981)	(2002)	(1981)	(1967)	(1961)	(1954)	(1957)	(1962)	(1954)

01652500 FOURMILE RUN AT ALEXANDRIA, VA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1952 - 2005	
ANNUAL TOTAL	8,171.2		9,142.3			
ANNUAL MEAN	22.3		25.0		17.5	
HIGHEST ANNUAL MEAN					38.6	2003
LOWEST ANNUAL MEAN					7.72	1959
HIGHEST DAILY MEAN	376	Sep 28	584	Jul 8	1,060	Sep 14, 1966
LOWEST DAILY MEAN	4.4	Sep 5	3.8	Sep 30	0.70	(a)
ANNUAL SEVEN-DAY MINIMUM	4.7	Jan 26	5.1	Sep 19	0.94	Aug 12, 1957
MAXIMUM PEAK FLOW			3,490	Jun 29	14,600	Jul 22, 1969
MAXIMUM PEAK STAGE			9.28	Jun 29	b17.80	Jun 21, 1972
INSTANTANEOUS LOW FLOW			3.4	cJan 28	0.53	Oct 7, 2002
ANNUAL RUNOFF (CFSM)	1.62		1.82		1.27	
ANNUAL RUNOFF (INCHES)	22.03		24.64		17.27	
10 PERCENT EXCEEDS	45		40		34	
50 PERCENT EXCEEDS	7.6		8.0		6.2	
90 PERCENT EXCEEDS	5.3		5.7		2.8	

a Many days in August 1957.
b From floodmarks.
c Also Sept. 30, 2005.
e Estimated.



0165258890 POTOMAC RIVER AT CAMERON STREET DOCK AT ALEXANDRIA, VA

LOCATION.--Lat 38°48'19", long 77°02'18" NAD83, Alexandria City, Hydrologic Unit 02070010, on upstream side of dock at end of Cameron Street, 0.8 mi upstream from Woodrow Wilson Memorial Bridge.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July 2004 to current year.

GAGE.--Water-stage recorder. Datum of gage is NAVD of 1988.

REMARKS.--Records good. Daily instantaneous maximum and minimum tide stages are shown in table below.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 4.01 ft, July 8; minimum elevation, -3.55 ft, Mar. 3.

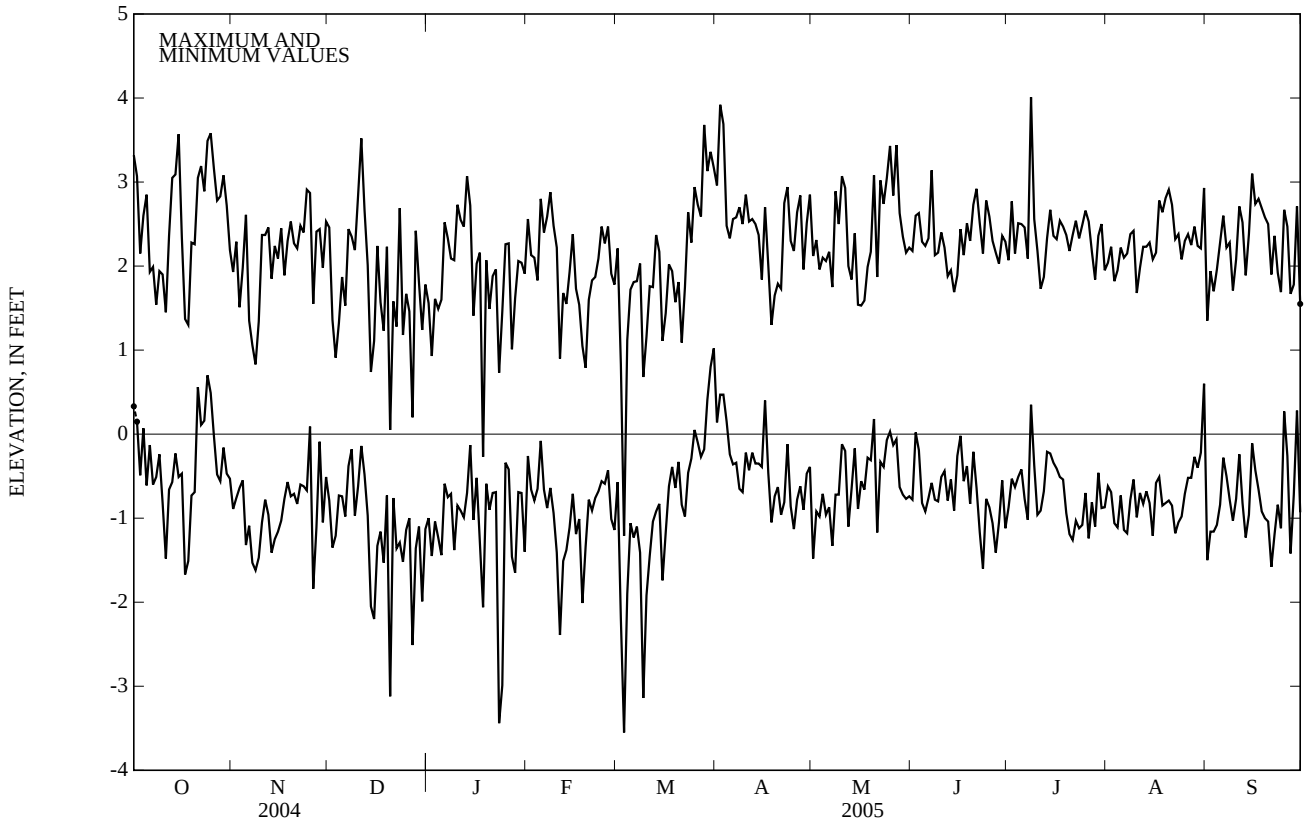
TIDE ELEVATION ABOVE NAVD 1988, FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	3.32	0.33	1.93	-0.89	2.46	-0.79	1.56	-1.00	2.56	-0.26	2.21	-0.57
2	3.07	0.15	2.29	-0.76	1.36	-1.35	0.93	-1.45	2.13	-0.66	0.83	-2.20
3	2.15	-0.49	1.51	-0.64	0.91	-1.21	1.61	-1.04	2.10	-0.79	-1.21	-3.55
4	2.60	0.07	1.98	-0.55	1.32	-0.73	1.49	-1.23	1.83	-0.65	1.12	-1.90
5	2.85	-0.61	2.61	-1.32	1.87	-0.74	1.60	-1.44	2.80	-0.08	1.72	-1.06
6	1.93	-0.13	1.35	-1.09	1.53	-0.98	2.52	-0.59	2.40	-0.66	1.81	-1.23
7	1.99	-0.60	1.06	-1.53	2.44	-0.38	2.33	-0.75	2.59	-0.88	1.82	-1.10
8	1.54	-0.51	0.83	-1.62	2.35	-0.18	2.09	-0.71	2.88	-0.64	2.03	-1.41
9	1.94	-0.24	1.34	-1.47	2.19	-0.97	2.07	-1.38	2.48	-0.94	0.68	-3.14
10	1.90	-0.82	2.37	-1.05	2.84	-0.62	2.73	-0.85	2.22	-1.41	1.16	-1.92
11	1.45	-1.48	2.37	-0.78	3.52	-0.14	2.55	-0.91	0.90	-2.39	1.76	-1.45
12	2.36	-0.66	2.46	-0.96	2.67	-0.48	2.47	-0.99	1.68	-1.51	1.75	-1.04
13	3.05	-0.57	1.85	-1.41	2.01	-0.97	3.07	-0.70	1.55	-1.38	2.37	-0.92
14	3.09	-0.23	2.24	-1.25	0.74	-2.05	2.72	-0.13	1.93	-1.11	2.17	-0.83
15	3.57	-0.51	2.09	-1.16	1.11	-2.20	1.41	-1.02	2.38	-0.71	1.11	-1.74
16	2.34	-0.47	2.45	-1.03	2.24	-1.33	2.03	-0.52	1.73	-1.19	1.44	-1.17
17	1.37	-1.67	1.89	-0.77	1.57	-1.16	2.16	-1.29	1.54	-1.01	2.02	-0.62
18	1.30	-1.51	2.30	-0.57	1.23	-1.53	-0.27	-2.06	1.05	-2.01	1.94	-0.39
19	2.28	-0.73	2.53	-0.74	2.23	-0.73	2.07	-0.59	0.79	-1.34	1.57	-0.64
20	2.26	-0.69	2.27	-0.71	0.05	-3.12	1.49	-0.90	1.60	-0.78	1.81	-0.33
21	3.05	0.56	2.21	-0.83	1.58	-0.76	1.88	-0.70	1.83	-0.91	1.09	-0.84
22	3.19	0.11	2.48	-0.60	1.28	-1.36	1.96	-0.69	1.87	-0.76	1.75	-0.98
23	2.89	0.16	2.40	-0.62	2.69	-1.29	0.73	-3.44	2.09	-0.68	2.64	-0.46
24	3.49	0.70	2.91	-0.67	1.18	-1.52	1.46	-2.99	2.47	-0.56	2.28	-0.29
25	3.58	0.49	2.87	0.09	1.67	-1.14	2.26	-0.34	2.27	-0.59	2.94	0.05
26	3.16	-0.02	1.55	-1.84	1.46	-1.00	2.27	-0.42	2.47	-0.43	2.73	-0.10
27	2.78	-0.48	2.41	-1.11	0.20	-2.51	1.01	-1.46	1.91	-1.01	2.59	-0.27
28	2.83	-0.56	2.44	-0.09	2.42	-1.36	1.62	-1.65	1.78	-1.14	3.68	-0.18
29	3.08	-0.16	1.98	-1.05	1.80	-1.10	2.06	-0.69	---	---	3.13	0.41
30	2.72	-0.47	2.53	-0.51	1.24	-1.99	2.04	-0.70	---	---	3.36	0.80
31	2.19	-0.53	---	---	1.78	-1.13	1.91	-1.40	---	---	3.17	1.02
MAX	3.58	0.70	2.91	0.09	3.52	-0.14	3.07	-0.13	2.88	-0.08	3.68	1.02
MIN	1.30	-1.67	0.83	-1.84	0.05	-3.12	-0.27	-3.44	0.79	-2.39	-1.21	-3.55

0165258890 POTOMAC RIVER AT CAMERON STREET DOCK AT ALEXANDRIA, VA—Continued

TIDE ELEVATION ABOVE NAVD 1988, FEET—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.96	0.14	2.12	-1.48	2.18	-0.78	2.07	-0.87	2.04	-0.62	1.35	-1.50
2	3.92	0.47	2.31	-0.92	2.60	0.02	2.77	-0.53	2.23	-0.69	1.94	-1.16
3	3.69	0.47	1.96	-0.98	2.63	-0.19	2.15	-0.63	1.82	-1.06	1.70	-1.16
4	2.48	0.15	2.10	-0.71	2.29	-0.82	2.51	-0.51	1.95	-1.11	1.96	-1.08
5	2.33	-0.24	2.06	-0.96	2.24	-0.92	2.50	-0.42	2.22	-0.73	2.28	-0.84
6	2.56	-0.36	2.17	-0.87	2.33	-0.76	2.46	-0.77	2.10	-1.14	2.60	-0.28
7	2.58	-0.34	1.75	-1.33	3.14	-0.58	2.09	-1.02	2.15	-1.18	2.22	-0.50
8	2.70	-0.65	2.89	-0.72	2.13	-0.78	4.01	0.35	2.38	-0.78	2.28	-0.78
9	2.50	-0.69	2.50	-0.72	2.16	-0.80	2.56	-0.37	2.42	-0.54	1.71	-1.03
10	2.85	-0.22	3.07	-0.12	2.40	-0.51	2.18	-0.96	1.68	-0.99	2.08	-0.77
11	2.53	-0.43	2.93	-0.20	2.22	-0.44	1.73	-0.91	1.98	-0.70	2.71	-0.24
12	2.56	-0.22	2.00	-1.10	1.88	-0.79	1.87	-0.68	2.23	-0.83	2.52	-0.82
13	2.50	-0.35	1.84	-0.65	1.95	-0.54	2.33	-0.21	2.23	-0.68	1.89	-1.23
14	2.37	-0.35	2.39	-0.17	1.69	-0.91	2.67	-0.23	2.28	-0.82	2.38	-0.96
15	1.84	-0.39	1.54	-0.89	1.89	-0.26	2.36	-0.34	2.08	-1.21	3.10	-0.11
16	2.70	0.40	1.53	-0.56	2.44	-0.02	2.32	-0.41	2.16	-0.58	2.74	-0.43
17	2.01	-0.46	1.59	-0.66	2.13	-0.56	2.54	-0.51	2.78	-0.51	2.80	-0.66
18	1.30	-1.05	1.99	-0.28	2.51	-0.38	2.47	-0.54	2.64	-0.85	2.69	-0.92
19	1.65	-0.74	2.17	-0.31	2.30	-0.83	2.37	-0.94	2.81	-0.82	2.58	-1.00
20	1.79	-0.63	3.08	0.18	2.73	-0.21	2.18	-1.19	2.91	-0.79	2.50	-1.04
21	1.73	-0.96	1.87	-1.17	2.92	-0.64	2.37	-1.26	2.73	-0.85	1.90	-1.58
22	2.75	-0.81	3.02	-0.33	2.51	-1.17	2.54	-1.03	2.32	-1.18	2.36	-1.19
23	2.94	-0.12	2.74	-0.39	2.15	-1.60	2.33	-1.12	2.38	-1.05	1.92	-0.84
24	2.30	-0.86	3.05	-0.07	2.78	-0.77	2.49	-1.08	2.08	-0.98	1.69	-1.12
25	2.18	-1.13	3.43	0.03	2.59	-0.87	2.66	-0.70	2.30	-0.71	2.67	0.27
26	2.64	-0.78	2.84	-0.13	2.30	-1.06	2.53	-1.24	2.38	-0.52	2.47	-0.26
27	2.84	-0.62	3.44	-0.06	2.16	-1.41	2.17	-0.81	2.25	-0.52	1.67	-1.42
28	1.96	-0.90	2.63	-0.63	2.03	-1.05	1.84	-1.10	2.47	-0.27	1.78	-0.72
29	2.51	-0.47	2.35	-0.72	2.36	-0.55	2.36	-0.46	2.24	-0.40	2.71	0.28
30	2.85	-0.39	2.16	-0.77	2.29	-1.12	2.50	-0.88	2.21	-0.22	1.55	-0.93
31	---	---	2.22	-0.74	---	---	1.95	-0.87	2.93	0.60	---	---
MAX	3.92	0.47	3.44	0.18	3.14	0.02	4.01	0.35	2.93	0.60	3.10	0.28
MIN	1.30	-1.13	1.53	-1.48	1.69	-1.60	1.73	-1.26	1.68	-1.21	1.35	-1.58



01653000 CAMERON RUN AT ALEXANDRIA, VA

LOCATION.--Lat 38°48'23", long 77°06'35", NAD83, Fairfax County, Hydrologic Unit 02070010, on left downstream side of Norfolk Southern Railway bridge at Alexandria, 800 ft downstream from confluence of Holmes Run and Backlick Run, 0.5 mi east of the U.S. Army Quartermaster Depot, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--33.7 mi^2.

PERIOD OF RECORD.--June 1955 to March 1979, October 1979 to September 1980, October 1980 to September 1986 (annual maximum only), October 1986 to current year.

GAGE.--Water-stage recorder. Gage reinstalled Nov. 8, 1979. Datum of gage is 31.74 ft NGVD of 1929. Prior to Sept. 20, 1965, at present site at datum 7.78 ft higher. Sept. 20, 1965, to Jan. 19, 1976, at present site at datum 5.44 ft higher. Jan. 20, 1976, to Nov. 8, 1976, at site 1,200 ft downstream at datum 10.00 ft lower. Nov. 9, 1976, to Mar. 31, 1979, at site 0.5 mi downstream at datum 7.22 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation by Lake Barcroft, formerly Alexandria Reservoir, on Holmes Run 3.6 mi upstream, usable capacity 2,092 acre-ft. Maximum discharge, 19,900 ft^3/s, from rating curve extended above 2,500 ft^3/s on basis of culvert computations of peak flow for main channel and bypass channels. Several measurements of water temperature were made during the year. Water-quality records for some periods have been collected at this location.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	6.9	94	17	22	90	38	122	6.8	9.3	3.8	2.2
2	85	6.9	27	13	18	46	667	23	4.9	11	2.5	1.8
3	22	12	17	13	23	24	274	14	150	2.4	2.1	1.5
4	12	337	14	16	27	20	70	9.2	23	1.2	1.9	1.3
5	9.4	83	15	35	27	20	40	7.8	11	12	1.5	1.1
6	7.1	26	14	22	21	18	32	6.7	7.7	73	1.4	1.1
7	7.1	16	90	16	20	18	38	6.7	196	17	1.2	1.3
8	7.4	14	68	43	18	241	87	5.3	15	853	110	1.3
9	6.0	8.7	143	19	17	56	27	3.7	e18	48	140	1.4
10	6.4	9.3	155	16	32	35	20	3.3	e9.8	19	15	2.5
11	5.9	8.6	83	17	14	29	23	2.5	e8.0	12	7.9	1.5
12	5.9	502	40	29	11	24	16	3.2	e7.7	10	2.4	2.4
13	5.7	152	30	21	12	18	13	1.9	e18	85	4.1	1.7
14	6.5	44	20	777	73	17	12	149	e40	128	2.5	11
15	20	28	16	e82	47	14	9.6	76	e7.5	189	1.7	2.8
16	29	23	16	e47	22	15	8.6	17	e6.5	134	41	1.8
17	9.3	18	20	e31	19	15	10	11	e6.0	86	23	1.9
18	8.0	17	17	e23	14	13	12	13	e5.8	20	4.6	3.0
19	16	16	29	e19	11	13	11	11	e5.7	13	63	1.7
20	56	29	22	e22	13	27	9.9	774	e5.6	11	13	2.4
21	66	30	9.4	e18	60	19	24	90	e5.8	8.0	6.2	1.6
22	16	16	12	e18	48	13	54	30	e6.6	6.2	3.1	2.0
23	10	18	230	e16	18	430	92	31	e7.9	13	1.7	1.9
24	11	53	69	e14	55	74	40	145	e16	5.9	1.3	2.5
25	10	63	32	15	57	28	10	60	e7.2	26	1.2	2.2
26	9.6	20	22	20	41	19	9.8	24	e5.8	8.6	e1.0	6.5
27	8.6	15	19	18	31	15	10	15	e6.5	56	e23	6.6
28	8.9	67	17	14	56	669	6.5	12	e6.5	34	47	2.8
29	13	20	19	11	---	156	5.7	7.7	e185	4.9	8.6	4.0
30	15	15	17	44	---	45	239	8.7	e50	8.1	3.6	2.1
31	10	---	17	30	---	28	---	8.0	---	4.5	3.0	---
TOTAL	516.8	1,674.4	1,393.4	1,496	827	2,249	1,909.1	1,691.7	850.3	1,909.1	542.3	77.9
MEAN	16.7	55.8	44.9	48.3	29.5	72.5	63.6	54.6	28.3	61.6	17.5	2.60
MAX	85	502	230	777	73	669	667	774	196	853	140	11
MIN	5.7	6.9	9.4	11	11	13	5.7	1.9	4.9	1.2	1.0	1.1
CFSM	0.49	1.66	1.33	1.43	0.88	2.15	1.89	1.62	0.84	1.83	0.52	0.08
IN.	0.57	1.85	1.54	1.65	0.91	2.48	2.11	1.87	0.94	2.11	0.60	0.09

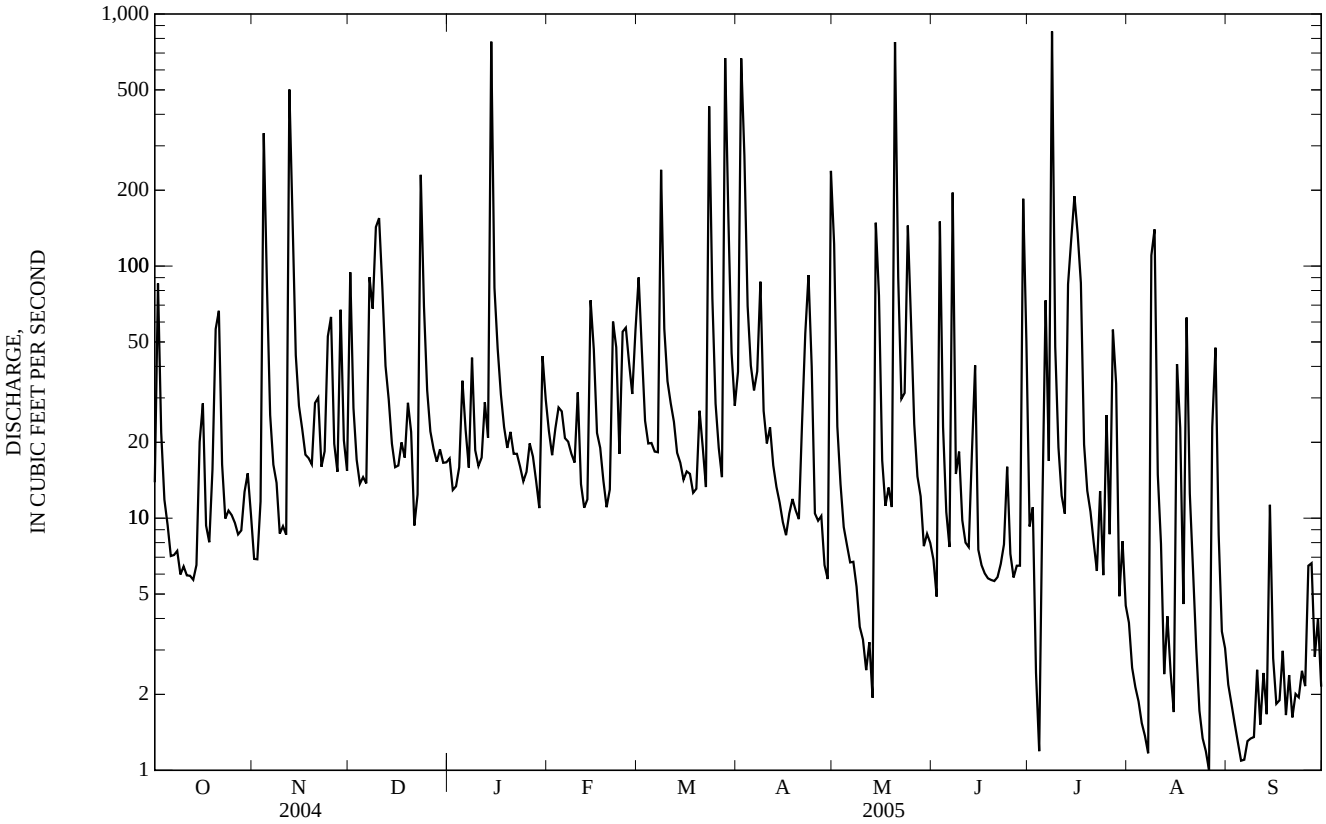
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1980, 1987 - 2005, BY WATER YEAR (WY)

MEAN	30.5	31.7	39.6	42.5	46.7	55.5	42.2	39.3	37.2	45.8	35.7	32.5
MAX	147	80.5	99.2	157	128	132	81.8	117	265	662	364	172
(WY)	(1984)	(1964)	(1970)	(1978)	(1979)	(1993)	(1970)	(1989)	(1972)	(1981)	(1981)	(1975)
MIN	4.52	4.40	3.47	10.0	9.10	19.9	10.6	8.59	7.93	2.51	3.85	2.60
(WY)	(1964)	(1966)	(1966)	(1966)	(2002)	(1966)	(1969)	(1956)	(1956)	(1957)	(1957)	(2005)

01653000 CAMERON RUN AT ALEXANDRIA, VA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1956 - 1980 1987 - 2005	
ANNUAL TOTAL	14,761.5		15,137.0			
ANNUAL MEAN	40.3		41.5		37.4	
HIGHEST ANNUAL MEAN					64.4	1972
LOWEST ANNUAL MEAN					15.6	2002
HIGHEST DAILY MEAN	522	Feb 6	853	Jul 8	3,680	Jun 22, 1972
LOWEST DAILY MEAN	2.5	Sep 3	e1.0	Aug 26	1.0	aAug 11, 2002
ANNUAL SEVEN-DAY MINIMUM	4.0	Sep 1	1.3	Sep 3	1.1	Aug 14, 2002
MAXIMUM PEAK FLOW			4,770	Mar 28	19,900	Jun 22, 1972
MAXIMUM PEAK STAGE			7.78	Mar 28	18.14	Jun 22, 1972
INSTANTANEOUS LOW FLOW			(b)		1.0	cAug 10, 2002
ANNUAL RUNOFF (CFSM)	1.20		1.23		1.11	
ANNUAL RUNOFF (INCHES)	16.29		16.71		15.10	
10 PERCENT EXCEEDS	93		84		75	
50 PERCENT EXCEEDS	21		16		16	
90 PERCENT EXCEEDS	7.8		2.5		4.8	

a Also Aug. 15-18, 2002 and Aug. 26, 2005.
b Not determined.
c Also Aug. 11, 12, 14-19, 2002.
e Estimated.



01654000 ACCOTINK CREEK NEAR ANNANDALE, VA

LOCATION.--Lat 38°48'46", long 77°13'42", NAD83, Fairfax County, Hydrologic Unit 02070010, on left bank 800 ft upstream from bridge on State Highway 620, 0.2 mi upstream from Long Branch, and 2.3 mi southwest of Annandale.

DRAINAGE AREA.--23.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1947 to current year (fragmentary prior to October 1947).

REVISED RECORDS.--WSP 1502: 1952. WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 191.24 ft NGVD of 1929 (levels by Stone and Webster Engineering Corporation). Prior to May 12, 1949, nonrecording gage at site 800 ft downstream at datum 0.33 ft lower. May 12, 1949, to June 4, 1970, water-stage recorder at site 800 ft downstream at datum 0.33 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge, 12,000 ft^3/s, from rating curve extended above 6,600 ft^3/s on basis of contracted-opening and flow-over-road measurement of peak flow. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 14	0945	*3,460	*10.56	May 20	1645	2,420	9.43
Mar 28	2130	2,410	9.42	Jul 8	0845	2,530	9.57
Apr 2	1645	2,380	9.38				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	5.6	56	11	e13	58	19	158	11	11	6.2	3.6
2	40	5.6	13	9.5	e12	25	686	29	9.8	10	6.0	2.8
3	9.8	5.7	10	9.4	14	17	245	20	89	6.8	5.1	2.8
4	8.3	230	9.1	9.4	21	15	57	18	20	6.3	4.6	2.5
5	6.7	37	8.6	16	20	15	36	16	13	6.3	4.6	2.4
6	6.1	11	8.3	11	17	15	30	15	11	102	20	2.3
7	6.1	9.1	54	9.8	15	14	28	15	145	12	4.9	2.1
8	6.1	7.8	47	30	15	182	94	16	17	832	73	2.0
9	6.2	7.0	107	11	15	30	28	13	12	29	123	1.9
10	6.0	6.8	116	9.9	29	20	23	12	12	14	15	1.8
11	5.2	6.7	40	9.7	13	19	20	12	12	10	7.6	2.0
12	5.0	420	18	12	13	17	18	12	11	9.0	6.3	2.1
13	5.3	99	14	13	12	15	18	11	21	33	5.3	1.6
14	6.2	18	12	950	40	13	17	113	39	21	4.7	5.8
15	20	13	10	41	36	13	16	67	11	231	4.1	6.5
16	19	11	10	23	17	13	14	16	9.8	86	26	2.4
17	9.0	9.8	10	19	15	13	14	13	9.3	39	30	1.8
18	5.0	9.4	9.8	14	13	13	15	12	8.9	14	5.5	1.6
19	6.4	9.1	10	13	12	12	14	11	7.4	11	52	1.5
20	27	13	e9.6	e13	12	13	14	812	7.4	9.7	9.6	1.3
21	44	15	8.3	e12	28	12	22	64	7.4	8.9	5.3	1.5
22	8.9	8.8	8.3	e11	36	11	48	25	7.5	8.0	4.0	1.5
23	6.5	8.3	218	e11	13	360	131	30	18	16	3.6	2.4
24	6.2	20	46	e10	27	53	49	124	7.5	6.9	3.5	1.6
25	6.7	22	17	e11	33	26	19	69	7.1	12	3.4	1.3
26	5.8	10	13	e13	22	21	15	22	6.5	7.9	3.1	1.4
27	5.2	8.1	11	e12	21	18	15	16	5.8	33	29	5.9
28	5.3	52	10	e10	25	734	14	14	5.6	33	21	2.1
29	5.5	11	10	e9.7	---	78	13	13	60	15	5.9	1.2
30	7.4	9.1	10	e16	---	23	177	13	97	11	4.3	1.0
31	5.4	---	10	e14	---	17	---	12	---	6.8	3.8	---
TOTAL	319.7	1,098.9	934.0	1,364.4	559	1,885	1,909	1,793	699.0	1,651.6	500.4	70.7
MEAN	10.3	36.6	30.1	44.0	20.0	60.8	63.6	57.8	23.3	53.3	16.1	2.36
MAX	44	420	218	950	40	734	686	812	145	832	123	6.5
MIN	5.0	5.6	8.3	9.4	12	11	13	11	5.6	6.3	3.1	1.0
CFSM	0.44	1.56	1.28	1.87	0.85	2.59	2.71	2.46	0.99	2.27	0.69	0.10
IN.	0.51	1.74	1.48	2.16	0.88	2.98	3.02	2.84	1.11	2.61	0.79	0.11

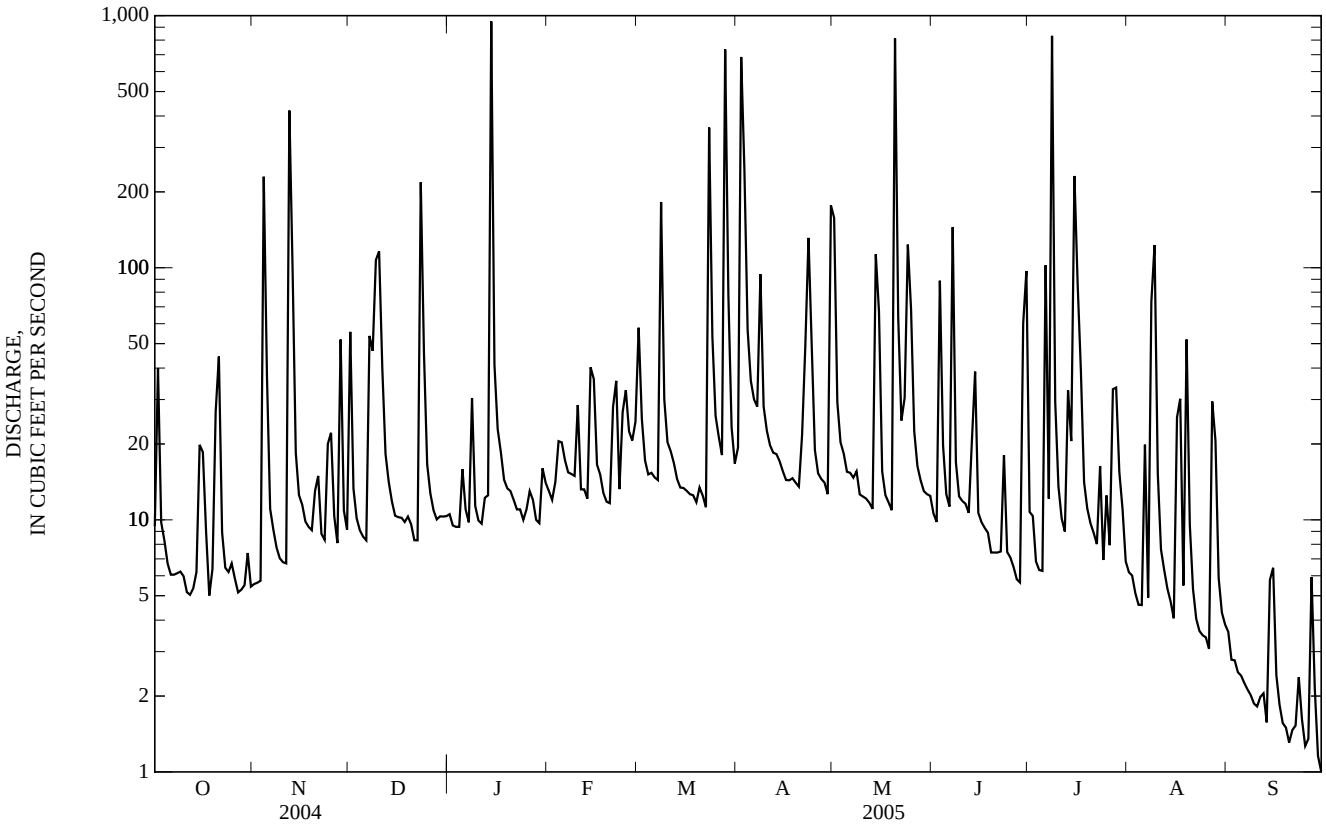
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2005, BY WATER YEAR (WY)

MEAN	18.0	24.7	29.1	32.3	36.0	42.6	35.8	33.2	26.4	22.0	22.1	23.2
MAX	76.6	70.4	88.5	87.0	113	114	94.5	125	212	74.5	123	120
(WY)	(1980)	(1994)	(2004)	(1996)	(1998)	(1993)	(1983)	(1989)	(1972)	(1969)	(1967)	(1996)
MIN	2.03	3.25	5.48	4.53	3.76	10.6	8.40	8.46	2.83	1.81	1.94	0.45
(WY)	(1955)	(1955)	(1966)	(1981)	(2002)	(1981)	(1985)	(1986)	(1986)	(1955)	(1957)	(1954)

01654000 ACCOTINK CREEK NEAR ANNANDALE, VA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1948 - 2005	
ANNUAL TOTAL	11,599.7		12,784.7			
ANNUAL MEAN	31.7		35.0		28.7	
HIGHEST ANNUAL MEAN					50.9	2003
LOWEST ANNUAL MEAN					10.8	2002
HIGHEST DAILY MEAN	642	Jun 5	950	Jan 14	e3,300	Jun 22, 1972
LOWEST DAILY MEAN	3.7	Sep 5	1.0	Sep 30	0.00	aAug 5, 1999
ANNUAL SEVEN-DAY MINIMUM	4.0	Sep 1	1.6	Sep 20	0.00	bAug 5, 1999
MAXIMUM PEAK FLOW			3,460	Jan 14	12,000	Jun 22, 1972
MAXIMUM PEAK STAGE			10.56	Jan 14	c15.96	Jun 22, 1972
INSTANTANEOUS LOW FLOW			0.94	Sep 30	0.00	(d)
ANNUAL RUNOFF (CFSM)	1.35		1.49		1.22	
ANNUAL RUNOFF (INCHES)	18.36		20.24		16.62	
10 PERCENT EXCEEDS	62		55		52	
50 PERCENT EXCEEDS	14		12		12	
90 PERCENT EXCEEDS	5.9		4.6		3.3	

a Also Aug. 6-13, 1999 and Aug. 12, 18-23, 2002.
b Also Aug. 17, 2002.
c From high-water mark in gage house.
d No flow part or all of each day Aug. 5-14, 1999 and Aug. 12, 13, 18-24, 2002.
e Estimated.



01654000 ACCOTINK CREEK NEAR ANNANDALE, VA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to August 1995, September 1997 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 2002 to September 2004 (discontinued).
WATER TEMPERATURE: January 2002 to September 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor January 2002 to September 2004.

EXTREMES FOR PERIOD OF DAILY RECORD--
SPECIFIC CONDUCTANCE: Maximum, 6,450 microsiemens/cm (road salt influence), Dec. 11, 2002, Feb. 9, 10, Mar. 1, 2003; minimum, 54 microsiemens/cm, Oct. 26, 2002, Sept. 18, 2004.
WATER TEMPERATURE: Maximum, 28.8°C, Aug. 24, 2002; minimum, 0.0°C, on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Sample type	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
NOV												
03...	1030	Environmental	1028	80020	5.4	40	769	7.7	75	7.1	306	15.5
JAN												
05...	1230	Environmental	1028	80020	26	40	756	11.8	104	7.1	312	8.5
MAR												
07...	1130	Environmental	1028	80020	14	40	752	15.2	124	7.0	1,150	9.0
MAY												
02...	1100	Environmental	1028	80020	29	40	756	13.3	129	7.2	242	19.0
JUL												
06...	*1015*	*Blank*	*1028*	*80020*	--	--	--	--	--	--	--	--
06...	1045	Environmental	1028	80020	50	40	757	7.0	83	6.6	110	22.5
AUG												
18...	1000	Biological	--	80020	--	--	--	--	--	--	--	--
SEP												
07...	0945	Environmental	1028	80020	1.9	40	765	9.2	99	7.1	276	22.0

Date	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unf by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Biomass periphyton, ashfree drymass g/m2 (49954)
NOV													
03...	15.0	49	60	53.6	7.4	<.04	--	.19	<.008	.28	E.004	<.004	--
JAN													
05...	9.2	36	44	55.2	10.4	.05	1.39	1.40	.009	1.73	<.006	.030	--
MAR													
07...	5.8	36	44	308	13.4	<.04	--	1.24	E.006	1.46	E.003	.022	--
MAY													
02...	13.5	33	40	42.8	9.2	E.03	.83	.84	.008	1.30	<.006	.052	--
JUL													
06...	--	--	--	*<.20*	*<.2*	*<.04*	--	*<.06*	*<.008*	*<.06*	*<.006*	*<.004*	--
06...	23.4	16	20	16.0	5.0	.07	.57	.59	.017	1.27	.020	.153	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	17.9
SEP													
07...	19.0	34	41	45.4	8.4	<.04	--	.42	<.008	.67	E.003	.032	--

Agency collecting sample: 1028 - U.S. Geological Survey

Agency analyzing sample: 80020 - USGS-National Water Quality Lab, Denver, CO

Sampling method: 40 - Multiple verticals

01654000 ACCOTINK CREEK NEAR ANNANDALE, VA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Periphyton biomass ash weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromofluoro, mg/m2 (70957)	1-Naphthol, water, fltrd 0.7u GF ug/L (49295)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	2Chloro-2',6-'diethyl acetanilide wat flt ug/L (61618)	CIAT, water, fltrd, ug/L (04040)	2-Ethyl-6-methylaniline water, fltrd, ug/L (61620)	3,4-Dichloroaniline water fltrd, ug/L (61625)	3,5-Dichloroaniline water, fltrd, ug/L (61627)	4Chloro 2methyl phenol, water, fltrd, ug/L (61633)	Acetochlor, water, fltrd, ug/L (49260)
NOV													
03...	--	--	--	--	<.09	<.006	<.005	<.006	<.004	<.004	<.004	<.006	<.006
JAN													
05...	--	--	--	--	<.09	<.006	<.005	<.008	<.004	<.004	--	<.006	<.006
MAR													
07...	--	--	--	--	<.09	<.006	<.005	<.006	<.004	<.004	--	<.006	<.006
MAY													
02...	--	--	--	--	M	<.006	<.005	E.011	<.004	E.044	--	E.009	.008
JUL													
06...	--	--	--	--	*<.09*	*<.006*	*<.005*	*<.006*	*<.004*	*<.004*	*<.004*	*<.006*	*<.006*
06...	--	--	--	--	<.09	<.006	<.005	<.006	<.004	E.019	<.004	<.010	<.015
AUG													
18...	420	437.3	18	46.0	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	M	<.006	<.005	<.007	<.004	E.011	<.004	<.006	<.006

Date	Alachlor, water, fltrd, ug/L (46342)	alpha-Endosulfan, water, fltrd, ug/L (34362)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, Sch2003 wat flt percent recovry (99995)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl oxon, water, fltrd, ug/L (61635)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos oxon, water, fltrd, ug/L (61636)
NOV													
03...	<.005	<.005	<.005	--	87.8	<.007	<.07	<.050	<.010	<.004	<.041	<.020	<.06
JAN													
05...	<.005	--	--	89.2	--	<.007	<.07	<.050	<.010	--	<.041	--	<.06
MAR													
07...	<.005	--	--	89.1	--	<.007	<.07	<.050	<.010	--	<.041	--	<.06
MAY													
02...	.007	--	--	101	--	.027	<.07	<.050	E.007	--	E.016	--	<.06
JUL													
06...	*<.005*	*<.005*	--	*97.3*	--	*<.007*	*<.07*	*<.050*	*<.010*	--	*<.041*	*<.020*	*<.06*
06...	<.005	<.005	--	91.8	--	.009	<.07	<.050	<.010	--	E.168	<.020	<.06
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	<.005	<.005	--	94.2	--	<.007	<.07	<.050	<.010	--	E.018	<.020	<.06

Date	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	cis-Propiconazole, water, fltrd, ug/L (79846)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Cyfluthrin, water, fltrd, ug/L (61585)	Cypermethrin water, fltrd, ug/L (61586)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon oxon, water, fltrd, ug/L (61638)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog, Sch2003 wat flt percent recovry (99994)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)
NOV													
03...	<.005	<.006	<.008	<.018	<.005	<.008	<.009	<.003	<.012	--	<.005	--	94.6
JAN													
05...	<.005	<.006	--	--	--	<.008	<.009	<.003	E.006	<.01	<.005	117	--
MAR													
07...	<.030	<.006	--	--	--	<.150	<.150	<.003	<.012	<.01	<.005	115	--
MAY													
02...	<.007	<.006	--	--	--	<.027	<.009	E.002	E.006	<.01	.009	112	--
JUL													
06...	*<.005*	*<.006*	*<.008*	*<.018*	--	*<.027*	*<.009*	*<.003*	*<.012*	*<.01*	*<.005*	*107*	--
06...	E.006	<.006	E.020	<.018	--	<.027	<.009	<.003	E.007	<.01	.022	123	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	<.005	<.006	<.008	<.018	--	<.027	<.009	<.003	E.007	<.01	.018	124	--

01654000 ACCOTINK CREEK NEAR ANNANDALE, VA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Dicrotophos, water fltrd, ug/L (38454)	Dieldrin, water, fltrd, ug/L (39381)	Dimethoate, water, fltrd 0.7u GF ug/L (82662)	Disulfoton sulfone water, fltrd, ug/L (61640)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Endosulfan sulfate water, fltrd, ug/L (61590)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethion monoxon water, fltrd, ug/L (61644)	Ethion, water, fltrd, ug/L (82346)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenamiphos sulfone water, fltrd, ug/L (61645)	Fenamiphos sulfoxide, water, fltrd, ug/L (61646)
NOV													
03...	<.08	<.009	<.006	<.01	<.02	<.014	<.004	<.009	<.0020	<.004	<.005	<.049	<.04
JAN													
05...	<.08	<.009	<.006	--	--	--	--	--	<.0020	<.004	--	<.049	<.04
MAR													
07...	<.08	<.009	<.006	--	--	--	--	--	<.0020	<.015	--	<.049	<.04
MAY													
02...	<.08	<.009	<.006	--	--	--	--	--	<.0020	<.004	--	<.049	<.04
JUL													
06...	*<.08*	*<.009*	*<.006*	*<.01*	*<.02*	*<.014*	*<.004*	--	*<.002*	*<.004*	*<.005*	*<.049*	*<.04*
06...	<.08	<.009	<.006	<.01	<.02	<.020	<.004	--	<.002	<.004	<.005	<.049	<.04
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	<.08	<.009	<.006	<.01	<.02	<.014	<.004	--	<.002	<.004	<.005	<.049	<.04

Date	Fenamiphos, water, fltrd, ug/L (61591)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos oxon, water, fltrd, ug/L (61649)	Fonofos water, fltrd, ug/L (04095)	Hexazinone, water, fltrd, ug/L (04025)	Iprodione, water, fltrd, ug/L (61593)	Isofenphos, water, fltrd, ug/L (61594)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malaoxon, water, fltrd, ug/L (61652)
NOV													
03...	<.03	<.029	<.013	<.024	<.016	<.003	<.003	<.013	<.387	<.003	<.004	<.035	<.030
JAN													
05...	<.03	<.029	E.008	E.008	E.011	--	<.003	<.013	<.387	<.003	--	--	<.030
MAR													
07...	<.03	<.029	<.013	<.024	<.016	--	<.003	<.013	<.538	<.003	--	--	<.030
MAY													
02...	<.03	<.029	E.006	<.024	E.024	--	<.003	<.013	<.538	<.003	--	--	<.030
JUL													
06...	*<.03*	*<.029*	*<.013*	*<.024*	*<.016*	--	*<.003*	*<.013*	*<.538*	*<.003*	--	--	*<.030*
06...	<.03	<.029	E.007	<.024	E.025	--	<.003	.037	<.538	<.003	--	--	<.030
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	<.03	E.007	E.008	<.024	<.016	--	<.003	<.013	<.538	<.003	--	--	<.030

Date	Malathion, water, fltrd, ug/L (39532)	Metalaxyl, water, fltrd, ug/L (61596)	Methialthion water, fltrd, ug/L (61598)	Methyl paraoxon, water, fltrd, ug/L (61664)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Myclobutanil water, fltrd, ug/L (61599)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Oxyfluorfen, water, fltrd, ug/L (61600)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)
NOV													
03...	<.027	<.005	<.006	<.03	<.015	<.006	<.006	<.003	<.008	<.007	<.007	<.003	<.010
JAN													
05...	<.027	<.005	<.006	<.03	<.015	.007	<.006	--	<.008	--	--	--	--
MAR													
07...	<.027	<.005	<.006	<.03	<.015	<.006	<.006	--	<.008	--	--	--	--
MAY													
02...	<.027	.008	<.006	<.03	<.015	.027	<.006	--	<.008	--	--	--	--
JUL													
06...	*<.027*	*<.005*	*<.006*	*<.03*	*<.015*	*<.006*	*<.006*	*<.003*	*<.008*	--	*<.007*	--	--
06...	.035	.027	<.006	<.03	<.015	E.005	<.006	<.003	.010	--	<.007	--	--
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	<.027	<.005	<.006	<.03	<.015	<.006	<.006	<.003	<.008	--	<.007	--	--

01654000 ACCOTINK CREEK NEAR ANNANDALE, VA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate oxon, water, fltrd, ug/L (61666)	Phorate water fltrd 0.7u GF ug/L (82664)	Phosmet oxon, water, fltrd, ug/L (61668)	Phosmet water, fltrd, ug/L (61601)	Prometon, water, fltrd, ug/L (04037)	Prometryn, water, fltrd, ug/L (04036)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)
NOV													
03...	<.004	<.022	<.10	<.011	--	--	E.01	<.005	<.004	<.025	<.011	<.02	<.005
JAN													
05...	--	<.022	<.10	<.011	<.05	<.008	.01	<.005	<.004	--	--	--	.050
MAR													
07...	--	<.022	<.10	<.011	<.05	<.008	<.01	<.005	<.004	--	--	--	.023
MAY													
02...	--	.031	<.10	<.011	<.05	<.008	.02	<.005	<.004	--	--	--	.064
JUL													
06...	--	*<.022*	*<.10*	*<.011*	--	--	*<.01*	*<.005*	*<.004*	--	*<.011*	*<.02*	*<.005*
06...	--	E.016	<.10	<.011	--	--	.09	<.005	<.004	--	<.011	<.02	.009
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	<.022	<.10	<.011	--	<.008	.07	<.005	<.004	--	<.011	<.02	<.010

Date	Tebuconazole, water, fltrd, ug/L (62852)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Tefluthrin, water, fltrd, ug/L (61606)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos oxon sulfone water, fltrd, ug/L (61674)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Terbuthylazine, water, fltrd, ug/L (04022)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	trans-Propiconazole, water, fltrd, ug/L (79847)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Tributophos, water, fltrd, ug/L (61610)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Dichlorvos, water fltrd, ug/L (38775)
NOV													
03...	--	<.02	<.008	<.034	<.07	<.02	<.01	<.010	<.01	<.006	<.004	<.009	E.01
JAN													
05...	--	<.02	--	--	<.07	<.02	<.01	--	--	--	--	<.009	<.01
MAR													
07...	--	<.02	--	--	<.07	<.02	<.01	--	--	--	--	<.009	<.01
MAY													
02...	--	<.02	--	--	<.07	<.02	<.01	--	--	--	--	E.007	E.02
JUL													
06...	*<.01*	*<.02*	*<.008*	--	*<.07*	*<.02*	*<.01*	*<.010*	*<.01*	--	*<.004*	*<.009*	*<.01*
06...	<.01	<.02	<.008	--	<.07	<.02	<.01	<.010	E.04	--	<.004	<.009	<.01
AUG													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	<.01	<.02	<.008	--	<.07	<.02	<.01	<.010	<.01	--	<.004	<.009	<.01

Date	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Sampler type, code (84164)
NOV			
03...	4	.06	3070
JAN			
05...	8	.56	3070
MAR			
07...	10	.38	3070
MAY			
02...	18	1.4	3070
JUL			
06...	*.0*	--	*3070*
06...	46	6.2	3070
AUG			
18...	--	--	--
SEP			
07...	6	.03	3070

Remark codes used in this table:
< -- Less than.
E -- Estimated.
M-- Presence verified but not quantified.
Sampler type: 3070 - Grab sample

01656000 CEDAR RUN NEAR CATLETT, VA

LOCATION.--Lat 38°38'12", long 77°37'30", NAD83, Fauquier County, Hydrologic Unit 02070010, on right bank 100 ft downstream from bridge on State Highway 806, 0.9 mi downstream from Licking Run, and 1.4 mi southeast of Catlett.

DRAINAGE AREA.--93.4 mi^2.

PERIOD OF RECORD.--July 1950 to December 1986, January 1986 to September 1989 (annual maximum only), October 1989 to current year.

REVISED RECORDS.--WSP 2103: Drainage area. WDR VA-79-1: 1973-77(P). WDR VA-95-1: 1972-94 (M).

GAGE.--Water-stage recorder. Datum of gage is 199.15 ft NGVD of 1929. July 1950 to December 1986, water-stage recorder at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge, 32,500 ft^3/s, from rating curve extended above 7,000 ft^3/s, on basis of contracted-opening measurement of peak flow. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 15, 1942, reached a stage of about 22 ft, discharge not determined, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 14	1130	*3,490	*11.17	Apr 2	2115	2,890	10.35
Mar 28	1845	2,740	10.13				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	16	145	59	e43	153	154	347	41	14	8.4	5.6
2	73	15	118	52	e41	151	1,730	141	37	11	7.8	5.2
3	55	14	89	48	42	106	1,490	89	45	9.8	7.5	4.2
4	42	60	74	46	53	85	481	68	48	7.8	7.4	3.7
5	34	123	62	47	70	87	252	57	38	6.6	6.4	3.5
6	28	54	56	53	68	77	176	51	32	5.9	12	3.1
7	24	39	93	54	64	70	141	48	26	8.7	18	2.9
8	22	31	121	59	65	241	151	43	20	422	12	2.6
9	20	24	219	57	65	177	127	41	20	90	156	3.1
10	19	21	553	49	91	124	100	34	31	40	59	2.9
11	17	20	262	44	64	104	87	31	25	26	33	3.1
12	16	488	163	49	50	87	77	30	19	21	19	2.4
13	16	618	118	50	46	73	68	28	17	19	13	2.8
14	18	189	90	1,880	60	63	62	28	19	17	10	2.7
15	19	113	72	546	87	56	55	30	16	19	9.1	2.7
16	20	86	62	242	70	51	49	29	13	94	11	3.7
17	17	67	59	157	62	49	48	25	11	141	43	3.5
18	15	59	54	101	52	46	47	21	9.9	93	18	6.3
19	13	53	52	80	44	43	43	20	9.1	35	14	6.2
20	13	57	47	77	41	41	42	378	8.0	25	23	3.7
21	19	58	e44	75	55	39	40	253	7.7	46	16	2.7
22	22	51	37	e61	192	37	51	101	7.6	68	11	2.9
23	20	45	414	e61	101	470	119	66	8.3	27	11	3.0
24	17	55	414	e55	84	374	136	177	8.0	17	9.1	3.0
25	20	138	160	e59	95	190	81	444	7.6	12	6.4	4.5
26	18	87	104	60	114	147	61	191	7.6	9.5	4.9	4.7
27	16	64	79	e59	125	120	52	106	6.6	8.7	5.7	3.6
28	15	236	71	e54	110	1,220	46	76	6.3	14	7.5	3.3
29	14	147	60	e50	---	817	39	63	8.1	12	9.0	4.3
30	15	99	62	e45	---	300	91	54	31	9.9	6.4	4.6
31	19	---	62	e44	---	194	---	47	---	9.2	5.5	---
TOTAL	801	3,127	4,016	4,373	2,054	5,792	6,096	3,117	583.8	1,339.1	580.1	110.5
MEAN	25.8	104	130	141	73.4	187	203	101	19.5	43.2	18.7	3.68
MAX	125	618	553	1,880	192	1,220	1,730	444	48	422	156	6.3
MIN	13	14	37	44	41	37	39	20	6.3	5.9	4.9	2.4
CFSM	0.28	1.12	1.39	1.51	0.79	2.00	2.18	1.08	0.21	0.46	0.20	0.04
IN.	0.32	1.25	1.60	1.74	0.82	2.31	2.43	1.24	0.23	0.53	0.23	0.04

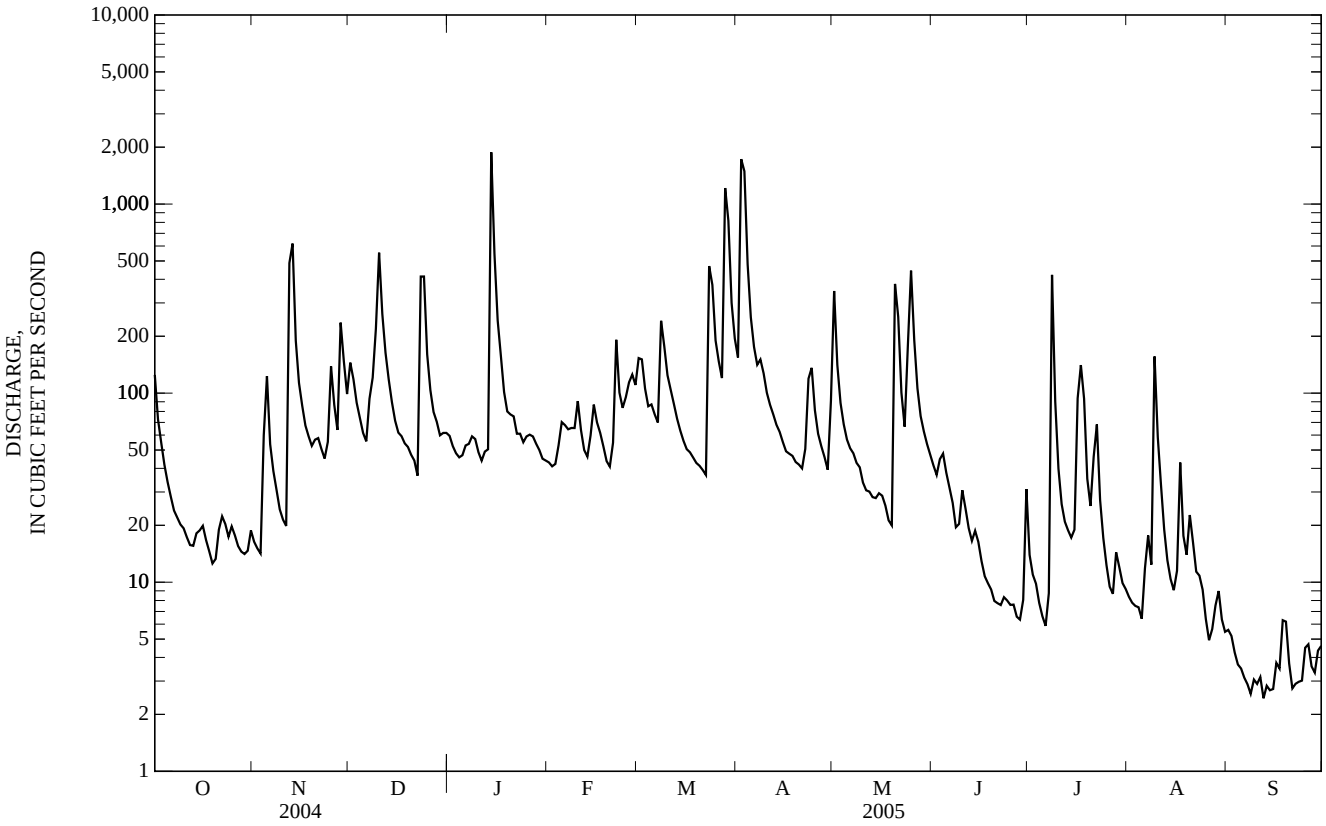
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1986, 1990 - 2005, BY WATER YEAR (WY)

MEAN	45.0	65.0	111	140	164	175	125	78.5	71.9	30.7	42.0	43.1
MAX	450	248	379	467	501	531	544	381	917	323	407	388
(WY)	(1980)	(1973)	(1993)	(1978)	(1998)	(1993)	(1983)	(2003)	(1972)	(1956)	(1955)	(1975)
MIN	0.40	3.15	3.53	4.64	6.09	22.3	19.6	9.41	1.38	0.74	0.58	0.37
(WY)	(1987)	(1966)	(1966)	(1981)	(2002)	(1981)	(1985)	(1956)	(1999)	(1963)	(1966)	(1954)

01656000 CEDAR RUN NEAR CATLETT, VA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1951 - 1986 1990 - 2005	
ANNUAL TOTAL	31,905.42		31,989.5			
ANNUAL MEAN	87.2		87.6		90.6	
HIGHEST ANNUAL MEAN					193	2003
LOWEST ANNUAL MEAN					16.5	2002
HIGHEST DAILY MEAN	1,760	Sep 29	1,880	Jan 14	e18,500	Jun 22, 1972
LOWEST DAILY MEAN	0.62	Sep 5	2.4	Sep 12	0.00	(a)
ANNUAL SEVEN-DAY MINIMUM	1.3	bAug 31	2.8	Sep 8	0.00	(c)
MAXIMUM PEAK FLOW			3,490	Jan 14	32,500	Jun 22, 1972
MAXIMUM PEAK STAGE			11.17	Jan 14	d27.66	Jun 22, 1972
INSTANTANEOUS LOW FLOW			2.4	fSep 8	0.00	(g)
ANNUAL RUNOFF (CFSM)	0.933		0.938		0.970	
ANNUAL RUNOFF (INCHES)	12.71		12.74		13.18	
10 PERCENT EXCEEDS	162		158		191	
50 PERCENT EXCEEDS	42		46		28	
90 PERCENT EXCEEDS	7.5		6.4		2.1	

a Many days in 1954, 1957, 1959, 1963-64, 1966, 1983, and 1993.
b Also Sept. 1, 2004.
c Many days in 1954, 1957, 1959, 1963-64, 1966, and 1983.
d From floodmarks.
e Estimated.
f Also Sept. 12, 14, 15, 2005.
g Many days in 1954, 1957, 1959, 1963-64, 1991, and 1993.



01658500 SOUTH FORK QUANTICO CREEK NEAR INDEPENDENT HILL, VA

LOCATION.--Lat 38°35'14", long 77°25'43", NAD83, Prince William County, Hydrologic Unit 02070011, on left bank at upstream side of bridge on State Highway 619, 3.4 mi south of Independent Hill, 5.6 mi west of Dumfries, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--7.64 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 238.88 ft NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 12	2030	269	5.19	Apr 2	1545	616	6.80
Jan 14	0930	*806	*7.38	May 20	1345	201	4.71
Mar 23	1730	270	5.20				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	2.5	9.6	5.3	e5.9	12	8.6	37	3.5	1.9	0.38	0.19
2	4.9	1.9	7.8	4.5	6.0	12	214	12	3.3	1.4	0.32	0.21
3	3.5	1.8	5.6	4.6	6.5	10	49	7.9	6.2	1.1	0.31	0.21
4	2.5	17	4.5	4.9	7.6	9.6	18	6.6	5.6	0.86	0.23	0.21
5	2.2	12	3.9	5.1	8.2	11	12	5.9	4.3	0.84	0.18	0.19
6	1.8	2.6	3.6	5.3	6.9	11	10	5.5	3.5	0.75	0.17	0.21
7	1.9	1.2	14	4.9	6.4	11	9.4	5.4	3.1	0.77	0.18	0.26
8	1.7	0.93	12	5.9	6.2	37	12	5.0	2.6	25	0.16	0.24
9	1.5	1.5	33	5.6	6.0	19	9.4	4.3	2.4	3.2	0.47	0.21
10	1.9	1.7	49	5.1	7.9	14	8.0	4.0	2.7	1.7	1.0	0.21
11	1.6	1.7	24	4.6	5.9	11	7.4	3.8	2.6	1.0	0.60	0.18
12	1.6	116	14	5.2	5.4	9.6	7.0	3.6	2.4	0.82	0.46	0.16
13	1.9	61	9.3	5.0	5.0	8.1	6.9	3.3	2.2	0.84	0.35	0.13
14	2.7	16	7.2	256	7.5	7.1	6.6	3.3	1.9	0.84	0.25	0.10
15	2.7	9.7	6.0	23	8.6	6.5	6.2	3.8	1.8	1.4	0.18	0.088
16	2.5	7.4	5.5	12	6.9	6.1	6.0	3.6	1.6	0.94	7.2	0.10
17	2.5	6.2	5.5	8.5	6.1	5.9	6.1	3.0	1.5	0.75	7.6	0.12
18	1.9	6.0	5.1	e7.2	5.2	5.6	6.2	2.7	1.3	0.74	0.92	0.19
19	1.7	6.1	5.2	e6.3	4.7	5.3	6.3	2.6	1.3	0.62	0.64	0.13
20	1.9	6.6	4.8	e5.9	4.7	5.1	6.3	74	1.2	0.54	0.72	0.10
21	4.7	6.4	4.3	e5.4	8.3	4.7	6.4	16	1.2	0.50	0.45	0.11
22	4.2	5.9	4.9	e4.3	21	4.4	7.7	6.9	1.1	0.78	0.28	0.091
23	3.5	5.9	29	e3.9	8.7	88	16	5.4	1.1	0.59	0.22	0.067
24	2.8	8.8	20	e3.4	7.8	27	21	61	0.93	0.36	0.21	0.067
25	2.7	13	9.8	e3.9	8.5	13	10	36	0.78	0.34	0.17	0.067
26	2.4	9.3	7.6	e4.2	9.8	10	8.2	13	0.74	0.36	0.14	0.076
27	2.1	5.7	6.6	e4.0	12	8.5	7.4	7.6	0.64	0.32	0.17	0.25
28	2.1	15	5.4	e4.0	11	62	6.6	6.0	0.58	0.36	0.39	0.15
29	2.4	8.3	6.1	e4.4	---	25	6.0	5.1	0.93	0.39	0.27	0.082
30	2.7	6.2	6.1	e5.1	---	12	20	4.5	4.5	0.38	0.20	0.050
31	3.0	---	5.6	e5.7	---	9.4	---	4.0	---	0.36	0.19	---
TOTAL	80.6	364.33	335.0	433.2	214.7	480.9	524.7	362.8	67.50	50.75	25.01	4.448
MEAN	2.60	12.1	10.8	14.0	7.67	15.5	17.5	11.7	2.25	1.64	0.81	0.15
MAX	5.1	116	49	256	21	88	214	74	6.2	25	7.6	0.26
MIN	1.5	0.93	3.6	3.4	4.7	4.4	6.0	2.6	0.58	0.32	0.14	0.050
CFSM	0.34	1.59	1.41	1.83	1.00	2.03	2.29	1.53	0.29	0.21	0.11	0.02
IN.	0.39	1.77	1.63	2.11	1.05	2.34	2.55	1.77	0.33	0.25	0.12	0.02

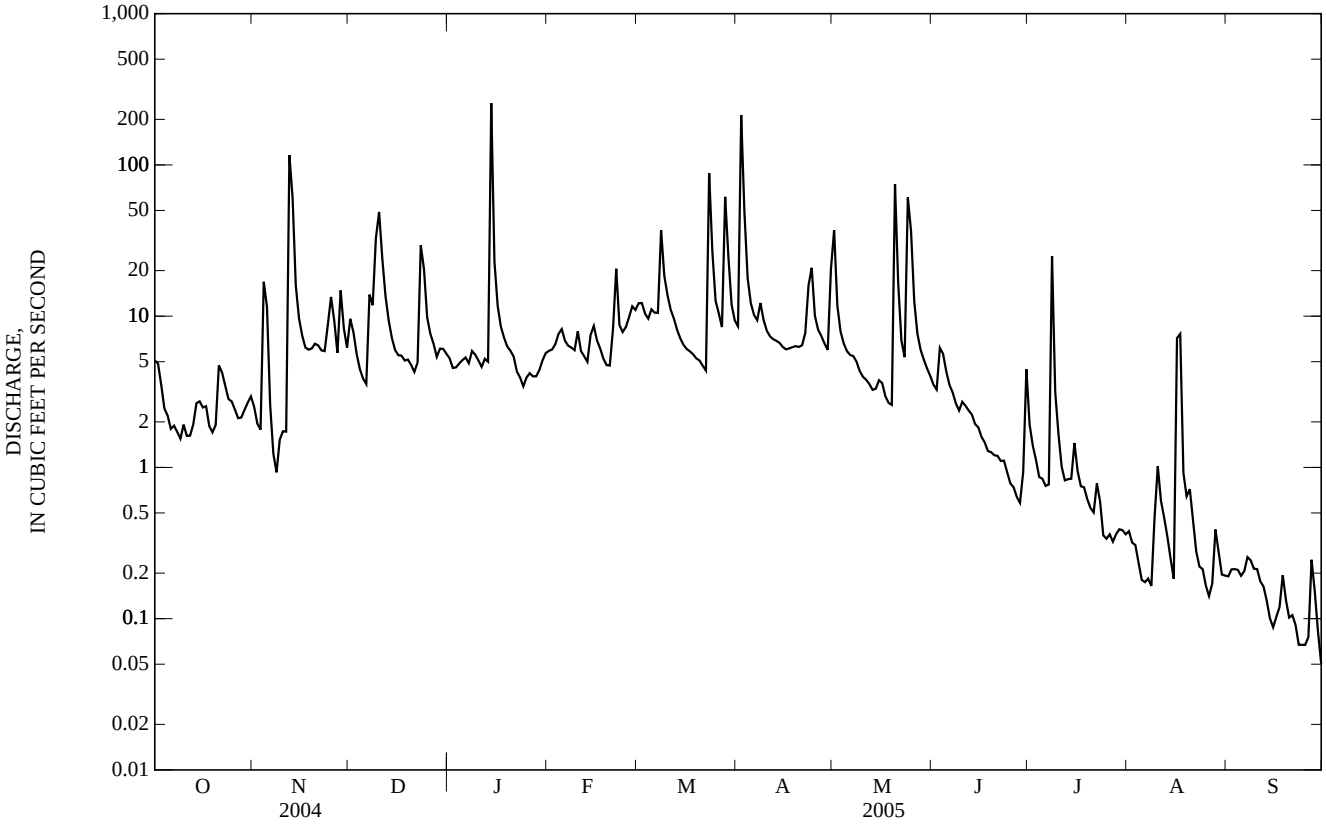
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2005, BY WATER YEAR (WY)

MEAN	3.12	5.88	8.15	9.91	12.0	13.8	11.6	8.19	4.85	2.64	2.48	3.34
MAX	23.9	19.2	29.0	31.2	54.0	35.0	33.0	42.8	48.8	15.1	24.5	37.2
(WY)	(1980)	(1953)	(2004)	(1996)	(1998)	(1994)	(1983)	(1989)	(1972)	(1975)	(1955)	(1975)
MIN	0.07	0.23	0.58	1.01	1.30	1.77	2.90	1.38	0.23	0.05	0.01	0.00
(WY)	(1989)	(1999)	(1966)	(1981)	(2002)	(1981)	(1969)	(1999)	(1999)	(1963)	(1963)	(1964)

01658500 SOUTH FORK QUANTICO CREEK NEAR INDEPENDENT HILL, VA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1951 - 2005	
ANNUAL TOTAL	3,048.11		2,943.938			
ANNUAL MEAN	8.33		8.07		7.12	
HIGHEST ANNUAL MEAN					13.5	1998
LOWEST ANNUAL MEAN					1.29	2002
HIGHEST DAILY MEAN	142	Feb 6	256	Jan 14	770	Jun 22, 1972
LOWEST DAILY MEAN	0.55	Jul 22	0.050	Sep 30	0.00	(a)
ANNUAL SEVEN-DAY MINIMUM	0.69	Jul 16	0.08	Sep 20	0.00	(a)
MAXIMUM PEAK FLOW			806	Jan 14	4,160	May 6, 1989
MAXIMUM PEAK STAGE			7.38	Jan 14	11.62	May 6, 1989
INSTANTANEOUS LOW FLOW			0.04	Sep 30	0.00	(a)
ANNUAL RUNOFF (CFSM)	1.09		1.06		0.931	
ANNUAL RUNOFF (INCHES)	14.84		14.33		12.66	
10 PERCENT EXCEEDS	14		13		14	
50 PERCENT EXCEEDS	5.2		4.6		2.7	
90 PERCENT EXCEEDS	1.2		0.21		0.20	

a No flow at times many years.
e Estimated.



01658500 SOUTH FORK QUANTICO CREEK NEAR INDEPENDENT HILL, VA—Continued

SUSPENDED-SEDIMENT
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Day	Mean concen-tration (mg/l)	Load (tons/ day)	Mean concen-tration (mg/l)	Load (tons/ day)	Mean concen-tration (mg/l)	Load (tons/ day)	Mean concen-tration (mg/l)	Load (tons/ day)	Mean concen-tration (mg/l)	Load (tons/ day)	Mean concen-tration (mg/l)	Load (tons/ day)
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7	0.10	2	0.01	9	0.25	4	0.05	e6	e0.10	7	0.23
2	7	0.09	1	0.00	7	0.16	3	0.04	6	0.09	6	0.19
3	5	0.04	1	0.00	6	0.09	3	0.04	5	0.09	5	0.13
4	3	0.02	29	3.2	5	0.06	3	0.04	6	0.14	5	0.14
5	1	0.00	19	0.90	5	0.05	4	0.05	6	0.14	3	0.09
6	2	0.00	6	0.04	4	0.04	4	0.05	4	0.07	3	0.08
7	2	0.00	4	0.01	13	0.61	3	0.04	3	0.05	7	0.20
8	1	0.00	5	0.01	9	0.29	4	0.06	3	0.05	78	12
9	1	0.00	5	0.02	41	9.4	4	0.07	5	0.08	14	0.72
10	2	0.00	3	0.02	122	19	4	0.06	8	0.17	16	0.60
11	1	0.00	6	0.03	30	2.0	4	0.04	6	0.09	11	0.33
12	2	0.00	75	39	11	0.44	3	0.04	3	0.05	7	0.19
13	1	0.00	130	20	5	0.13	3	0.04	3	0.04	5	0.10
14	2	0.01	72	3.2	4	0.08	225	254	4	0.09	5	0.10
15	3	0.02	31	0.83	3	0.05	46	3.5	6	0.15	4	0.07
16	2	0.01	9	0.19	3	0.05	15	0.47	5	0.09	4	0.07
17	1	0.00	4	0.06	4	0.05	12	0.28	3	0.04	4	0.06
18	1	0.00	3	0.06	4	0.05	e11	e0.17	2	0.03	3	0.05
19	1	0.00	4	0.07	3	0.04	e9	e0.14	2	0.02	5	0.07
20	1	0.00	3	0.05	3	0.04	e8	e0.14	2	0.02	6	0.08
21	1	0.01	2	0.03	4	0.05	e7	e0.12	11	0.54	6	0.07
22	1	0.01	2	0.04	4	0.06	e6	e0.09	94	7.3	4	0.05
23	1	0.01	2	0.04	60	8.7	e6	e0.09	9	0.23	182	67
24	1	0.00	3	0.09	60	4.8	e6	e0.08	4	0.08	80	7.5
25	1	0.00	10	0.36	12	0.33	e5	e0.08	3	0.06	14	0.48
26	1	0.00	6	0.15	9	0.18	e7	e0.16	6	0.18	11	0.31
27	1	0.00	5	0.08	8	0.14	e9	e0.20	8	0.26	9	0.20
28	1	0.00	13	0.63	7	0.11	e8	e0.10	3	0.10	116	34
29	1	0.00	8	0.18	6	0.11	e7	e0.09	---	---	56	4.0
30	1	0.00	7	0.11	6	0.09	e7	e0.11	---	---	26	0.87
31	2	0.01	---	---	5	0.07	e6	e0.10	---	---	10	0.24
TOTAL	---	0.33	---	69.41	---	47.52	---	260.54	---	10.35	---	130.22

01658500 SOUTH FORK QUANTICO CREEK NEAR INDEPENDENT HILL, VA—Continued

SUSPENDED-SEDIMENT—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Day	Mean concen-tration (mg/l)	Load (tons/day)	Mean concen-tration (mg/l)	Load (tons/day)	Mean concen-tration (mg/l)	Load (tons/day)	Mean concen-tration (mg/l)	Load (tons/day)	Mean concen-tration (mg/l)	Load (tons/day)	Mean concen-tration (mg/l)	Load (tons/day)
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10	0.24	72	9.3	5	0.04	7	0.04	3	0.00	2	0.00
2	142	137	10	0.32	4	0.03	6	0.02	3	0.00	2	0.00
3	45	7.0	7	0.15	7	0.12	4	0.01	3	0.00	2	0.00
4	14	0.66	7	0.12	6	0.09	4	0.00	3	0.00	2	0.00
5	11	0.37	7	0.10	4	0.05	4	0.00	3	0.00	2	0.00
6	11	0.30	8	0.12	6	0.06	4	0.00	3	0.00	2	0.00
7	10	0.24	6	0.09	6	0.05	4	0.00	3	0.00	2	0.00
8	15	0.51	5	0.07	5	0.03	49	5.5	3	0.00	2	0.00
9	10	0.26	5	0.06	4	0.03	12	0.11	3	0.00	2	0.00
10	9	0.20	6	0.06	4	0.03	5	0.02	3	0.00	2	0.00
11	7	0.15	6	0.06	4	0.03	3	0.00	3	0.00	2	0.00
12	6	0.12	6	0.06	4	0.02	4	0.00	3	0.00	2	0.00
13	7	0.13	4	0.04	3	0.02	4	0.00	3	0.00	2	0.00
14	8	0.14	4	0.04	4	0.02	4	0.00	3	0.00	3	0.00
15	7	0.11	5	0.05	3	0.02	4	0.02	3	0.00	3	0.00
16	6	0.10	4	0.04	4	0.02	4	0.00	12	1.1	3	0.00
17	6	0.09	5	0.04	5	0.02	4	0.00	23	0.85	3	0.00
18	5	0.08	6	0.04	4	0.01	4	0.00	7	0.02	3	0.00
19	5	0.09	5	0.04	3	0.00	4	0.00	4	0.00	2	0.00
20	6	0.10	156	44	3	0.01	3	0.00	4	0.00	2	0.00
21	6	0.11	32	1.5	2	0.00	3	0.00	3	0.00	1	0.00
22	5	0.11	20	0.38	2	0.00	3	0.00	3	0.00	1	0.00
23	54	5.0	15	0.22	2	0.00	3	0.00	3	0.00	2	0.00
24	47	3.9	65	12	3	0.00	3	0.00	2	0.00	2	0.00
25	11	0.30	22	2.6	2	0.00	3	0.00	2	0.00	2	0.00
26	8	0.17	11	0.37	3	0.00	3	0.00	2	0.00	1	0.00
27	10	0.20	7	0.15	3	0.00	3	0.00	2	0.00	2	0.00
28	8	0.15	6	0.09	4	0.00	3	0.00	2	0.00	2	0.00
29	7	0.11	6	0.08	4	0.01	3	0.00	2	0.00	2	0.00
30	34	2.4	6	0.08	8	0.11	2	0.00	2	0.00	2	0.00
31	---	---	6	0.07	---	---	2	0.00	2	0.00	---	---
TOTAL	---	160.34	---	72.34	---	0.82	---	5.72	---	1.97	---	0.00
YEAR	759.56											

e Estimated

01658500 SOUTH FORK QUANTICO CREEK NEAR INDEPENDENT HILL, VA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951, 1953, 1955-56, 1969, 1973-75, 1983-85, 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Sample type	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Ammonia + org-N, water, fltrd, mg/L as N (00623)
OCT												
12...	0900	Environmental	1.85	1.6	763	7.4	68	7.2	69	19.5	11.4	.13
NOV												
29...	0845	Environmental	1.96	8.2	760	11.1	92	6.7	56	3.0	7.4	.29
DEC												
13...	0915	Environmental	1.96	9.7	747	11.2	96	6.9	51	6.0	7.8	.22
FEB												
08...	0915	Environmental	1.80	6.0	753	12.9	100	7.2	67	2.0	4.8	.27
MAR												
22...	0840	Environmental	1.71	4.4	763	12.8	102	7.2	61	4.0	6.1	.15
22...	0848	Replicate	--	--	--	--	--	--	--	--	--	.19
APR												
05...	0850	Environmental	2.00	12	762	12.3	105	6.9	48	4.0	8.4	.17
MAY												
10...	0900	Environmental	1.64	4.0	759	8.9	88	7.0	63	12.5	14.8	.29
JUN												
07...	1000	Environmental	1.58	3.1	755	7.6	85	7.0	68	28.5	21.0	.37
JUL												
07...	0930	Environmental	1.36	.65	757	6.9	79	7.0	74	26.0	21.8	.63
SEP												
14...	1224	Environmental	1.35	.11	760	9.2	102	6.9	65	30.5	20.5	.17

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Suspended sediment concentration mg/L (80154)
OCT										
12...	.16	<.04	E.05n	<.008	<.02	.004	.008	E24k	E12k	2
NOV										
29...	.34	<.04	E.04n	<.008	<.02	.015	.033	150	140	8
DEC										
13...	.26	<.04	<.06	<.008	<.02	.010	.019	E17k	E16k	5
FEB										
08...	.14	<.04	E.04n	<.008	<.02	.004	.015	E15k	--	2
MAR										
22...	.18	<.04	<.06	<.008	<.02	.007	.018	E10k	--	4
22...	.17	<.04	<.06	<.008	<.02	.006	.016	--	--	--
APR										
05...	.21	<.04	<.06	<.008	<.02	.008	.018	E11k	--	9
MAY										
10...	.36	<.04	<.06	<.008	<.02	.007	.018	46	--	6
JUN										
07...	.30	E.02n	E.06n	<.008	<.02	.010	.028	80	--	8
JUL										
07...	.29	E.02n	.06	<.008	<.02	.009	.028	78	--	5
SEP										
14...	.25	<.04	E.03n	<.008	<.02	.006c	<.004	210	--	3

Remark codes used in this table:
< -- Less than.
E -- Estimated.

Value qualifier codes used in this table:
c -- See laboratory comment
k -- Counts outside acceptable range
n -- Below the LRL and above the LT-MDL

01660400 AQUIA CREEK NEAR GARRISONVILLE, VA

LOCATION.--Lat 38°29'25", long 77°26'01", NAD83, Stafford County. Hydrologic Unit 02070011, on right bank at bridge on State Highway 641, 1.1 mi northwest of Garrisonville, and 3.0 mi upstream from Beaverdam Run.

DRAINAGE AREA.--34.9 mi^2.

PERIOD OF RECORD.--September 1971 to September 1997, November 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 120 ft NGVD of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Maximum discharge, 11,600 ft^3/s, from rating curve extended above 1,600 ft^3/s on basis of contracted-opening measurement of peak flow. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location by the Virginia Department of Environmental Quality - Water Division.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 12	2015	558	3.59	May 20	1200	535	3.52
Jan 14	1115	*1,370	*5.49	Jul 8	0530	639	3.82
Apr 2	1515	1,170	5.07				

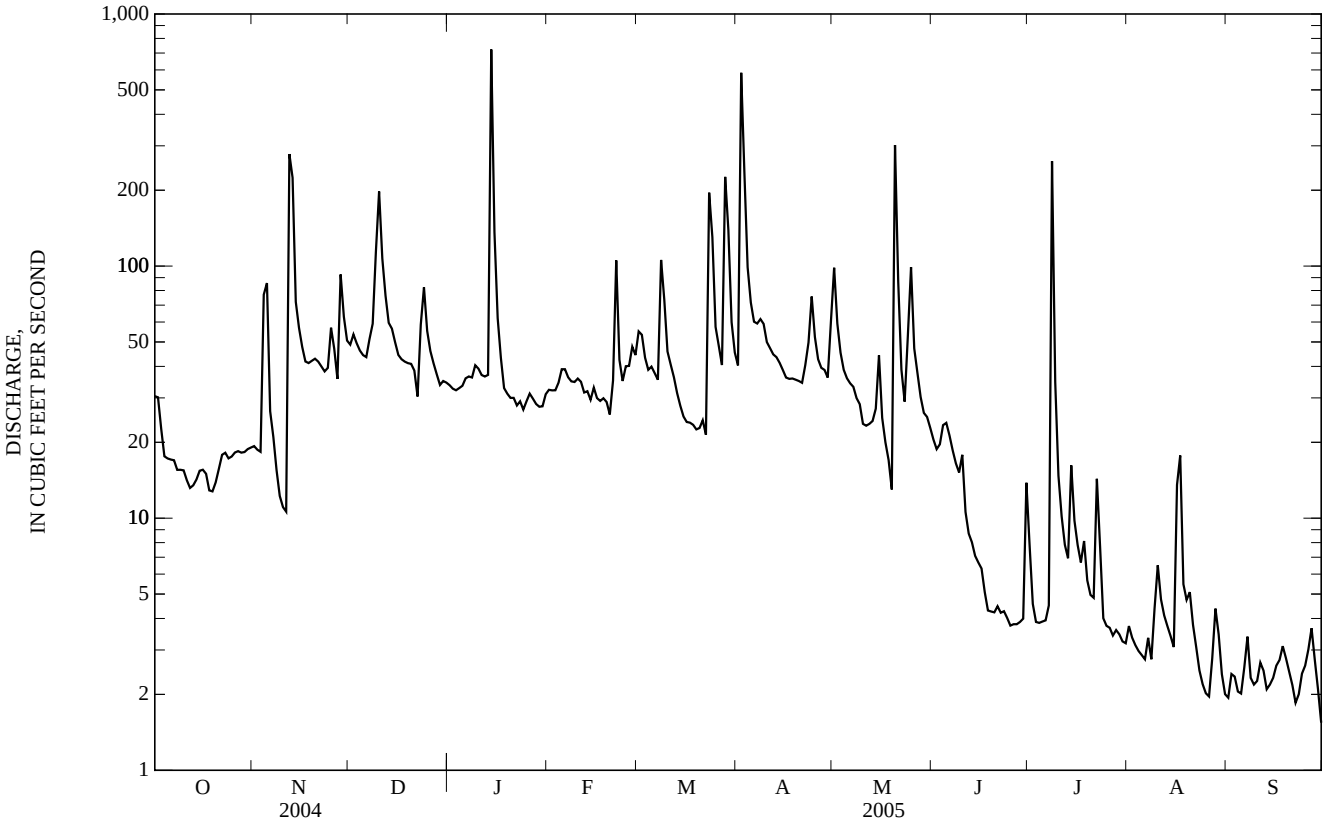
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	19	49	34	32	55	40	99	20	7.8	e3.7	e1.9
2	30	19	54	33	32	53	585	59	19	4.6	e3.4	e2.4
3	23	18	49	32	32	43	235	45	20	3.9	e3.1	e2.4
4	18	77	46	33	35	39	99	39	23	3.8	e3.0	e2.1
5	17	86	44	34	39	40	72	e36	24	3.9	e2.9	e2.0
6	17	27	44	36	39	38	60	e34	21	3.9	e2.8	e2.6
7	17	21	51	36	36	35	59	e33	19	4.5	e3.4	e3.4
8	16	16	59	36	35	106	62	e30	16	261	e2.8	e2.3
9	16	12	114	40	35	74	59	e28	15	35	e4.4	e2.2
10	15	11	198	39	36	46	50	24	18	15	e6.5	e2.3
11	14	11	107	37	35	41	47	23	11	10	e4.8	e2.7
12	13	278	76	36	32	36	45	24	8.7	7.8	e4.1	e2.5
13	14	224	60	37	32	31	44	24	8.0	6.9	e3.7	e2.1
14	14	72	56	723	30	28	41	27	7.1	16	e3.4	e2.2
15	15	57	50	136	33	25	39	44	6.7	9.8	e3.1	e2.3
16	16	48	44	62	30	24	36	e25	6.3	7.8	e14	e2.6
17	15	42	43	43	29	24	36	e20	5.1	6.7	e18	e2.7
18	13	41	42	33	30	23	36	e17	4.3	8.1	e5.5	e3.1
19	13	42	41	e31	29	22	35	e13	4.3	5.7	e4.7	e2.8
20	14	43	41	e30	e26	23	35	302	4.2	5.0	e5.1	e2.5
21	16	42	39	e30	35	24	34	87	4.5	4.8	e3.8	e2.2
22	18	40	30	e28	105	21	40	39	4.2	14	e3.1	e1.9
23	18	38	59	e29	42	196	50	29	4.3	e7.7	e2.5	e2.0
24	17	39	82	e27	35	130	76	53	4.0	e4.0	e2.2	e2.4
25	18	57	e55	e29	40	57	52	99	3.7	e3.7	e2.0	e2.6
26	18	47	e46	e31	40	48	43	47	3.8	e3.7	e2.0	e3.0
27	18	36	e41	e30	48	41	39	38	3.8	e3.4	e2.8	e3.7
28	18	93	e37	e28	44	226	39	30	3.9	e3.6	e4.4	e2.7
29	18	63	e34	e28	---	139	36	26	4.0	e3.5	e3.5	e2.1
30	19	51	35	28	---	60	60	25	14	e3.2	e2.4	e1.5
31	19	---	34	31	---	45	---	23	---	e3.2	e2.0	---
TOTAL	537	1,670	1,760	1,840	1,046	1,793	2,184	1,442	310.9	482.0	133.1	73.2
MEAN	17.3	55.7	56.8	59.4	37.4	57.8	72.8	46.5	10.4	15.5	4.29	2.44
MAX	30	278	198	723	105	226	585	302	24	261	18	3.7
MIN	13	11	30	27	26	21	34	13	3.7	3.2	2.0	1.5
CFSM	0.50	1.60	1.63	1.70	1.07	1.66	2.09	1.33	0.30	0.45	0.12	0.07
IN.	0.57	1.78	1.88	1.96	1.11	1.91	2.33	1.54	0.33	0.51	0.14	0.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1997, 1999 - 2005, BY WATER YEAR (WY)

MEAN	22.0	32.8	44.0	48.9	52.1	60.0	54.5	39.1	25.8	17.0	12.8	19.9
MAX	138	91.3	117	118	124	175	141	144	234	103	65.8	174
(WY)	(1980)	(1973)	(2004)	(1978)	(1979)	(1994)	(1973)	(1989)	(1972)	(1975)	(1984)	(1975)
MIN	0.42	1.95	4.70	3.93	5.80	8.71	11.6	10.8	2.84	1.38	0.15	0.06
(WY)	(1981)	(1992)	(2002)	(1981)	(2002)	(1981)	(1981)	(1986)	(1986)	(2002)	(1983)	(1980)

01660400 AQUIA CREEK NEAR GARRISONVILLE, VA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1971 - 1997 1999 - 2005	
ANNUAL TOTAL	15,827.5		13,271.2			
ANNUAL MEAN	43.2		36.4		35.9	
HIGHEST ANNUAL MEAN					58.6	1972
LOWEST ANNUAL MEAN					7.77	2002
HIGHEST DAILY MEAN	416	Apr 13	723	Jan 14	3,900	Jun 22, 1972
LOWEST DAILY MEAN	5.4	Jul 2	e1.5	Sep 30	0.00	(a)
ANNUAL SEVEN-DAY MINIMUM	7.1	Jun 28	2.2	Aug 30	0.01	Sep 11, 1980
MAXIMUM PEAK FLOW			1,370	Jan 14	11,600	Jun 22, 1972
MAXIMUM PEAK STAGE			5.49	Jan 14	16.32	Jun 22, 1972
INSTANTANEOUS LOW FLOW			(b)		0.00	(c)
ANNUAL RUNOFF (CFSM)	1.24		1.04		1.03	
ANNUAL RUNOFF (INCHES)	16.87		14.15		13.99	
10 PERCENT EXCEEDS	74		60		70	
50 PERCENT EXCEEDS	31		28		18	
90 PERCENT EXCEEDS	13		3.0		1.6	

a No flow many days in September 1980, August 1983, August, September 1988, and September 1991.
b Not determined.
c No flow part or all of many days in September 1980, August 1983, August, September 1988, and September 1991.
e Estimated.