Water-Data Report 2006

02013000 DUNLAP CREEK NEAR COVINGTON, VA

James Basin
Upper James Subbasin

LOCATION.--Lat 37°48′10″, long 80°02′50″ referenced to North American Datum of 1927, Alleghany County, VA, Hydrologic Unit 02080201, on right bank 20 ft downstream from bridge on U.S. Highway 60, 2.2 mi downstream from Ogle Creek, and 3.0 mi west of Covington.

DRAINAGE AREA.--162 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 972: 1929-30, 1932-34, 1942. WSP 1303: 1929-35(M), 1937-38(M), 1941-48(M). WDR VA-74-1: 1969(M), 1972, 1973(P). OFR 2006-1308: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,294.70 ft NGVD of 1929. Prior to Dec. 8, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Occasional diurnal fluctuation caused by dam 7.9 mi upstream from station. U.S. Army Corps of Engineers satellite precipitation and gage-height telemeter at station. Maximum discharge, 27,400 ft^3/s, from rating curve extended above 4,500 ft^3/s on basis of step-backwater computations and contracted-opening measurement at gage height 15.65 ft. 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.--Flood in March 1913 reached a stage of 18 ft, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun 27	1545	*4,640	*8.00
No other peak greater than base discharge			

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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	19	22	153	e139	90	91	78	105	42	129	22	22
2	21	23	98	e130	84	85	78	95	57	95	21	27
3	19	22	73	e135	85	79	82	90	44	77	20	25
4	19	22	90	122	86	72	102	82	36	68	19	20
5	18	23	114	110	115	65	116	75	30	64	18	24
6	19	23	99	96	130	64	115	69	27	68	18	23
7	34	23	79	83	120	65	127	66	25	59	19	20
8	40	24	66	74	108	61	1,140	75	23	51	22	18
9	40	27	64	67	98	58	705	67	23	44	22	17
10	31	25	57	60	87	57	382	60	23	40	21	15
11	27	25	56	55	87	55	256	61	22	38	19	14
12	25	24	55	54	85	52	192	63	31	38	21	13
13	23	23	51	52	76	51	158	57	37	39	21	14
14	21	23	45	223	68	56	143	54	30	45	20	14
15	21	23	45	233	71	56	411	54	27	45	19	13
16	20	28	52	169	86	53	386	49	24	39	18	13
17	20	30	54	140	115	53	541	47	22	35	17	13
18	20	31	50	739	124	53	911	45	20	31	16	12
19	20	27	54	527	112	51	496	43	19	38	16	11
20	20	26	53	302	108	50	330	40	18	35	17	11
21	20	27	47	212	101	52	244	37	17	34	17	11
22	23	33	45	161	96	54	285	34	16	31	16	11
23	22	37	41	148	95	51	421	32	18	30	14	12
24	22	37	40	142	101	48	327	30	26	28	14	14
25	24	34	42	139	103	48	250	28	83	28	13	14
26	23	33	77	125	104	48	219	27	439	38	13	13
27	24	31	111	109	98	46	188	28	2,430	38	13	13
28	23	32	99	101	95	46	160	26	1,280	30	14	13
29	23	432	220	100	---	55	135	24	381	27	13	14
30	22	376	248	99	---	64	117	22	199	25	14	14
31	22	---	169	96	---	72	---	27	---	24	17	---
Total	725	1,566	2,547	4,942	2,728	1,811	9,095	1,612	5,469	1,411	544	468
Mean	23.4	52.2	82.2	159	97.4	58.4	303	52.0	182	45.5	17.5	15.6
Max	40	432	248	739	130	91	1,140	105	2,430	129	22	27
Min	18	22	40	52	68	46	78	22	16	24	13	11
Cfsm	0.14	0.32	0.51	0.98	0.60	0.36	1.87	0.32	1.13	0.28	0.11	0.10
In.	0.17	0.36	0.58	1.13	0.63	0.42	2.09	0.37	1.26	0.32	0.12	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	64.3	112	170	239	304	390	285	217	108	50.8	54.8	45.1
Max	431	659	694	770	821	1,053	1,071	646	584	358	514	478
(WY)	(1990)	(1986)	(1974)	(1996)	(1998)	(1993)	(1987)	(2003)	(1972)	(1972)	(1984)	(2004)
Min	13.4	14.8	21.4	24.2	21.5	58.4	54.7	43.7	24.2	13.6	12.5	11.0
(WY)	(1942)	(2002)	(2002)	(1981)	(1934)	(2006)	(1986)	(1930)	(1999)	(1999)	(1932)	(1970)

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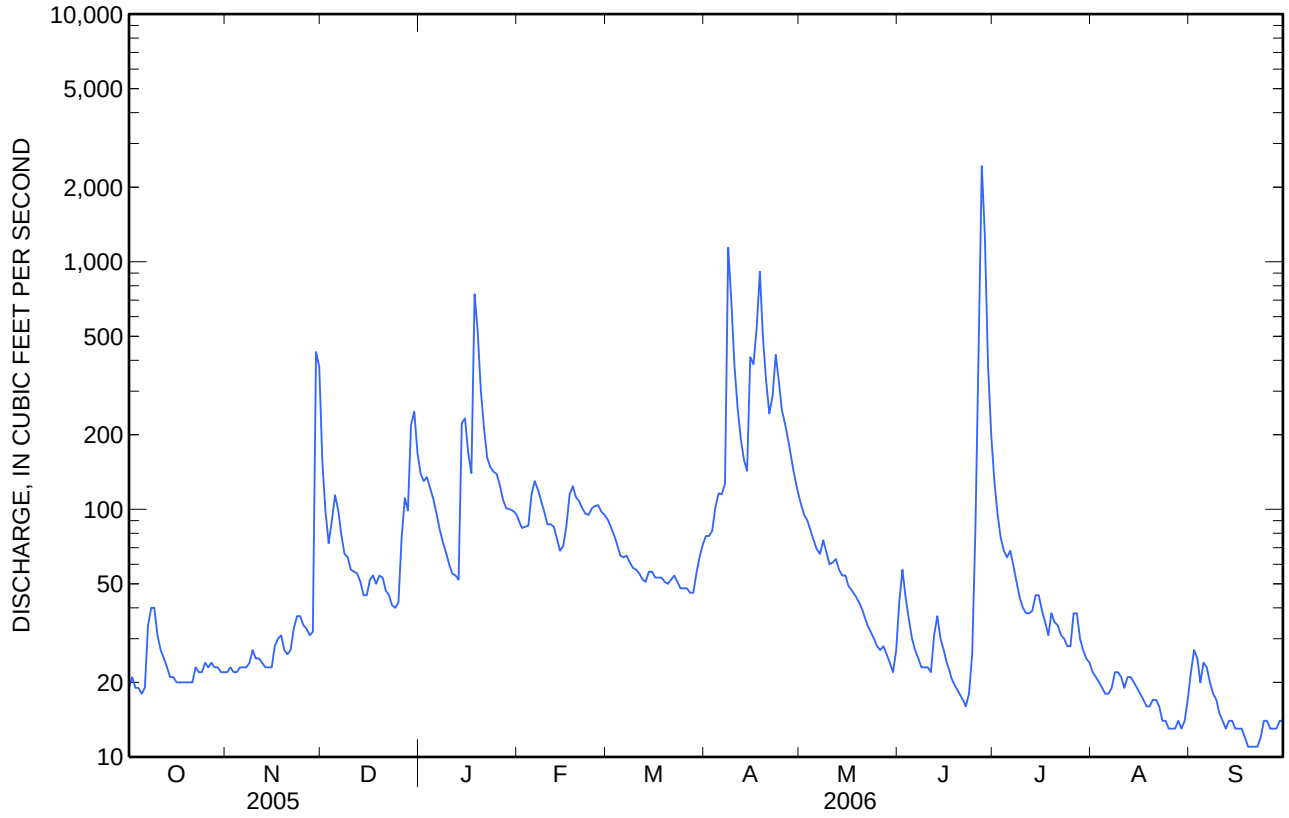
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1929 - 2006	
Annual total	48,181		32,918			
Annual mean	132		90.2		169	
Highest annual mean					320	1973
Lowest annual mean					67.3	1941
Highest daily mean	1,960	Mar 29	2,430	Jun 27	10,400	Jan 19, 1996
Lowest daily mean	18	Sep 21 [a]	11	Sep 19 [b]	7.0	Sep 9, 1966
Annual seven-day minimum	19	Sep 18	12	Sep 17	7.6	Sep 6, 1966
Maximum peak flow			4,640	Jun 27	27,400	Jun 21, 1972
Maximum peak stage			8.00	Jun 27	15.65	Jun 21, 1972
Instantaneous low flow			10	Sep 20 [c]	2.0	Jul 4, 1970
Annual runoff (cfsm)	0.815		0.557		1.05	
Annual runoff (inches)	11.06		7.56		14.20	
10 percent exceeds	287		160		368	
50 percent exceeds	61		45		67	
90 percent exceeds	22		17		18	

[a] Also Sept. 23, and Oct. 5, 2005.
[b] Also Sept. 20-22, 2006.
[c] Also Sept. 21, 22, 2006.