

KANAWHA RIVER BASIN

03165000 CHESTNUT CREEK AT GALAX, VA

LOCATION.--Lat 36°38'45", long 80°55'10", Galaxy City, Hydrologic Unit 05050001, on right bank 200 ft upstream from bridge on State Highway 89 and 1.7 mi downstream from Wards Mill Branch.

DRAINAGE AREA.--39.4 mi².

PERIOD OF RECORD.--September 1944 to current year.

REVISED RECORDS.--WSP 1385: 1953.

GAGE.--Water-stage recorder. Concrete control since Aug. 30, 1979. Datum of gage is 2,344.17 ft above sea level. Prior to June 25, 1948, nonrecording gage, and June 25, 1948, to May 28, 1953, water-stage recorder, at site 200 ft upstream at datum 0.86 ft higher.

REMARKS.--Records good except for period with ice effect, Jan. 21 to Feb. 9, which is poor. Maximum discharge, 6,980 ft³/s, from rating curve extended above 2,200 ft³/s on basis of two slope-area and one contracted-opening measurements at gage heights 9.5 ft, 14.4 ft, and 17.4 ft, respectively, site and datum then in use. 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 of Aug. 14, 1940, reached a stage of 17.4 ft, at site and datum used 1944-53, discharge, 11,000 ft³/s, by contracted-opening measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 850 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 26	1015	*996	*3.51			No other peak greater than base discharge.	

Minimum discharge, 19 ft³/s, July 21, 22, gage height, 1.26 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	27	44	33	e31	43	48	57	33	32	27	69
2	36	127	42	33	e31	42	48	54	33	29	47	97
3	31	60	41	33	e31	41	59	54	31	27	56	78
4	29	41	40	34	e33	41	101	51	32	33	54	80
5	29	36	38	34	e33	40	64	51	35	39	34	49
6	27	33	40	31	e33	39	56	50	59	43	29	41
7	27	31	37	31	e34	38	53	48	37	31	27	35
8	26	30	36	30	e35	38	52	46	33	27	31	33
9	27	29	35	37	e40	38	52	45	31	27	46	31
10	51	29	41	111	50	38	48	44	30	25	84	29
11	51	29	40	63	60	56	47	42	29	23	38	27
12	36	29	36	47	103	71	47	41	28	25	30	26
13	32	29	37	43	74	48	50	41	27	28	28	25
14	31	28	131	38	113	44	55	39	26	28	26	27
15	29	27	67	39	84	42	73	37	27	24	25	27
16	29	26	51	37	67	45	74	37	27	23	24	23
17	28	26	45	36	61	57	96	39	28	22	23	23
18	27	26	42	40	70	46	156	38	27	21	26	23
19	26	26	40	41	76	44	87	36	25	21	30	52
20	40	26	51	38	63	346	72	36	26	21	24	31
21	40	27	47	e33	57	193	67	47	26	20	23	27
22	33	43	47	e31	53	98	60	46	26	19	23	25
23	31	31	42	e30	52	78	57	38	24	22	21	26
24	29	29	40	e29	50	68	57	37	23	30	24	25
25	29	35	38	e30	49	63	111	43	35	31	25	29
26	29	426	44	e30	47	59	85	41	62	25	29	35
27	28	103	40	e30	47	56	69	36	74	23	24	27
28	28	66	35	e28	47	54	70	37	105	28	25	25
29	28	55	35	e30	44	51	68	37	70	42	23	24
30	27	48	34	e31	---	52	61	36	41	28	22	24
31	27	---	34	e31	---	50	---	34	---	35	23	---
TOTAL	989	1578	1370	1162	1568	2019	2043	1318	1110	852	971	1093
MEAN	31.9	52.6	44.2	37.5	54.1	65.1	68.1	42.5	37.0	27.5	31.3	36.4
MAX	51	426	131	111	113	346	156	57	105	43	84	97
MIN	26	26	34	28	31	38	47	34	23	19	21	23
CFSM	.81	1.34	1.12	.95	1.37	1.65	1.73	1.08	.94	.70	.79	.92
IN.	.93	1.49	1.29	1.10	1.48	1.91	1.93	1.24	1.05	.80	.92	1.03

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	58.6	62.8	64.6	71.3	82.1	94.2	90.4	75.3	66.4	51.5	49.0	53.4
MAX	197	157	112	161	166	301	233	160	172	150	156	254
(WY)	1948	1980	1958	1995	1998	1993	1983	1973	1992	1989	1949	1989
MIN	19.8	27.3	25.8	23.9	35.9	38.1	37.4	34.2	25.5	20.7	15.6	18.6
(WY)	1964	1982	1964	1956	1989	1988	1989	1956	1988	1986	1981	1954

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1945 - 2000
ANNUAL TOTAL	16122	16073	
ANNUAL MEAN	44.2	43.9	68.2
HIGHEST ANNUAL MEAN			107
LOWEST ANNUAL MEAN			37.3
HIGHEST DAILY MEAN	426	Nov 26	2050
LOWEST DAILY MEAN	14	aAug 18	12
ANNUAL SEVEN-DAY MINIMUM	15	Aug 13	13
INSTANTANEOUS PEAK FLOW		996 Nov 26	6980 Oct 17 1947
INSTANTANEOUS PEAK STAGE		3.51 Nov 26	b14.40 Oct 17 1947
INSTANTANEOUS LOW FLOW		19 cJul 21	12 dAug 25 1981
ANNUAL RUNOFF (CFSM)	1.12	1.11	1.73
ANNUAL RUNOFF (INCHES)	15.22	15.18	23.52
10 PERCENT EXCEEDS	67	68	108
50 PERCENT EXCEEDS	39	36	52
90 PERCENT EXCEEDS	21	25	28

a Also Aug. 19, 1999.

b From floodmark, site and datum then in use.

c Also July 22, 2000.

d Also part or all of each day Aug. 26-30, 1981.

e Estimated.

