

WEST BRANCH SUSQUEHANNA RIVER BASIN

01546500 SPRING CREEK NEAR AXEMANN, PA

LOCATION.--Lat 40°53'23", long 77°47'40", Centre County, Hydrologic Unit 02050204, on right bank at upstream side of bridge on SR 3001, 1.6 mi west of Axemann, 1.8 mi southwest of Bellefonte, and 2.5 mi upstream from Logan Branch.

DRAINAGE AREA.--87.2 mi².

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 788.81 ft above sea level. Prior to Nov. 19, 1940, nonrecording gage at same site and datum. Nonrecording gage Mar. 6 to Sept. 30, 1995.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Occasional regulation at low flow by fish hatchery and Rockview Penitentiary. Several measurements of water temperature were made during the year. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1936 reached a stage of 8.6 ft, from information by local residents, discharge not determined.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 350 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 24	0600	*890	*4.21	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	49	43	31	97	67	101	101	59	58	54	48
2	51	49	42	30	130	63	98	99	59	57	46	49
3	53	48	41	37	120	72	94	97	63	52	47	50
4	61	48	42	33	111	206	94	95	60	51	45	50
5	55	48	41	e29	110	129	93	92	57	50	52	50
6	54	48	41	e28	102	119	94	91	56	52	45	56
7	54	48	42	e27	100	110	92	89	59	50	44	98
8	107	46	41	e29	111	101	87	95	56	48	50	59
9	74	47	40	e31	102	97	125	89	53	48	47	55
10	61	54	40	e28	97	94	173	83	52	69	45	54
11	57	60	39	e28	94	90	147	80	53	56	45	52
12	54	49	39	e30	94	88	146	79	52	50	45	51
13	52	47	38	e35	92	87	135	78	51	49	52	51
14	53	47	40	e33	87	89	127	76	52	48	112	53
15	51	47	38	e31	85	93	121	74	54	48	55	49
16	50	45	38	e30	83	92	120	71	49	47	49	84
17	50	44	39	e33	82	96	114	70	88	47	46	76
18	50	43	37	e36	80	118	108	69	67	46	47	59
19	50	43	35	56	77	119	103	67	59	46	44	54
20	49	48	36	55	75	113	115	65	56	50	80	55
21	48	43	36	56	73	125	106	63	56	46	79	60
22	48	42	45	64	70	148	121	63	56	75	57	52
23	47	42	e35	227	67	130	124	91	55	53	53	49
24	46	42	e33	765	66	124	133	73	52	50	54	48
25	48	42	32	236	65	119	123	69	52	51	50	47
26	48	45	33	165	64	114	123	66	51	56	58	47
27	49	41	34	136	63	110	118	63	50	49	69	47
28	50	41	35	127	71	107	112	62	55	47	53	48
29	49	42	32	122	---	104	108	61	105	47	51	46
30	46	42	32	109	---	100	104	59	63	47	50	124
31	49	---	33	102	---	98	---	58	---	47	49	---
TOTAL	1665	1380	1172	2779	2468	3322	3459	2388	1750	1590	1673	1721
MEAN	53.7	46.0	37.8	89.6	88.1	107	115	77.0	58.3	51.3	54.0	57.4
MAX	107	60	45	765	130	206	173	101	105	75	112	124
MIN	46	41	32	27	63	63	87	58	49	46	44	46
CFSM	.62	.53	.43	1.03	1.01	1.23	1.32	.88	.67	.59	.62	.66
IN.	.71	.59	.50	1.19	1.05	1.42	1.48	1.02	.75	.68	.71	.73

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1999, BY WATER YEAR (WY)

MEAN	60.3	69.9	84.7	93.3	110	151	156	122	97.8	71.0	60.4	57.6
MAX	216	206	251	224	257	335	475	257	369	216	137	208
(WY)	1997	1978	1997	1996	1984	1994	1993	1978	1972	1972	1984	1996
MIN	26.1	26.0	22.8	23.3	38.1	36.5	49.6	50.5	41.1	28.0	24.4	24.9
(WY)	1964	1966	1966	1966	1963	1969	1969	1969	1965	1965	1966	1965

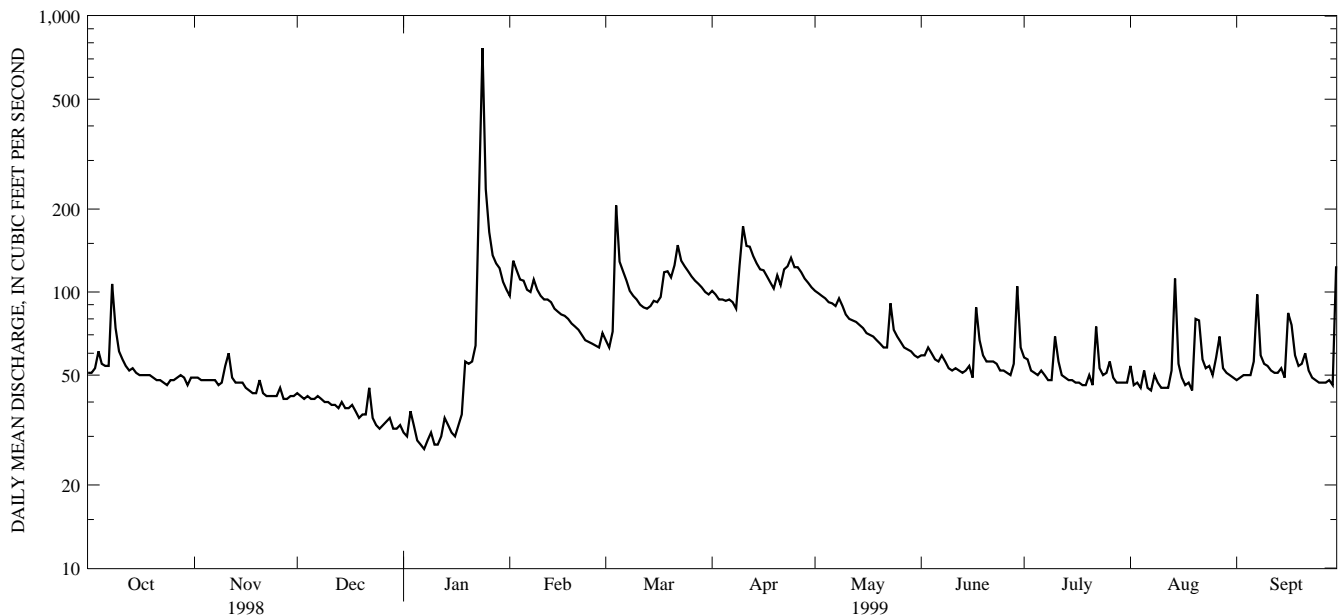
e Estimated.

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01546500 SPRING CREEK NEAR AXEMANN, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1941 - 1999	
ANNUAL TOTAL	46467		25367		94.3	
ANNUAL MEAN	127		69.5		161	
HIGHEST ANNUAL MEAN					1978	
LOWEST ANNUAL MEAN					43.5	
HIGHEST DAILY MEAN	506	Jan 9	765	Jan 24	2910	Jun 23 1972
LOWEST DAILY MEAN	32	Dec 25	e27	Jan 7	20	Dec 20-30 1963a
ANNUAL SEVEN-DAY MINIMUM	33	Dec 24	b29	Jan 5	21	Jan 28 1966
INSTANTANEOUS PEAK FLOW			890	Jan 24	c5410	Jun 23 1972
INSTANTANEOUS PEAK STAGE			4.21	Jan 24	d7.47	Jun 23 1972
ANNUAL RUNOFF (CFSM)	1.46		.80		1.08	
ANNUAL RUNOFF (INCHES)	19.82		10.82		14.70	
10 PERCENT EXCEEDS	259		114		166	
50 PERCENT EXCEEDS	95		54		73	
90 PERCENT EXCEEDS	42		39		40	

- a Also Jan 28, 29, 31, 1966.
- b Computed using estimated daily discharges.
- c From rating curve extended above 1,400 ft³/s on basis of contracted-opening measurement of peak flow.
- d In gage; 8.75 ft from outside floodmark.
- e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999