

WEST BRANCH SUSQUEHANNA RIVER BASIN

01546500 SPRING CREEK NEAR AXEMANN, PA
(Pennsylvania Water-Quality Network Station)

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.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 788.81 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 19, 1940, nonrecording gage at same site and datum. Nonrecording gage Mar. 6 to Sept. 30, 1995.

REMARKS.--No estimated daily discharges. Records good. 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 500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
May 13	1645	569	3.70	June 7	0015	*905	*4.23
June 5	0515	631	3.81				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	38	58	39	53	48	133	80	126	100	53	38
2	40	41	47	39	51	46	115	100	110	99	52	38
3	38	39	45	39	51	59	106	88	103	95	50	39
4	37	38	44	39	51	48	100	80	102	87	49	40
5	37	38	43	38	50	45	93	79	318	80	49	39
6	36	36	42	40	49	45	89	79	345	78	50	37
7	35	36	41	42	49	45	86	80	661	76	47	36
8	35	36	42	39	49	45	83	76	363	75	46	36
9	35	35	48	38	47	45	85	96	283	77	44	36
10	34	35	45	42	51	50	86	100	237	76	44	36
11	34	35	43	44	83	50	77	80	209	74	44	35
12	33	35	41	42	63	50	73	96	191	69	46	35
13	34	35	43	43	62	49	79	274	175	68	79	36
14	36	35	43	42	60	49	91	361	179	67	50	37
15	62	35	42	41	59	49	123	287	230	66	46	39
16	45	35	40	41	58	63	93	229	178	64	45	38
17	51	35	45	41	56	54	89	199	153	63	43	35
18	42	34	61	40	55	64	88	333	141	62	43	34
19	38	35	52	40	53	61	88	267	129	70	42	33
20	38	34	52	40	52	81	90	232	121	64	41	33
21	37	33	50	40	54	91	85	207	115	60	42	32
22	38	32	48	39	51	87	83	183	111	59	42	34
23	38	32	47	38	49	83	78	164	108	63	64	65
24	45	32	49	42	48	79	73	151	107	61	55	34
25	40	65	45	46	48	77	74	139	105	57	48	32
26	39	49	44	46	50	184	71	130	102	57	44	32
27	40	40	44	47	51	313	68	122	147	59	43	85
28	39	39	43	48	49	208	82	116	149	58	41	58
29	39	43	42	47	---	172	92	125	110	56	40	40
30	39	54	40	49	---	149	80	123	103	57	40	37
31	38	---	40	53	---	132	---	153	---	55	39	---
TOTAL	1214	1139	1409	1304	1502	2621	2653	4829	5511	2152	1461	1179
MEAN	39.16	37.97	45.45	42.06	53.64	84.55	88.43	155.8	183.7	69.42	47.13	39.30
MAX	62	65	61	53	83	313	133	361	661	100	79	85
MIN	33	32	40	38	47	45	68	76	102	55	39	32
CFSM	0.45	0.44	0.52	0.48	0.62	0.97	1.01	1.79	2.11	0.80	0.54	0.45
IN.	0.52	0.49	0.60	0.56	0.64	1.12	1.13	2.06	2.35	0.92	0.62	0.50

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2002, BY WATER YEAR (WY)

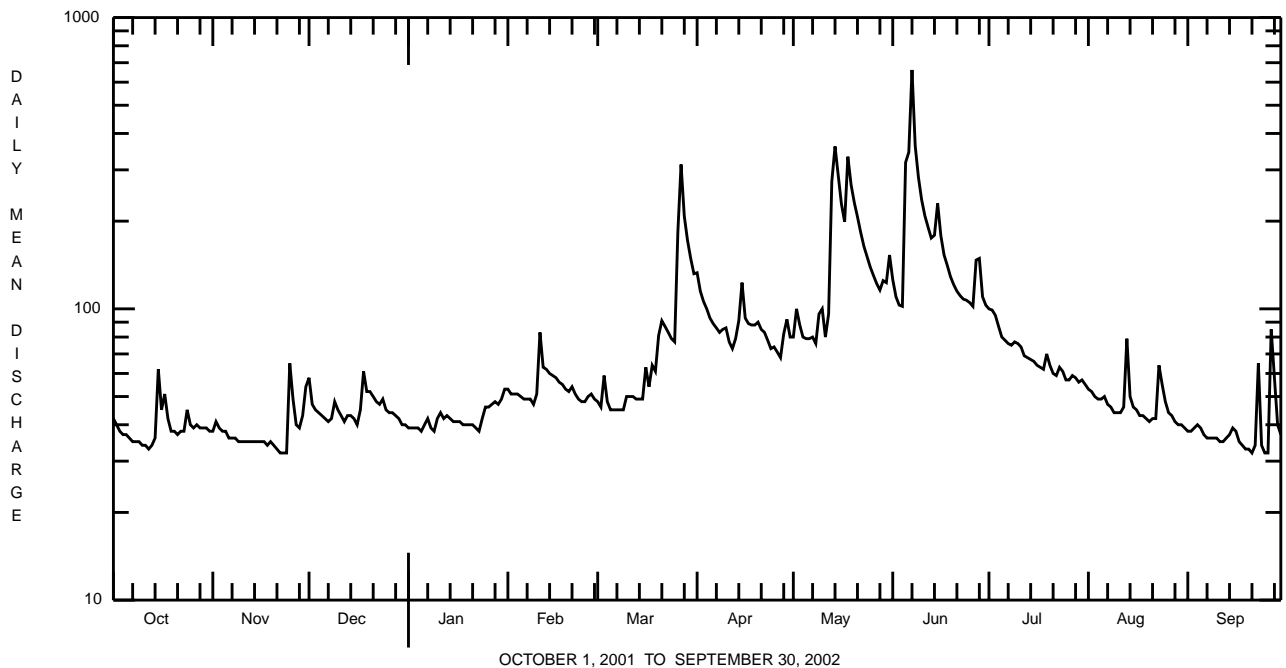
MEAN	59.54	68.88	83.41	91.10	107.7	147.9	154.1	121.0	98.42	70.69	60.07	57.06
MAX	216	206	251	224	257	335	475	257	369	216	137	208
(WY)	1997	1978	1997	1996	1984	1994	1993	1978	1972	1972	1984	1996
MIN	26.1	26.0	22.8	23.3	38.1	36.5	49.6	50.5	41.1	28.0	24.4	24.9
(WY)	1964	1966	1966	1966	1963	1969	1969	1969	1965	1965	1966	1965

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1941 - 2002	
ANNUAL TOTAL	22421		26974			
ANNUAL MEAN	61.4		73.9		93.2	
HIGHEST ANNUAL MEAN					161	1978
LOWEST ANNUAL MEAN					43.5	1965
HIGHEST DAILY MEAN	212	Apr 16	661	Jun 7	2910	Jun 23 1972
LOWEST DAILY MEAN	32	Nov 22-24	32	Nov 22-24 ^a	20	Dec 20-30 1963 ^b
ANNUAL SEVEN-DAY MINIMUM	33	Nov 18	33	Nov 18	21	Jan 28 1966
MAXIMUM PEAK FLOW			905	Jun 7	c5410	Jun 23 1972
MAXIMUM PEAK STAGE			4.23	Jun 7	d7.47	Jun 23 1972
ANNUAL RUNOFF (CFSM)	0.70		0.85		1.07	
ANNUAL RUNOFF (INCHES)	9.56		11.51		14.52	
10 PERCENT EXCEEDS	112		132		165	
50 PERCENT EXCEEDS	51		50		72	
90 PERCENT EXCEEDS	38		36		40	

- a Also Sept. 21, 25, 26.
- b Also Jan 28, 29, 31, 1966.
- 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.



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01546500 SPRING CREEK NEAR AXEMANN, PA--Continued
(Pennsylvania Water-Quality Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to current year.

REMARKS.--Other data for the Water-Quality Network can be found on pages 306-334.

COOPERATION.--Samples were collected as part of the Pennsylvania Department of Environmental Protection Water-Quality Network (WQN) with cooperation from the Pennsylvania Department of Environmental Protection.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SAM-PLING METHOD, CODES (82398)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
APR 2002													
17...	1130	9813	86	30	10.8	8.2	490	16.2	230	59.4	20.6	176	24.5
JUN													
26...	1100	9813	100	30	10.4	8.0	549	17.1	270	66.3	24.5	202	23.2
AUG													
14...	0820	9813	48	30	7.8	7.8	534	18.4	260	63.6	24.0	184	25.6

Date	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS ORTHO TOTAL (MG/L AS P) (70507)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)
APR 2002													
17...	356	20	.040	3.59	.060	4.1	.03	.040	2.1	<10	250	<1.0	10
JUN													
26...	354	<2	.040	4.14	<.040	4.2	.02	.030	1.5	<10	390	<1.0	<10
AUG													
14...	350	10	.060	3.96	.090	4.7	.02	.030	2.5	<10	120	<1.0	<10

Date	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)
APR 2002		
17...	<50	<10
JUN		
26...	<50	<10
AUG		
14...	<50	<10