

BEAVER RIVER BASIN

03101500 SHENANGO RIVER AT PYMATUNING DAM, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 41°29'53", long 80°27'37", Crawford County, Hydrologic Unit 05030102, on left bank 500 ft downstream from Sugar Run, 900 ft downstream from Pymatuning Dam, 1.5 mi northwest of Jamestown, at mile 84.9.

DRAINAGE AREA.--167 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1934 to current year.

REVISED RECORDS.--WSP 823: 1934-36. WSP 1083: 1936 (M), 1937, 1940 (M), 1941-45. WSP 1335: 1940.

GAGE.--Water-stage recorder and concrete dam control. Datum of gage is 970.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since December 1933 by Pymatuning Reservoir (station 03100500). Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

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	97	79	106	172	260	171	316	485	510	73	120	120
2	96	79	83	172	195	172	345	522	508	72	120	120
3	96	80	78	172	182	186	471	493	508	69	120	111
4	81	77	76	172	177	173	365	486	508	69	120	100
5	79	77	75	172	173	170	353	482	281	67	120	100
6	79	77	72	172	172	168	352	343	218	66	120	100
7	79	77	72	172	173	168	348	312	147	66	120	100
8	79	76	72	172	174	168	347	297	136	94	120	100
9	79	77	71	172	173	169	356	296	133	121	120	100
10	79	77	71	173	174	172	357	274	132	124	120	100
11	79	77	70	179	183	168	391	263	132	127	120	100
12	79	76	70	178	177	168	425	308	132	120	122	100
13	79	76	72	179	175	168	456	244	132	120	122	100
14	79	76	77	176	171	168	421	228	149	120	122	100
15	79	75	80	178	172	169	391	480	155	120	122	101
16	79	75	74	176	172	184	476	481	139	120	122	102
17	82	75	114	175	174	174	497	402	134	120	124	100
18	80	75	158	173	171	172	493	504	132	120	124	102
19	79	76	91	172	171	172	492	485	130	120	124	102
20	79	83	144	173	175	185	498	497	130	120	125	102
21	79	78	175	175	181	185	493	516	95	120	125	102
22	89	76	172	174	180	176	489	515	75	120	125	102
23	84	75	192	177	175	175	488	512	75	120	125	102
24	96	74	194	194	172	178	484	512	73	120	125	102
25	88	101	179	185	172	253	484	512	73	120	124	102
26	81	86	174	177	174	319	482	521	74	120	122	102
27	97	79	173	175	173	330	481	512	77	120	122	104
28	98	81	172	174	170	287	506	511	74	120	122	103
29	84	105	172	172	---	274	496	510	73	122	121	97
30	81	157	172	205	---	286	488	527	73	120	120	87
31	79	---	172	226	---	266	---	512	---	120	120	---
TOTAL	2594	2452	3673	5514	4991	6174	13041	13542	5208	3350	3778	3063
MEAN	83.7	81.7	118	178	178	199	435	437	174	108	122	102
MAX	98	157	194	226	260	330	506	527	510	127	125	120
MIN	79	74	70	172	170	168	316	228	73	66	120	87
CFSM	0.50	0.49	0.71	1.07	1.07	1.19	2.60	2.62	1.04	0.65	0.73	0.61
IN.	0.58	0.55	0.82	1.23	1.11	1.38	2.90	3.02	1.16	0.75	0.84	0.68

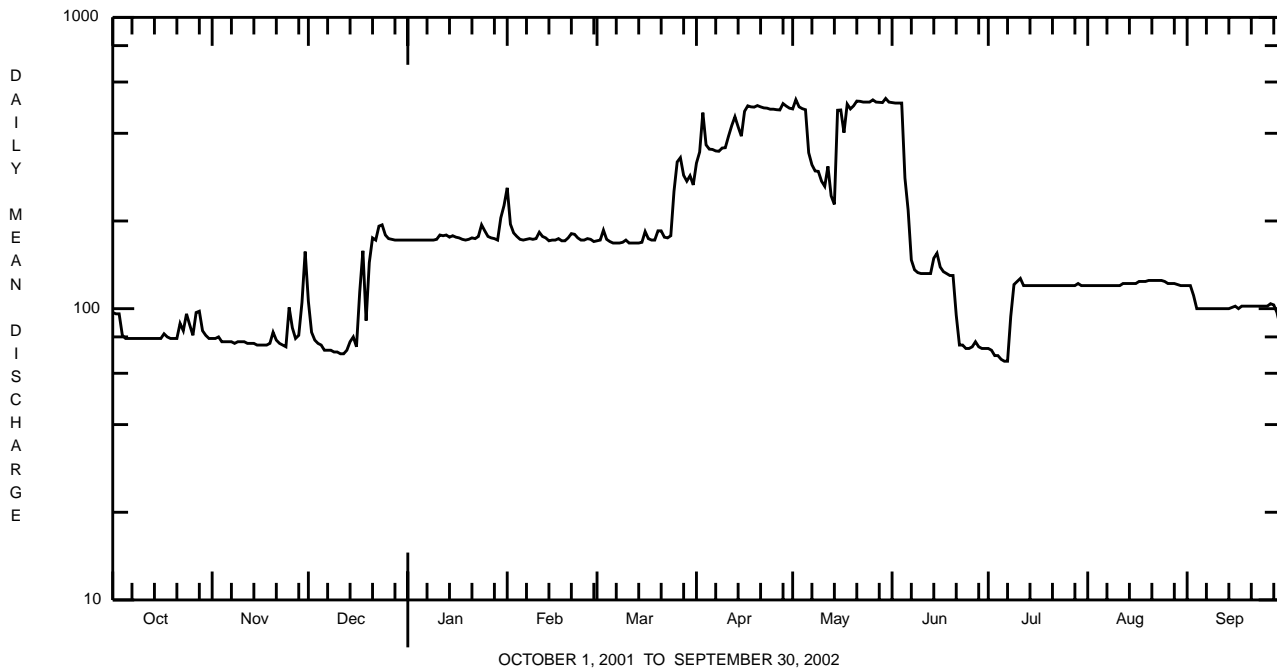
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 2002, BY WATER YEAR (WY)

MEAN	166	180	295	277	277	257	198	165	159	149	159	181
MAX	601	588	753	728	783	682	608	548	773	408	587	558
(WY)	1982	1997	1987	1943	1952	1956	1950	1956	1947	1987	1956	1956
MIN	17.3	6.27	3.79	10.4	13.2	17.0	2.78	5.78	5.37	20.0	31.6	40.2
(WY)	1935	1935	1945	1936	1935	1992	1935	1935	1935	1968	1935	1935

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03101500 SHENANGO RIVER AT PYMATUNING DAM, PA--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1935 - 2002	
ANNUAL TOTAL	48282		67380		205	
ANNUAL MEAN	132		185		330	
HIGHEST ANNUAL MEAN					16.6	1935
LOWEST ANNUAL MEAN					1240	Jan 28 1937
HIGHEST DAILY MEAN	398	Mar 13	527	May 30	0.40	Aug 25 1935
LOWEST DAILY MEAN	35	Jun 26	66	Jul 6,7	0.73	Jun 6 1935
ANNUAL SEVEN-DAY MINIMUM	36	Jun 21	69	Jul 1	1540	Sep 4 1937
MAXIMUM PEAK FLOW			616	Apr 3	9.20	Sep 4 1937
MAXIMUM PEAK STAGE			6.09	Apr 3	1.23	
ANNUAL RUNOFF (CFSM)	0.79		1.11		16.68	
ANNUAL RUNOFF (INCHES)	10.76		15.01			
10 PERCENT EXCEEDS	249		481		548	
50 PERCENT EXCEEDS	100		132		134	
90 PERCENT EXCEEDS	54		76		26	



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03101500 SHENANGO RIVER AT PYMATUNING DAM, 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 210-233.

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)	FLUO-RIDE, TOTAL (MG/L AS F) (00951)
APR 2002	23...	9813	488	40	8.2	7.7	181	12.7	68	19.7	4.7	48	--
JUN	11...	9813	132	40	8.9	7.7	190	18.8	70	20.5	4.6	48	<.2
AUG	13...	9813	122	40	7.6	7.5	219	24.4	79	23.3	5.0	54	<.2

Date	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, AMMONIA (MG/L AS N) (00610)	NITRO-GEN, NITRATE (MG/L AS N) (00620)	NITRO-GEN, NITRITE (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)	CYANIDE AMEN-ABLE TO CHLOR-INATION UNFLTRD (MG/L) (00722)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)
APR 2002	14.6	160	8	<.020	.23	<.040	.96	.03	.040	5.8	<10	--	540
JUN	14.6	120	10	.120	.15	<.040	1.3	.04	.050	5.9	<10	<1.00	560
AUG	14.1	136	6	.110	<.04	<.040	.81	.04	.040	5.5	<10	<1.00	350

Date	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)	NICKEL, TOTAL RECOV-ERABLE (µG/L AS NI) (01067)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)	PHENOLS TOTAL (µG/L) (32730)
APR 2002	<1.0	80	<50	<10	--
JUN	<1.0	180	<50	10	<5
AUG	1.8	190	<50	<10	<5