

MAHONING CREEK BASIN

03034000 MAHONING CREEK AT PUNXSUTAWNEY, PA

LOCATION.--Lat 40°56'21", long 79°00'31", Jefferson County, Hydrologic Unit 05010006, on right bank 75 ft downstream from Williams Run, 1.8 mi upstream from bridge on Diamond Road at Sportsburg, 1.9 mi downstream from Sawmill Run, and 2 mi west of Punxsutawney.

DRAINAGE AREA.--158 mi².

PERIOD OF RECORD.--October 1938 to current year.

REVISED RECORDS.--WDR PA-87-3: 1977-86 (P).

GAGE.--Water-stage recorder. Datum of gage is 1,206.14 ft above sea level (U.S. Army Corps of Engineers benchmark). Prior to Oct. 1, 1946, at site 2.9 mi upstream at datum 13.30 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuations at low flow by mine pumpage into stream above station. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 18, 1936 reached a stage of 15.6 ft, from floodmark at former site and datum, discharge, 12,500 ft³/s, from rating curve extended above 4,300 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 26	1800	*2,760	*6.18	No other peak greater than base discharge.			

**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	95	26	230	e106	e69	510	220	226	76	117	188	45
2	52	59	195	e104	e72	564	206	267	93	101	99	43
3	38	295	175	e118	e70	471	279	223	138	97	80	44
4	37	160	176	370	e68	413	1350	194	94	112	67	45
5	37	106	162	432	e66	367	1280	184	82	93	51	39
6	32	83	176	320	e62	321	884	172	131	77	95	32
7	26	69	166	290	e61	287	645	158	109	69	1100	29
8	24	60	144	256	e62	265	574	146	88	61	701	29
9	26	56	134	233	e63	247	627	138	75	57	394	28
10	42	52	148	249	e66	234	490	137	66	70	273	29
11	54	48	174	280	e70	228	426	131	59	70	184	43
12	40	45	151	235	e100	318	417	117	60	54	172	64
13	35	43	148	e210	e200	283	355	112	78	48	135	219
14	108	42	315	e185	e350	259	325	104	316	46	115	94
15	80	40	620	e170	956	245	302	95	327	53	99	84
16	54	39	475	e150	622	242	280	91	357	78	88	109
17	46	37	375	e145	516	516	289	87	250	59	75	97
18	41	35	307	e140	432	444	283	84	205	50	74	72
19	37	34	263	e132	520	393	252	125	234	42	71	62
20	34	42	258	e129	407	349	231	126	160	41	62	55
21	34	51	289	e124	344	805	401	100	163	41	56	85
22	33	45	241	e120	349	1190	757	91	235	42	50	80
23	35	41	e200	e116	509	850	846	96	158	38	82	68
24	37	40	e180	e112	736	655	658	223	126	35	98	286
25	36	44	e160	e108	929	520	514	189	110	31	69	210
26	33	1700	e140	e102	839	428	418	133	102	29	57	263
27	32	1520	e130	e94	674	368	357	108	256	27	58	305
28	32	679	e120	e90	711	350	318	112	245	47	70	214
29	29	409	e118	e82	563	317	282	113	164	79	56	165
30	28	298	e113	e74	---	279	248	94	140	49	52	135
31	27	---	e108	e69	---	246	---	83	---	64	48	---
TOTAL	1294	6198	6591	5345	10486	12964	14514	4259	4697	1877	4819	3073
MEAN	41.7	207	213	172	362	418	484	137	157	60.5	155	102
MAX	108	1700	620	432	956	1190	1350	267	357	117	1100	305
MIN	24	26	108	69	61	228	206	83	59	27	48	28
CFSM	.26	1.31	1.35	1.09	2.29	2.65	3.06	.87	.99	.38	.98	.65
IN.	.30	1.46	1.55	1.26	2.47	3.05	3.42	1.00	1.11	.44	1.13	.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

MEAN	117	222	325	340	410	562	469	332	208	153	107	94.3
MAX	394	715	769	1025	1013	1249	909	722	1210	855	670	572
(WY)	1987	1986	1973	1952	1975	1964	1994	1953	1972	1977	1956	1996
MIN	18.1	23.0	27.2	61.0	96.6	132	112	79.9	48.9	26.4	23.0	16.9
(WY)	1965	1999	1961	1961	1993	1969	1946	1941	1991	1988	1949	1964

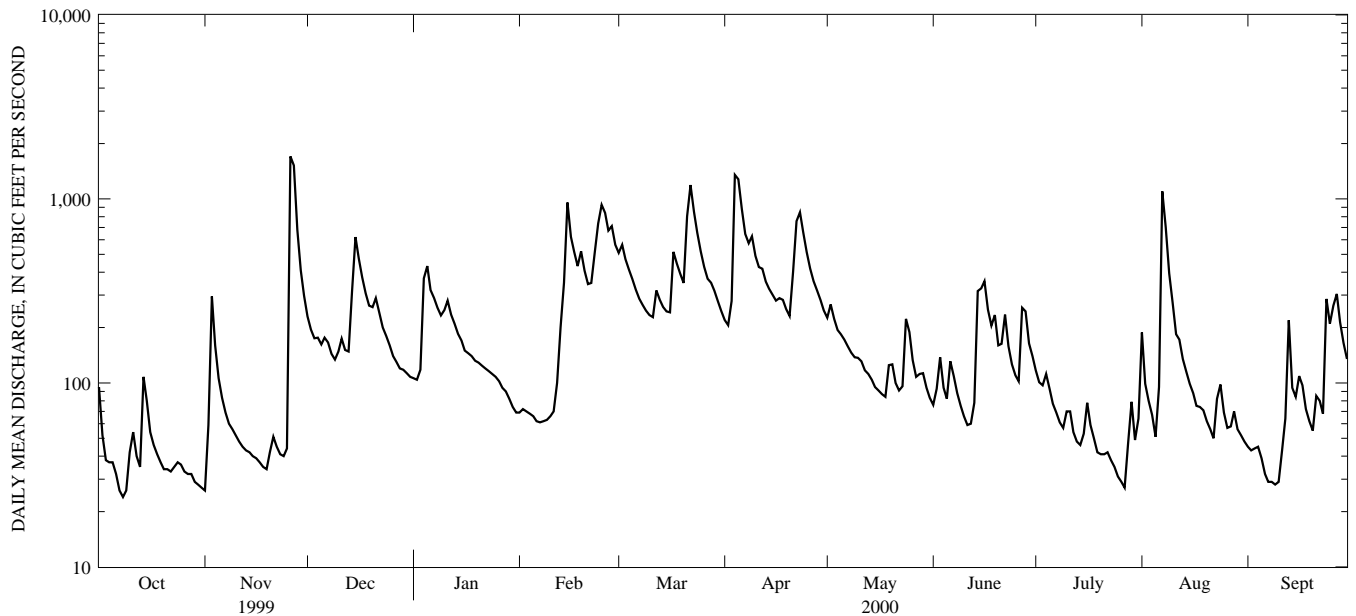
e Estimated.

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03034000 MAHONING CREEK AT PUNXSUTAWNEY, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1939 - 2000	
ANNUAL TOTAL	76510		76117			
ANNUAL MEAN	210		208		278	
HIGHEST ANNUAL MEAN					433	1956
LOWEST ANNUAL MEAN					177	1963
HIGHEST DAILY MEAN	4420	Jan 24	1700	Nov 26	13200	Jun 23 1972
LOWEST DAILY MEAN	14	Sep 4,5	24	Oct 8	12	Oct 19 1939
ANNUAL SEVEN-DAY MINIMUM	17	Aug 31	30	Oct 26	13	Oct 14 1939
INSTANTANEOUS PEAK FLOW			2760	Nov 26	a 20400	Jul 19 1996
INSTANTANEOUS PEAK STAGE			6.18	Nov 26	b 18.38	Jul 19 1996
INSTANTANEOUS LOW FLOW			22	Oct 8	2.6	Sep 26 1939
ANNUAL RUNOFF (CFSM)	1.33		1.32		1.76	
ANNUAL RUNOFF (INCHES)	18.01		17.92		23.87	
10 PERCENT EXCEEDS	484		480		625	
50 PERCENT EXCEEDS	106		118		154	
90 PERCENT EXCEEDS	24		39		33	

a From rating curve extended above 4,300 ft³/s on basis of slope-area measurement at gage height 13.01 ft.
b From floodmark in gage well.



1-YEAR HYDROGRAPH
 OCTOBER 1, 1999 TO SEPTEMBER 30, 2000