

## LEHIGH RIVER BASIN

## 01450500 AQUASHICOLA CREEK AT PALMERTON, PA

**LOCATION.**--Lat 40°48'22", long 75°35'54", Carbon County, Hydrologic Unit 02040106, on right bank 1,200 ft upstream from bridge on Sixth Street in Palmerton, and 1.2 mi upstream from mouth.

**DRAINAGE AREA.**--76.7 mi<sup>2</sup>.

**PERIOD OF RECORD.**--October 1939 to current year.

**REVISED RECORDS.**--WSP 1051: 1940-45 (monthly net diversion), Drainage area.

**GAGE.**--Water-stage recorder. Datum of gage is 389.08 ft above sea level.

**REMARKS.**--Records fair except those for estimated daily discharges, which are poor. Occasional diversion from Pohopoco Creek into Aquashicola Creek upstream of station. Several measurements of water temperature were made during the year. Satellite telemetry at station.

**COOPERATION.**--Records of diversion provided by Palmer Water Company.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Jan. 18	2200	*2,210	*4.95	Sept. 17	0215	1,620	4.25
Jan. 24	1745	1,490	4.08				

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	29	43	e40	e24	181	157	146	93	71	34	e20	e17
2	26	42	e39	e26	341	131	141	90	69	34	e19	e16
3	24	40	e37	e70	423	123	133	89	67	33	e18	e16
4	28	38	e35	e62	353	175	130	90	62	31	e17	e16
5	27	36	e35	e56	297	167	122	88	60	30	e16	e17
6	24	37	e35	e52	257	180	115	84	57	29	e15	e24
7	24	37	e34	e46	234	184	113	83	58	27	e15	e32
8	105	37	e37	e43	219	160	108	94	56	e25	e16	31
9	116	36	e39	e50	195	157	116	86	52	e24	e16	e25
10	246	32	e35	e66	184	156	138	77	50	30	e16	33
11	149	52	e33	e72	166	146	115	71	49	29	e16	30
12	110	46	e31	e75	165	136	117	69	47	e26	e18	e23
13	92	39	e29	e76	187	130	104	67	48	e26	e20	e20
14	135	37	e27	e72	163	128	103	65	54	e26	52	e19
15	112	35	e27	e68	157	137	102	63	56	e26	39	e20
16	96	32	e27	e66	154	130	113	60	46	e25	e29	483
17	85	e32	e27	e70	153	130	128	59	47	e23	e24	927
18	78	e31	e27	695	180	127	111	58	52	e25	e21	301
19	72	e31	e26	745	173	119	106	104	44	e23	e21	176
20	67	e31	e26	380	158	113	114	96	42	e24	e21	136
21	63	e33	e27	283	151	123	115	75	41	e22	e25	128
22	60	e32	e28	290	142	464	110	70	41	e26	e23	130
23	57	e31	e27	353	e130	442	112	94	39	e24	e22	105
24	54	e31	e25	1070	129	335	117	106	36	e22	e22	91
25	52	e31	e25	908	125	274	107	111	36	e22	e21	83
26	49	e80	e25	526	124	231	106	96	36	e21	34	76
27	47	e64	e27	389	119	205	104	92	35	e21	33	71
28	48	e50	e29	323	134	204	102	87	36	e21	e26	67
29	50	e46	e29	271	---	182	100	82	39	e20	e22	e66
30	46	e43	e26	231	---	163	96	78	35	e20	e19	e200
31	44	---	e23	200	---	151	---	74	---	e20	e18	---
TOTAL	2215	1185	937	7658	5394	5660	3444	2551	1461	789	694	3379
MEAN	71.5	39.5	30.2	247	193	183	115	82.3	48.7	25.5	22.4	113
MAX	246	80	40	1070	423	464	146	111	71	34	52	927
MIN	24	31	23	24	119	113	96	58	35	20	15	16
(†)	-2.9	-1.6	-1.5	-3.2	-2.7	-2.4	-2.3	-2.0	-1.9	-1.6	-1.5	-3.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1999, BY WATER YEAR (WY)

MEAN	96.6	146	184	171	175	246	237	179	114	100	84.6	88.1
MAX	331	379	583	558	325	534	625	480	412	638	468	417
(WY)	1956	1973	1997	1996	1971	1977	1983	1989	1972	1945	1942	1987
MIN	17.2	21.6	30.2	19.4	38.4	86.5	74.7	55.9	38.8	19.8	13.7	15.2
(WY)	1964	1965	1999	1981	1940	1985	1985	1941	1955	1955	1964	1964

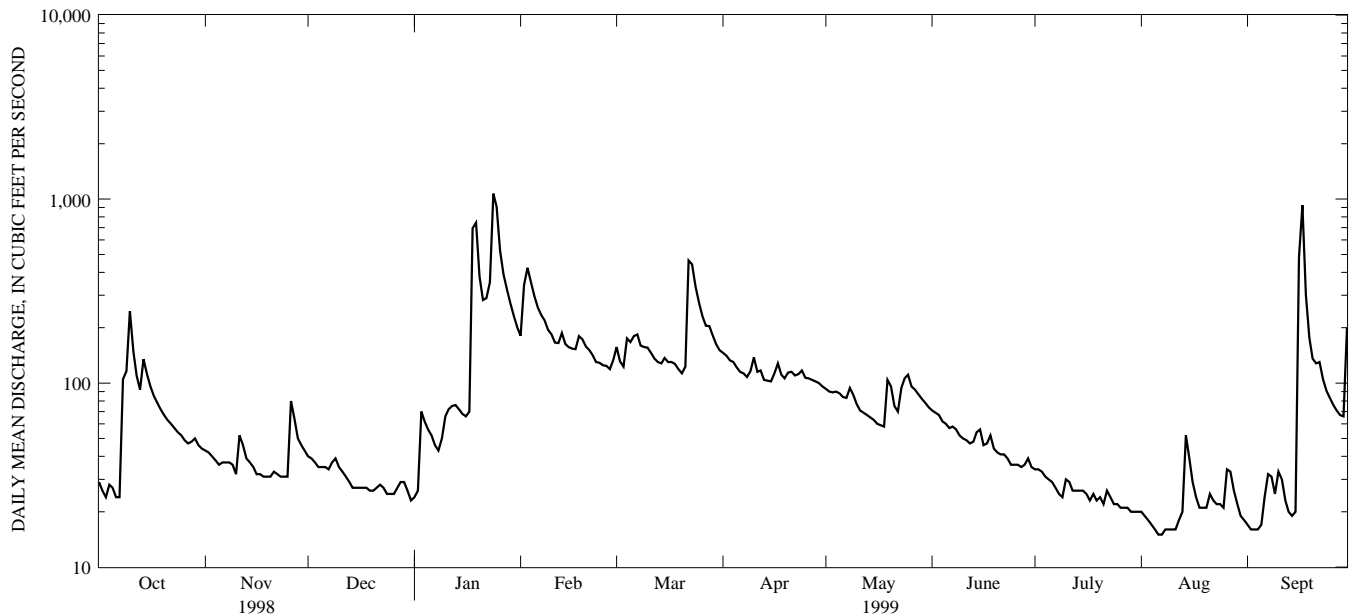
† Figures of net diversion, equivalent in cubic feet per second. Includes water diverted from Pohopoco Creek to Aquashicola Creek.  
e Estimated.

LEHIGH RIVER BASIN

01450500 AQUASHICOLA CREEK AT PALMERTON, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1940 - 1999	
ANNUAL TOTAL	54131		35367		152	
ANNUAL MEAN	148		96.9		242	
HIGHEST ANNUAL MEAN					1952	
LOWEST ANNUAL MEAN					69.2	
HIGHEST DAILY MEAN	1490	Mar 10	1070	Jan 24	4680	Jul 10 1945
LOWEST DAILY MEAN	22	Sep 15,16,19,20	e15	Aug 6,7	9.1	Sep 15 1964
ANNUAL SEVEN-DAY MINIMUM	23	Sep 14	a16	Aug 5	10	Sep 10 1964
INSTANTANEOUS PEAK FLOW			2210	Jan 18	b11700	Jul 10 1945
INSTANTANEOUS PEAK STAGE			4.95	Jan 18	13.63	Jul 10 1945
INSTANTANEOUS LOW FLOW					2.6	Sep 12 1957
10 PERCENT EXCEEDS	315		184		304	
50 PERCENT EXCEEDS	92		57		100	
90 PERCENT EXCEEDS	27		22		35	

- a Computed using estimated daily discharges.
- b From rating curve extended above 2,300 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow.
- e Estimated.



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