

## SCHUYLKILL RIVER BASIN

## 01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA

**LOCATION.**--Lat 40°22'14", long 76°01'32", Berks County, Hydrologic Unit 02040203, on right bank 1.0 mi upstream from Rebers Bridge and Plum Creek, 1.0 mi east of Blue Marsh, 3.0 mi north of Sinking Spring, and 5.5 mi northeast of Reading.

**DRAINAGE AREA.**--175 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--May 1965 to current year.

**REVISED RECORDS.**--WDR PA-72-1: 1969-71 (M).

**GAGE.**--Water-stage recorder. Datum of gage is 230.06 ft above sea level (Western Berks Water Authority datum). Prior to Nov. 25, 1974, water-stage recorder at site 0.3 mi downstream at same datum.

**REMARKS.**--No estimated daily discharges. Records good. Flow regulated since April 1979 by Blue Marsh Lake (station 01470870) 0.8 mi upstream. Satellite and landline telemetry at station.

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	769	128	510	181	148	826	434	215	178	435	135	105
2	499	129	506	181	148	474	440	158	180	438	123	105
3	497	128	372	182	148	420	445	158	167	352	123	105
4	496	184	202	185	148	401	459	158	167	294	166	105
5	537	174	203	184	148	400	458	188	167	243	195	137
6	585	140	203	183	148	326	416	211	396	171	195	161
7	582	140	203	150	131	322	385	211	332	151	172	147
8	510	139	204	121	117	377	386	211	127	150	118	105
9	448	114	192	121	117	287	385	178	98	150	94	84
10	449	99	173	159	117	175	497	154	98	167	85	84
11	451	99	164	371	117	149	557	222	98	180	78	84
12	592	100	164	455	117	152	469	204	161	179	79	84
13	705	100	164	411	117	277	400	152	429	169	79	181
14	700	100	207	229	198	491	368	153	495	161	90	154
15	609	99	559	154	250	562	350	182	246	161	125	94
16	538	99	805	155	403	559	350	208	217	161	115	102
17	534	100	570	154	510	615	350	207	229	182	98	102
18	306	100	418	178	459	667	351	207	229	189	97	102
19	142	99	417	198	428	663	303	190	229	178	97	102
20	104	99	293	218	426	493	241	178	210	178	97	272
21	104	99	279	247	426	387	273	178	193	144	80	352
22	102	99	260	247	266	282	332	311	470	98	67	188
23	101	99	213	247	145	1060	332	390	455	98	67	98
24	101	99	217	169	146	1830	298	388	302	155	67	98
25	103	100	217	105	316	1540	273	770	302	194	90	98
26	157	101	217	104	488	1470	274	733	1930	194	104	128
27	185	102	217	127	489	1230	274	372	2580	169	105	150
28	169	103	217	148	1030	1240	274	370	1070	145	104	128
29	139	313	217	148	1320	1550	274	367	427	146	104	112
30	127	510	196	148	---	937	274	275	383	146	104	110
31	128	---	181	148	---	534	---	165	---	147	104	---
TOTAL	11469	3995	8960	6008	9021	20696	10922	8064	12565	5925	3357	3877
MEAN	370	133	289	194	311	668	364	260	419	191	108	129
MAX	769	510	805	455	1320	1830	557	770	2580	438	195	352
MIN	101	99	164	104	117	149	241	152	98	98	67	84

SCHUYLKILL RIVER BASIN

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2000, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	207	234	339	357	355	461	333	304	239	185	125	146
MAX	612	484	986	1151	596	1365	1016	1058	606	543	283	379
(WY)	1980	1997	1997	1979	1979	1994	1993	1989	1982	1984	1994	1987
MIN	51.4	62.4	61.3	91.7	131	135	49.8	123	69.9	79.3	55.4	54.0
(WY)	1996	1981	1999	1981	1980	1981	1985	1999	1979	1985	1981	1983

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1979 - 2000	
ANNUAL TOTAL	87646		104859			
ANNUAL MEAN	240		286		273	
HIGHEST ANNUAL MEAN					435	
LOWEST ANNUAL MEAN					127	
HIGHEST DAILY MEAN	2550	Jan 20	2580	Jun 27	3950	Apr 18 1983
LOWEST DAILY MEAN	46	Jun 26	67	Aug 22-24	25	Oct 7 1995
ANNUAL SEVEN-DAY MINIMUM	53	Sep 9	81	Aug 19	26	Oct 6 1995
INSTANTANEOUS PEAK FLOW			a3660	Jun 26	a4060	Dec 6 1993
INSTANTANEOUS PEAK STAGE			8.02	Jun 26	8.02	Jun 26 2000
10 PERCENT EXCEEDS	510		517		537	
50 PERCENT EXCEEDS	145		184		175	
90 PERCENT EXCEEDS	60		99		66	

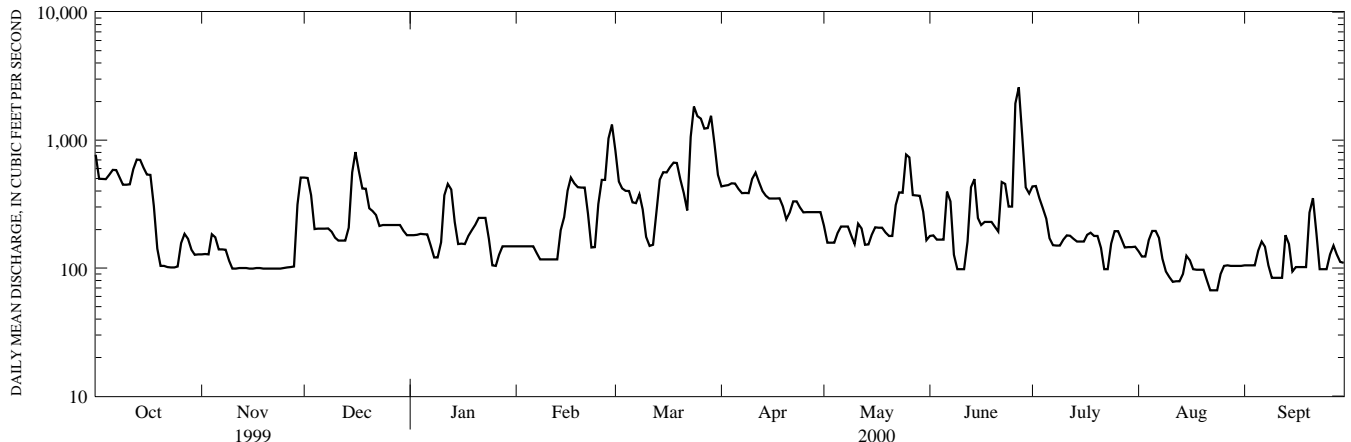
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1978, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	180	236	333	333	373	423	363	261	285	233	175	150
MAX	701	464	827	761	790	832	706	423	1244	523	350	536
(WY)	1977	1976	1978	1978	1971	1978	1970	1973	1972	1969	1969	1975
MIN	56.2	58.3	69.9	100	146	163	144	89.2	60.4	45.0	31.9	43.4
(WY)	1967	1966	1966	1966	1969	1969	1966	1965	1965	1966	1966	1966

SUMMARY STATISTICS WATER YEARS 1965 - 1978

ANNUAL MEAN	283											
HIGHEST ANNUAL MEAN	416					1978						
LOWEST ANNUAL MEAN	122					1966						
HIGHEST DAILY MEAN	11000				Jun 23	1972						
LOWEST DAILY MEAN	23				Sep 12	1966						
ANNUAL SEVEN-DAY MINIMUM	25				Sep 7	1966						
INSTANTANEOUS PEAK FLOW	a16100				Jun 22	1972						
INSTANTANEOUS PEAK STAGE	b18.70				Jun 22	1972						
ANNUAL RUNOFF (CFSM)	1.62											
ANNUAL RUNOFF (INCHES)	22.00											
10 PERCENT EXCEEDS	551											
50 PERCENT EXCEEDS	178											
90 PERCENT EXCEEDS	69											

- a From rating curve extended above 3,540 ft<sup>3</sup>/s on basis of runoff comparison with downstream station.
- b From floodmark.



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

## SCHUYLKILL RIVER BASIN

01470960 TULPEHOCKEN CREEK AT BLUE MARSH DAMSITE NEAR READING, PA--Continued

## WATER-QUALITY RECORDS

**PERIOD OF RECORD.**--Water years 1972 to 1980.**PERIOD OF DAILY RECORD.**--

WATER TEMPERATURE: Water years 1969 to current year.

SUSPENDED-SEDIMENT DISCHARGE.--May 1973 to May 1976.

**INSTRUMENTATION.**--Temperature recorder since October 1968. Temperature probe interfaced with a data collection platform since 1986 water year.**REMARKS.**--Temperature records collected at streamgage. Interruptions in the record were due to malfunctions of the equipment. Water-quality samples and suspended sediment samples collected at Rebers Bridge 1.0 mi downstream.**EXTREMES FOR PERIOD OF DAILY RECORD.**--

WATER TEMPERATURE: Maximum, 34.0°C, Oct. 2, 1968; minimum, 0.0°C, on several days during December 1970, January and March 1971, and February 1979.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum daily mean, 1,400 mg/L, June 22, 1973; minimum daily mean, 2 mg/L on many days.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 8,570 tons, Jan. 27, 1976; minimum daily, 0.45 tons, July 13.

**EXTREMES FOR CURRENT YEAR.**--

WATER TEMPERATURE: Maximum, 22.0°C, several days during summer; minimum, 1.0°C, Jan. 17, 18, 25.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	18.0	18.5	12.0	11.5	12.0	8.5	8.0	8.5	3.0	2.5	3.0
2	19.0	18.0	18.5	13.0	11.5	12.0	8.0	8.0	8.0	3.0	3.0	3.0
3	18.5	18.0	18.0	13.0	12.0	12.5	8.0	7.5	7.5	3.5	3.0	3.0
4	18.0	17.5	18.0	12.5	12.0	12.0	8.0	7.5	8.0	3.5	3.0	3.5
5	18.0	17.5	17.5	12.0	11.5	12.0	8.0	7.5	8.0	4.0	3.5	3.5
6	18.0	17.5	17.5	12.0	11.5	12.0	8.5	7.5	8.0	4.0	3.5	3.5
7	17.5	17.0	17.5	11.5	11.0	11.5	---	---	---	4.0	3.5	3.5
8	17.0	16.5	17.0	11.5	11.0	11.0	7.5	7.5	7.5	3.5	3.0	3.5
9	16.5	16.0	16.5	11.5	11.0	11.0	7.5	7.5	7.5	4.0	3.5	3.5
10	16.0	15.5	16.0	11.5	11.0	11.0	7.5	7.0	7.5	4.0	3.5	3.5
11	16.5	15.5	16.0	11.5	10.5	11.0	7.0	6.5	7.0	3.5	3.5	3.5
12	16.5	15.5	16.0	11.0	10.5	10.5	7.0	6.5	6.5	3.5	3.5	3.5
13	17.0	16.0	16.5	11.0	10.0	10.5	6.5	6.5	6.5	3.5	3.0	3.5
14	16.5	16.0	16.5	10.5	10.0	10.5	---	---	---	3.0	2.5	2.5
15	16.0	16.0	16.0	10.5	10.0	10.0	6.5	6.5	6.5	2.5	2.0	2.5
16	---	---	---	10.0	9.0	9.5	---	---	---	3.0	2.0	2.5
17	---	---	---	9.5	9.0	9.0	6.0	6.0	6.0	2.0	1.0	1.5
18	---	---	---	9.5	8.5	9.0	6.0	5.5	6.0	1.5	1.0	1.0
19	15.0	14.0	14.5	9.0	8.5	9.0	6.0	5.5	5.5	1.5	1.5	1.5
20	14.5	14.0	14.5	9.5	8.5	9.0	5.5	5.5	5.5	1.5	1.5	1.5
21	14.5	13.5	14.0	9.0	8.0	8.5	5.5	5.0	5.5	1.5	1.5	1.5
22	14.5	13.5	14.0	8.5	8.0	8.0	5.0	5.0	5.0	2.0	1.5	1.5
23	14.0	13.5	14.0	8.0	7.5	8.0	5.0	4.5	5.0	2.0	2.0	2.0
24	14.0	13.0	13.5	8.0	7.5	8.0	4.5	4.0	4.5	2.5	2.0	2.0
25	14.5	13.0	13.5	8.5	7.5	8.0	4.0	4.0	4.0	2.0	1.0	2.0
26	13.5	13.0	13.0	9.5	8.0	8.0	4.0	3.5	3.5	2.5	2.0	2.0
27	13.0	12.5	13.0	9.5	8.0	8.5	3.5	3.0	3.5	2.0	1.5	2.0
28	13.0	12.0	12.5	9.0	8.0	8.5	3.5	3.0	3.0	2.0	1.5	2.0
29	12.5	12.0	12.0	---	---	---	3.0	2.5	3.0	2.5	2.0	2.0
30	12.5	11.5	12.0	---	---	---	3.0	2.5	3.0	2.5	1.5	2.0
31	12.0	11.5	12.0	---	---	---	3.0	2.5	3.0	2.5	2.0	2.0
MONTH	19.0	11.5	15.3	13.0	7.5	10.0	8.5	2.5	5.8	4.0	1.0	2.5

