

## 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	51	117	93	365	252	493	204	266	104	65	48
2	182	52	95	105	365	251	491	218	241	104	50	48
3	232	51	95	133	365	251	420	188	241	104	50	48
4	231	52	82	152	365	251	367	169	187	104	50	48
5	401	52	72	151	364	250	264	164	153	105	50	48
6	464	52	72	150	363	248	185	164	127	106	50	48
7	414	82	72	151	330	297	198	164	111	106	50	48
8	412	77	72	150	306	303	198	132	111	106	49	49
9	408	64	71	120	263	230	199	107	111	133	50	50
10	355	74	70	98	236	218	200	122	111	132	50	50
11	264	74	70	98	238	220	203	133	111	107	50	51
12	232	74	71	98	335	219	285	133	105	87	50	51
13	232	101	71	98	426	292	367	133	150	71	97	50
14	231	169	158	98	464	499	380	133	131	72	136	49
15	230	139	236	98	366	498	372	132	95	72	123	48
16	147	84	237	98	280	469	443	133	95	83	90	50
17	73	72	247	113	269	445	555	133	95	107	57	50
18	65	72	1140	139	270	445	702	133	178	169	48	50
19	66	72	1870	150	270	444	551	132	215	149	46	91
20	66	60	1830	151	309	443	428	132	197	100	47	97
21	67	46	983	152	316	443	429	192	120	99	48	49
22	67	46	351	215	279	506	430	273	88	99	48	49
23	67	46	257	264	254	475	348	299	98	70	49	50
24	67	46	256	262	253	414	262	212	98	46	70	51
25	67	46	255	261	254	413	235	120	184	49	97	139
26	81	47	162	193	252	336	258	103	242	148	97	206
27	91	118	91	145	252	191	271	104	239	161	69	164
28	91	183	91	145	252	177	271	104	155	116	46	135
29	91	141	92	144	---	166	273	212	104	117	46	135
30	68	126	93	207	---	304	212	296	104	97	46	135
31	52	---	93	319	---	492	---	293	---	86	47	---
TOTAL	5623	2369	9472	4751	8661	10442	10290	5167	4463	3209	1921	2185
MEAN	181	79.0	306	153	309	337	343	167	149	104	62.0	72.8
MAX	464	183	1870	319	464	506	702	299	266	169	136	206
MIN	52	46	70	93	236	166	185	103	88	46	46	48

SCHUYLKILL RIVER BASIN

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	205	228	337	348	353	455	333	298	235	181	122	142
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001	
ANNUAL TOTAL	97899		68553			
ANNUAL MEAN	267		188		270	
HIGHEST ANNUAL MEAN					435	
LOWEST ANNUAL MEAN					127	
HIGHEST DAILY MEAN	2580		Jun 27		1870	
LOWEST DAILY MEAN	46		Nov 21-25		46	
ANNUAL SEVEN-DAY MINIMUM	48		Nov 20		47	
MAXIMUM PEAK FLOW					1920	
MAXIMUM PEAK STAGE					5.87	
10 PERCENT EXCEEDS	469		369		527	
50 PERCENT EXCEEDS	169		133		174	
90 PERCENT EXCEEDS	72		50		65	

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

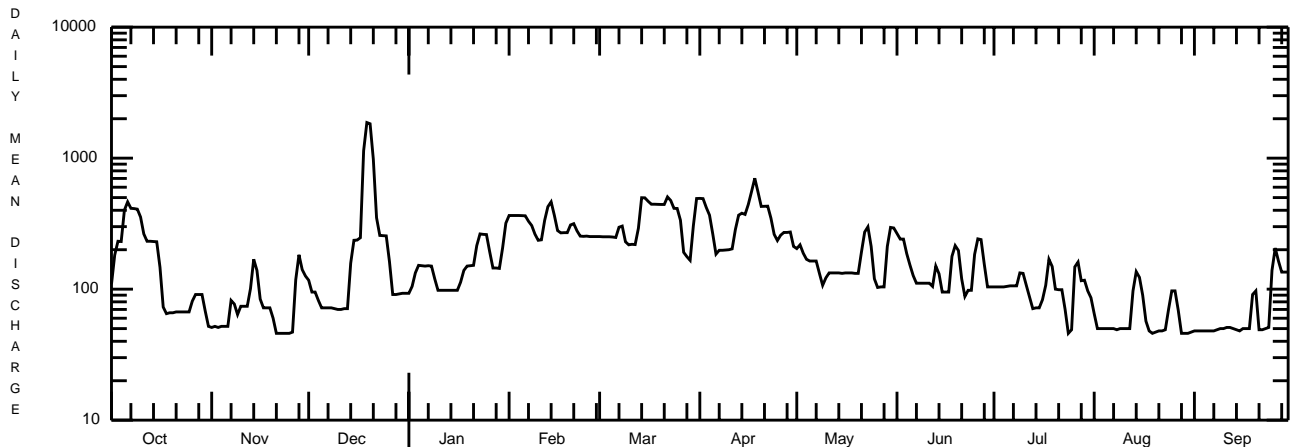
SUMMARY STATISTICS WATER YEARS 1965 - 1978

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
MAXIMUM PEAK FLOW	b16100	Jun 22 1972
MAXIMUM PEAK STAGE	c18.70	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 Also July 24, Aug. 19, 28-30.

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

c From floodmark.



OCTOBER 1, 2000 TO SEPTEMBER 30, 2001

## 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.**--Water temperature records rated good. Temperature records collected at streamgage. 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, 23.0°C, July 23; minimum, 1.5°C, Dec. 28, 29.

## WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.0	17.5	17.5	14.0	12.5	13.0	6.5	6.0	6.5	2.5	2.0	2.0
2	18.0	17.5	17.5	13.5	12.5	13.0	6.0	5.5	6.0	2.5	2.0	2.0
3	18.0	17.5	18.0	13.5	12.5	13.0	6.0	5.5	5.5	2.0	2.0	2.0
4	18.0	17.5	17.5	13.0	12.0	12.5	6.0	5.5	5.5	2.5	2.0	2.0
5	18.0	17.5	18.0	12.5	11.5	12.0	6.0	5.0	5.5	2.5	2.0	2.0
6	18.5	18.0	18.0	12.5	11.5	11.5	5.0	4.5	5.0	2.5	2.0	2.0
7	18.5	18.0	18.0	12.0	11.0	11.5	5.0	4.5	4.5	2.5	2.0	2.0
8	18.0	17.5	17.5	12.5	11.5	12.0	5.0	4.0	4.5	2.5	2.0	2.5
9	17.5	17.0	17.5	12.0	11.5	12.0	4.5	4.0	4.0	2.5	2.0	2.0
10	17.0	16.5	17.0	12.5	11.5	12.0	4.5	3.5	4.0	2.5	2.0	2.5
11	17.0	16.5	16.5	12.0	11.5	11.5	4.5	4.0	4.0	2.5	2.0	2.5
12	16.5	15.5	16.0	12.0	11.0	11.5	4.5	3.5	4.0	2.5	2.0	2.5
13	16.0	15.0	15.5	11.5	11.0	11.5	4.0	3.5	3.5	2.5	2.0	2.5
14	15.5	15.0	15.0	11.5	11.0	11.5	4.0	3.5	4.0	3.0	2.0	2.5
15	15.5	15.0	15.0	11.0	10.5	11.0	4.0	3.5	3.5	2.5	2.5	2.5
16	15.5	14.5	15.0	11.0	10.5	10.5	4.0	3.5	3.5	2.5	2.5	2.5
17	14.5	14.0	14.5	11.0	10.0	10.5	4.0	3.5	4.0	3.0	2.5	2.5
18	15.0	14.0	14.5	10.5	9.5	10.0	4.0	3.5	3.5	2.5	2.5	2.5
19	15.5	14.0	14.5	10.0	9.0	9.5	3.5	3.0	3.5	2.5	2.5	2.5
20	15.5	14.0	14.5	9.5	8.5	9.0	3.0	3.0	3.0	2.5	2.5	2.5
21	15.5	14.0	14.5	9.0	7.5	8.5	3.0	3.0	3.0	3.0	2.0	2.5
22	15.5	14.0	14.5	8.0	7.0	7.5	3.0	2.5	3.0	3.0	2.5	2.5
23	15.0	14.0	14.5	7.5	6.5	7.0	2.5	2.0	2.5	3.0	2.5	2.5
24	15.5	14.0	14.5	7.0	6.5	6.5	2.5	2.0	2.5	3.0	2.5	2.5
25	15.5	14.5	14.5	7.0	6.0	6.5	2.0	2.0	2.0	3.0	2.5	2.5
26	15.0	14.0	14.5	7.0	6.5	7.0	2.0	2.0	2.0	3.0	2.5	3.0
27	15.0	14.5	14.5	7.0	6.5	7.0	2.5	2.0	2.0	3.0	2.5	3.0
28	15.0	14.0	14.5	7.0	6.5	7.0	2.0	1.5	2.0	3.0	2.5	3.0
29	14.5	13.5	14.0	7.0	6.5	6.5	2.5	1.5	2.0	3.0	2.5	3.0
30	14.5	13.0	13.5	7.0	6.5	6.5	2.0	2.0	2.0	3.0	3.0	3.0
31	14.0	12.5	13.0	---	---	---	2.5	2.0	2.0	3.0	3.0	3.0
MONTH	18.5	12.5	15.6	14.0	6.0	10.0	6.5	1.5	3.6	3.0	2.0	2.5



## SCHUYLKILL RIVER BASIN

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

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, IN CUBIC FEET PER SECOND (00060)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	TEMPER- ATURE WATER (DEG C) (00010)
NOV 2000				
14...	0823	169	0	--
14...	0824	--	1	11.4
14...	0825	--	10	11.5
14...	0826	--	20	11.5
14...	0827	--	30	11.5
14...	0828	--	40	11.5
14...	0829	--	50	11.5
14...	0830	--	60	11.5
14...	0831	--	78	11.5
14...	0832	--	80	11.4
14...	0833	--	90	11.3
14...	0834	--	99	10.6
14...	0835	--	100	--
FEB 2001				
13...	0902	426	0	--
13...	0903	--	2	3.3
13...	0904	--	12	3.2
13...	0905	--	22	3.2
13...	0906	--	32	3.2
13...	0907	--	42	3.2
13...	0908	--	52	3.2
13...	0909	--	62	3.2
13...	0910	--	72	3.2
13...	0911	--	82	3.2
13...	0912	--	92	3.1
13...	0913	--	102	3.1
13...	0914	--	113	--
MAY				
03...	0806	188	0	--
03...	0807	--	3	14.3
03...	0808	--	8	14.2
03...	0809	--	13	14.2
03...	0810	--	18	14.2
03...	0811	--	23	14.1
03...	0812	--	28	14.1
03...	0813	--	33	14.1
03...	0814	--	38	14.1
03...	0815	--	43	14.1
03...	0816	--	48	14.1
03...	0817	--	53	14.1
03...	0818	--	58	14.1
03...	0819	--	63	14.1
03...	0820	--	68	14.1
03...	0821	--	73	14.1
03...	0822	--	78	14.0
03...	0823	--	83	14.0
03...	0824	--	88	13.9
03...	0825	--	93	13.9
03...	0826	--	98	13.8
03...	0827	--	108	--
SEP				
04...	1312	48	90	--
04...	1313	--	88	29.3
04...	1314	--	83	26.8
04...	1315	--	78	25.6
04...	1316	--	73	25.6
04...	1317	--	68	24.9
04...	1318	--	63	24.2
04...	1319	--	58	23.5
04...	1320	--	53	22.9
04...	1321	--	48	22.3
04...	1322	--	43	21.8
04...	1323	--	38	21.5
04...	1324	--	33	21.2
04...	1325	--	28	21.1
04...	1326	--	23	20.8
04...	1327	--	18	20.8
04...	1328	--	13	20.7
04...	1329	--	8	20.9
04...	1330	--	3	21.2
04...	1331	--	0	--