

SCHUYLKILL RIVER BASIN

01471000 TULPEHOCKEN CREEK NEAR READING, PA
(Pennsylvania Water-Quality Network Station)

LOCATION.--Lat 40°22'08", long 75°58'46", Berks County, Hydrologic Unit 02040203, on right bank 15 ft upstream from covered bridge on Township Route 921, 1.0 mi downstream from Cacoosing Creek, 2.5 mi upstream from mouth, and 3.5 mi northwest of town square in Reading.

DRAINAGE AREA.--211 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1950 to current year.

REVISED RECORDS.--WSP 1382: 1951-53, 1954 (M). WSP 2102: 1965 (M). WDR PA-72-1: 1971 (M).

GAGE.--Water-stage recorder. Datum of gage is 216.60 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since April 1979 by Blue Marsh Lake (station 01470870) 3.9 mi upstream. Several measurements of water temperature were made during the year. Satellite and landline 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	144	52	38	37	116	66	194	391	157	231	58	67
2	131	46	36	48	116	67	137	510	156	154	58	67
3	130	40	35	63	114	92	86	650	154	114	70	64
4	129	40	52	63	127	76	85	482	128	115	66	62
5	129	45	74	64	145	73	82	474	103	106	64	63
6	132	56	73	65	145	73	81	375	215	93	62	63
7	133	56	74	66	130	72	80	255	359	96	61	62
8	133	56	76	71	109	71	99	226	388	85	60	63
9	179	56	84	82	108	72	146	239	302	77	60	77
10	227	57	76	83	108	75	171	227	157	77	60	107
11	226	56	89	81	108	71	159	221	105	76	60	107
12	226	55	111	70	106	70	123	230	104	72	59	110
13	227	56	111	68	105	73	124	431	102	67	57	127
14	229	55	115	90	104	72	127	667	123	69	75	149
15	272	81	115	115	104	71	310	556	131	68	108	151
16	300	113	112	115	105	71	399	370	128	66	109	115
17	301	113	104	114	105	71	371	278	134	66	109	60
18	299	113	88	97	103	90	359	341	149	66	110	60
19	219	102	97	82	90	86	269	285	151	67	109	61
20	136	88	114	82	52	128	201	512	169	67	93	61
21	135	88	113	81	52	171	197	691	170	66	62	62
22	135	89	113	80	51	204	221	617	142	61	62	65
23	106	88	113	81	51	196	233	430	142	55	65	131
24	53	87	115	110	51	193	229	286	107	59	74	175
25	52	104	113	170	51	191	191	247	66	57	68	61
26	52	90	87	231	58	194	142	246	66	59	64	65
27	52	37	49	230	67	436	139	243	104	60	62	120
28	52	36	38	207	66	413	210	189	211	62	63	87
29	53	35	39	137	---	238	286	146	258	59	79	71
30	52	37	38	113	---	193	370	152	253	58	66	69
31	51	---	38	116	---	193	---	159	---	58	64	---
TOTAL	4695	2027	2530	3112	2647	4162	5821	11126	4934	2486	2237	2602
MEAN	151.5	67.57	81.61	100.4	94.54	134.3	194.0	358.9	164.5	80.19	72.16	86.73
MAX	301	113	115	231	145	436	399	691	388	231	110	175
MIN	51	35	35	37	51	66	80	146	66	55	57	60

SCHUYLKILL RIVER BASIN

01471000 TULPEHOCKEN CREEK NEAR READING, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	234.8	269.6	385.3	356.4	385.4	507.8	399.4	362.8	280.9	206.7	145.7	160.5
MAX	651	589	1220	1069	663	1604	1191	1226	673	661	331	456
(WY)	1997	1997	1997	1996	1986	1994	1983	1989	1982	1984	1994	1987
MIN	78.3	67.6	80.1	99.8	94.5	134	64.2	155	98.8	80.2	63.1	63.0
(WY)	1996	2002	1999	1981	2002	2002	1985	1999	1999	2002	1981	1983

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1980 - 2002
ANNUAL TOTAL	70531	48379	
ANNUAL MEAN	193	133	308
HIGHEST ANNUAL MEAN			531
LOWEST ANNUAL MEAN			133
HIGHEST DAILY MEAN	830	Apr 18	691
LOWEST DAILY MEAN	35	Nov 29, Dec 3	35
ANNUAL SEVEN-DAY MINIMUM	36	Nov 27	36
MAXIMUM PEAK FLOW		754	May 13
MAXIMUM PEAK STAGE		2.48	May 13
10 PERCENT EXCEEDS	393		254
50 PERCENT EXCEEDS	147		102
90 PERCENT EXCEEDS	56		55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1979, BY WATER YEAR (WY) (PRIOR TO REGULATION)

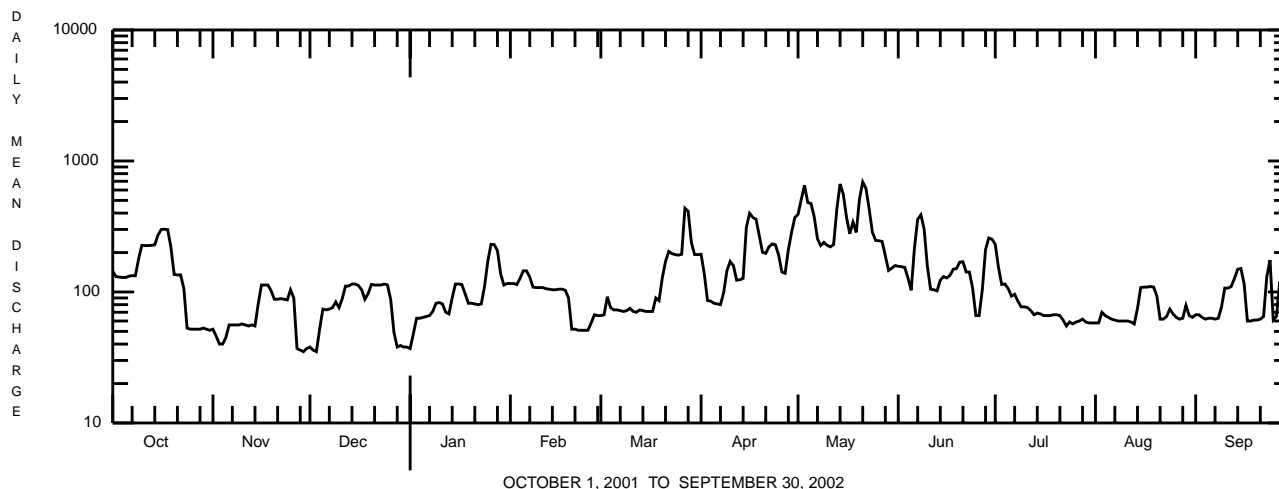
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	178	259	360	405	444	522	451	318	263	210	178	192
MAX	689	490	829	1193	917	914	806	712	1434	645	481	588
(WY)	1977	1973	1978	1979	1971	1978	1970	1953	1972	1969	1955	1975
MIN	55.8	67.5	84.4	124	178	202	170	116	72.8	57.5	41.9	54.8
(WY)	1964	1966	1966	1966	1969	1969	1966	1965	1965	1966	1966	1957

SUMMARY STATISTICS WATER YEARS 1951 - 1979

ANNUAL MEAN	314
HIGHEST ANNUAL MEAN	491
LOWEST ANNUAL MEAN	144
HIGHEST DAILY MEAN	12000
LOWEST DAILY MEAN	33
ANNUAL SEVEN-DAY MINIMUM	35
MAXIMUM PEAK FLOW	a17000
MAXIMUM PEAK STAGE	b15.65
INSTANTANEOUS LOW FLOW	23
ANNUAL RUNOFF (CFSM)	1.49
ANNUAL RUNOFF (INCHES)	20.23
10 PERCENT EXCEEDS	613
50 PERCENT EXCEEDS	211
90 PERCENT EXCEEDS	86

a From rating curve extended above 3,600 ft³/s on basis of contracted-opening measurement of peak flow.

b From floodmark in gage shelter.



OCTOBER 1, 2001 TO SEPTEMBER 30, 2002

SCHUYLKILL RIVER BASIN

01471000 TULPEHOCKEN CREEK NEAR READING, 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 410-425.

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) (00028)	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)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)
APR 2002 11...	1230	9813	151	40	12.1	8.5	375	11.3	170	45.5	13.6	114	24.4
JUN 13...	1145	9813	102	40	7.5	7.5	398	18.8	180	49.4	13.6	124	23.2
AUG 21...	1330	9813	61	40	8.9	7.8	422	19.3	190	51.6	13.9	146	22.5

Date	RESIDUE AT 105 DEG. C, DIS- SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, AMMONIA TOTAL (MG/L) AS N (00610)	NITRO- GEN, NITRATE TOTAL (MG/L) AS N (00620)	NITRO- GEN, NITRITE TOTAL (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)	IRON, TOTAL RECOV- ERABLE (µG/L) AS FE (01045)	LEAD, TOTAL RECOV- ERABLE (µG/L) AS PB (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (µG/L) AS MN (01055)
APR 2002 11...	250	14	<.020	3.65	<.040	4.3	.03	.070	3.2	<10	120	<1.0	60
JUN 13...	298	6	.060	4.08	<.040	4.7	.17	.180	2.9	10	160	<1.0	90
AUG 21...	330	2	.060	2.80	.090	3.4	.14	.180	3.0	<10	90	<1.0	60

Date	NICKEL, TOTAL RECOV- ERABLE (µG/L) AS NI (01067)	ZINC, TOTAL RECOV- ERABLE (µG/L) AS ZN (01092)
APR 2002 11...	<50	<10
JUN 13...	<50	10
AUG 21...	<50	<10