

## SCHUYLKILL RIVER BASIN

01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued  
(Pennsylvania Water-Quality Network Station)

**LOCATION.**--Lat 40°31'21", long 75°59'55", Berks County, Hydrologic Unit 02040203, on right bank 50 ft upstream from bridge on Township Route 558 at Berne, 0.5 mi upstream from Mill Creek, and 6.5 mi downstream from Little Schuylkill River.

**DRAINAGE AREA.**--355 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

**PERIOD OF RECORD.**--August 1947 to current year.

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 310.65 ft above National Geodetic Vertical Datum of 1929.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Some regulation at low flow by mine pumpage and by Still Creek Reservoir (station 01469200) about 25 mi upstream. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 4,400 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)
Apr. 15	0800	*3,230	*7.36	(No peaks above base discharge.)			

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	178	124	405	e220	357	190	1120	1320	487	245	112	107
2	173	124	271	e210	381	187	903	1780	443	234	106	193
3	167	123	227	e230	333	622	816	1840	402	221	111	126
4	156	116	209	e245	328	511	760	1530	382	210	112	113
5	151	112	197	e240	320	409	669	1330	376	196	111	105
6	144	116	193	228	309	381	623	1170	443	183	113	100
7	139	119	204	e235	305	369	586	1050	796	183	107	98
8	123	120	202	e215	300	345	542	943	472	185	107	88
9	125	120	375	e205	274	327	530	1080	389	184	106	82
10	127	115	303	e190	261	615	615	992	349	204	103	80
11	127	108	253	220	370	492	508	785	319	177	97	79
12	122	104	230	258	326	452	484	753	375	168	92	76
13	117	104	225	233	289	454	489	888	628	159	93	75
14	113	106	246	219	258	449	599	1220	511	156	88	77
15	332	108	315	210	252	420	2280	994	566	161	86	101
16	207	109	247	208	256	411	1860	921	469	151	118	482
17	199	106	236	202	258	385	1480	874	406	142	103	249
18	175	104	456	198	245	525	1240	2110	350	143	90	158
19	150	104	470	190	233	591	1130	2070	451	145	86	150
20	137	121	412	212	238	906	1050	1720	361	147	98	174
21	130	129	366	233	249	1540	899	1450	324	140	95	169
22	126	118	326	200	240	1280	864	1230	303	136	91	202
23	122	117	302	196	226	1090	771	1060	290	143	106	309
24	122	113	341	290	214	949	668	948	277	227	113	231
25	123	206	309	486	210	836	655	830	268	157	144	185
26	122	661	275	413	208	780	657	752	255	141	103	182
27	115	316	248	369	216	2100	571	696	275	138	92	739
28	114	247	266	343	202	1650	934	637	568	138	87	1090
29	114	225	e260	326	---	1420	1680	611	306	135	124	489
30	116	247	e250	324	---	1220	1390	563	262	124	149	332
31	120	---	e225	333	---	1050	---	513	---	120	104	---
TOTAL	4486	4642	8844	7881	7658	22956	27373	34660	12103	5193	3247	6641
MEAN	145	155	285	254	274	741	912	1118	403	168	105	221
MAX	332	661	470	486	381	2100	2280	2110	796	245	149	1090
MIN	113	104	193	190	202	187	484	513	255	120	86	75
CFSM	0.41	0.44	0.80	0.72	0.77	2.09	2.57	3.15	1.14	0.47	0.30	0.62
IN.	0.47	0.49	0.93	0.83	0.80	2.41	2.87	3.63	1.27	0.54	0.34	0.70

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2002, BY WATER YEAR (WY)

MEAN	417	682	914	812	880	1176	1123	875	560	371	334	353
MAX	1896	1631	2932	2547	1735	2525	3319	2689	3410	1240	1594	1381
(WY)	1977	1971	1997	1979	1981	1994	1993	1989	1972	1984	1955	1987
MIN	75.7	120	125	88.4	274	462	424	314	148	104	105	94.6
(WY)	1964	1965	1981	1981	2002	1985	1985	1999	1965	1999	2002	1964

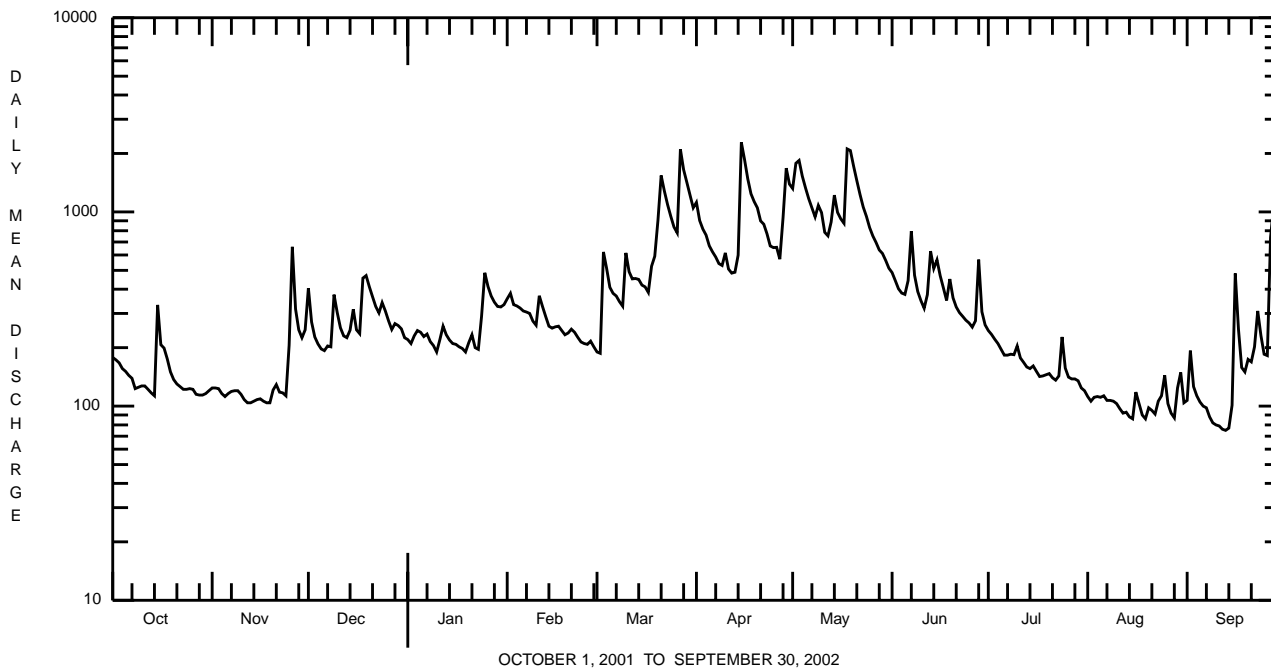
e Estimated.

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1947 - 2002	
ANNUAL TOTAL	144017		145684			
ANNUAL MEAN	395		399		707	
HIGHEST ANNUAL MEAN					1182	1952
LOWEST ANNUAL MEAN					321	1965
HIGHEST DAILY MEAN	1980	Mar 30	2280	Apr 15	26000	Jun 23 1972
LOWEST DAILY MEAN	97	Sep 13	75	Sep 13	40	Sep 2 1949
ANNUAL SEVEN-DAY MINIMUM	106	Nov 12	80	Sep 8	52	Aug 30 1999
MAXIMUM PEAK FLOW			3230	Apr 15	<b>a</b> 42800	Jun 22 1972
MAXIMUM PEAK STAGE			7.36	Apr 15	<b>b</b> 19.00	Jun 22 1972
INSTANTANEOUS LOW FLOW			70	Sep 12,13	31	Sep 2 1949
ANNUAL RUNOFF (CFSM)	1.11		1.12		1.99	
ANNUAL RUNOFF (INCHES)	15.09		15.27		27.07	
10 PERCENT EXCEEDS	844		948		1460	
50 PERCENT EXCEEDS	275		245		448	
90 PERCENT EXCEEDS	119		107		158	

**a** From rating curve extended above 20,800 ft<sup>3</sup>/s.  
**b** From floodmark in gage shelter.



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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 (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA) (00916)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG) (00927)
APR 2002 11...	1000	9813	513	40	10.6	7.1	276	12.0	100	18.8	20.4	11.3	12.2
JUN 13...	0955	9813	619	40	7.6	6.9	318	21.7	130	26.5	25.8	15.6	15.5
AUG 21...	1020	9813	98	40	7.3	7.5	557	23.4	230	47.7	46.7	29.0	28.4

Date	ANC WATER UNFLTRD FET LAB (MG/L AS CACO3) (00417)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L) (00515)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (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)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COPPER, DIS-SOLVED (µG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (µG/L AS CU) (01042)
APR 2002 11...	18	81.4	220	12	.020	.98	<.040	1.2	.02	.024	1.3	<4	<4
JUN 13...	26	102	278	2	.030	.90	<.040	1.3	.03	.047	2.1	<4	<4
AUG 21...	38	207	470	8	<.020	1.03	<.040	1.4	.03	.042	.8	<4	<4

Date	IRON, DIS-SOLVED (µG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (µG/L AS FE) (01045)	LEAD, DIS-SOLVED (µG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (µG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (µG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (µG/L AS MN) (01055)	ZINC, DIS-SOLVED (µG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (µG/L AS ZN) (01092)
APR 2002 11...	40	320	<1.0	<1.0	440	500	10	20
JUN 13...	50	660	<1.0	1.8	140	360	7.3	20
AUG 21...	60	160	<1.0	<1.0	40	130	<5.0	9.6