

SCHUYLKILL RIVER BASIN

01470500 SCHUYLKILL RIVER AT BERNE, PA

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 mi².

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 310.65 ft above sea level.

REMARKS.--Records fair 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 telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,400 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 18	2230	5,240	8.43	Sept. 16	2330	*18,700	*13.34
Jan. 24	1530	8,870	10.02				

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	137	188	179	e111	897	685	644	423	219	146	75	45
2	129	185	171	e108	1530	568	633	400	219	141	70	46
3	127	180	174	e106	1620	506	584	378	229	135	61	44
4	175	218	174	e600	1400	969	557	383	209	130	68	44
5	178	219	168	e460	1250	907	544	378	204	123	69	55
6	148	217	157	e370	1110	865	492	359	192	116	65	363
7	141	210	152	e320	1020	865	478	355	185	112	63	1120
8	415	203	154	419	987	746	446	370	198	105	72	587
9	574	200	167	1090	886	704	495	391	193	104	105	300
10	1240	190	149	1140	831	675	775	323	179	122	72	226
11	722	241	147	760	771	640	629	311	179	147	72	176
12	494	214	143	660	757	579	760	295	179	114	71	138
13	391	177	138	471	894	538	687	280	173	101	82	121
14	525	174	139	421	768	525	654	288	172	97	827	109
15	428	162	142	454	723	581	623	277	307	99	289	134
16	355	152	137	624	699	569	620	252	194	97	163	4950
17	316	144	140	500	685	574	628	250	186	99	131	7150
18	289	139	142	1660	748	629	567	250	423	97	120	2000
19	272	134	142	2610	691	611	533	266	247	98	106	1210
20	246	142	138	1540	629	583	542	270	202	96	103	857
21	225	156	137	1210	592	605	538	245	187	118	117	807
22	210	145	152	1380	541	2010	588	230	178	99	103	928
23	212	141	154	1750	499	1750	604	273	168	98	93	738
24	219	141	136	6090	490	1480	692	395	161	86	83	609
25	201	137	139	4970	472	1270	593	480	149	83	83	531
26	201	355	127	2980	463	1080	578	329	150	77	103	461
27	196	339	e126	2140	443	948	533	290	144	75	108	413
28	198	222	e122	1710	532	895	484	273	140	78	96	396
29	218	194	e120	1450	---	822	469	255	220	76	82	393
30	200	184	e118	1200	---	734	444	241	166	75	72	2410
31	194	---	e113	1030	---	667	---	225	---	75	58	---
TOTAL	9576	5703	4497	40334	22928	25580	17414	9735	5952	3219	3682	27361
MEAN	309	190	145	1301	819	825	580	314	198	104	119	912
MAX	1240	355	179	6090	1620	2010	775	480	423	147	827	7150
MIN	127	134	113	106	443	506	444	225	140	75	58	44
CFSM	.87	.54	.41	3.67	2.31	2.32	1.64	.88	.56	.29	.33	2.57
IN.	1.00	.60	.47	4.23	2.40	2.68	1.82	1.02	.62	.34	.39	2.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1999, BY WATER YEAR (WY)

MEAN	420	702	929	837	900	1177	1134	878	562	376	334	358
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	290	462	424	314	148	104	119	94.6
(WY)	1964	1965	1981	1981	1980	1985	1985	1999	1965	1999	1999	1964

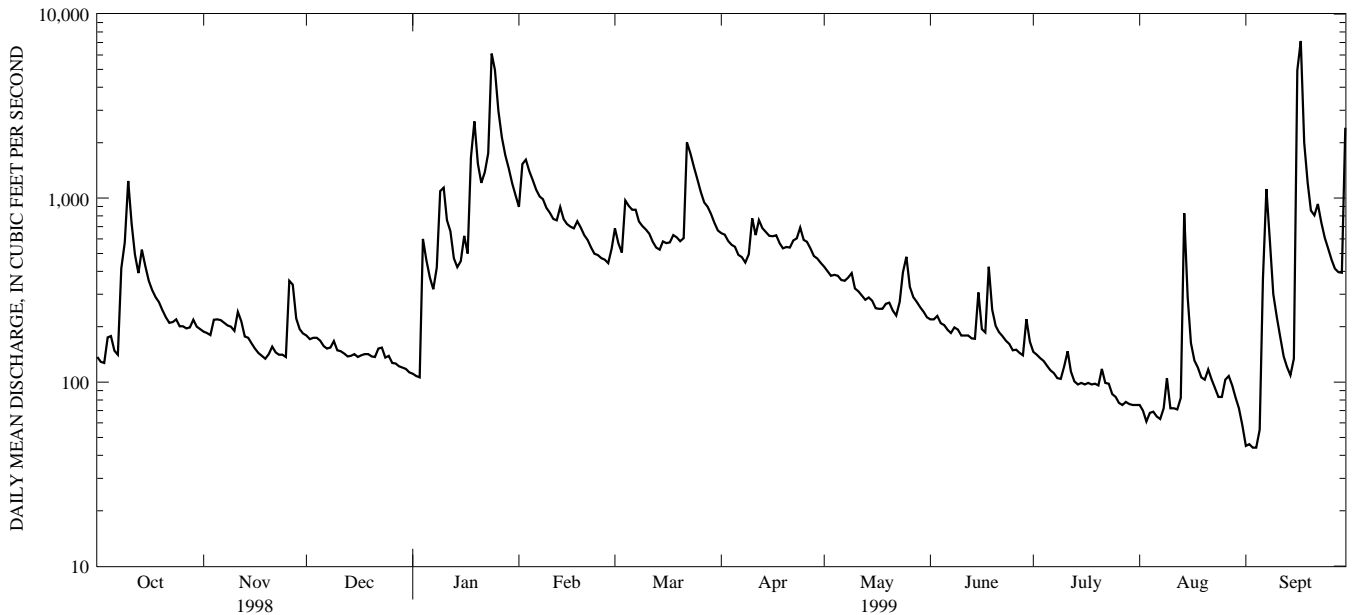
e Estimated.

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01470500 SCHUYLKILL RIVER AT BERNE, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1947 - 1999	
ANNUAL TOTAL	273006		175981			
ANNUAL MEAN	748		482		716	
HIGHEST ANNUAL MEAN					1182	1952
LOWEST ANNUAL MEAN					321	1965
HIGHEST DAILY MEAN	4370	May 12	7150	Sep 17	26000	Jun 23 1972
LOWEST DAILY MEAN	e113	Dec 31	44	Sep 3,4	40	Sep 2 1949
ANNUAL SEVEN-DAY MINIMUM	a124	Dec 25	52	Aug 30	52	Aug 30 1999
INSTANTANEOUS PEAK FLOW			18700	Sep 16	b42800	Jun 22 1972
INSTANTANEOUS PEAK STAGE			13.34	Sep 16	c19.00	Jun 22 1972
INSTANTANEOUS LOW FLOW			41	Aug 31, Sep 1-4	31	Sep 2 1949
ANNUAL RUNOFF (CFSM)	2.11		1.36		2.02	
ANNUAL RUNOFF (INCHES)	28.61		18.44		27.41	
10 PERCENT EXCEEDS	1730		956		1480	
50 PERCENT EXCEEDS	435		246		450	
90 PERCENT EXCEEDS	141		98		158	

- a Computed using estimated daily discharges.
- b From rating curve extended above 20,800 ft³/s.
- c From floodmark in gage shelter.
- e Estimated.



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