

SCHUYLKILL RIVER BASIN

01473000 PERKIOMEN CREEK AT GRATERFORD, PA

LOCATION.--Lat 40°13'46", long 75°27'07", Montgomery County, Hydrologic Unit 02040203, on left bank 1,650 ft upstream from highway bridge at Graterford, 0.5 mi upstream from Lodel Creek, and 2.5 mi north of Collegeville.

DRAINAGE AREA.--279 mi².

PERIOD OF RECORD.--June 1914 to current year. Monthly discharge only for some periods, published in WSP 1302. Prior to October 1950, published as "at Graters Ford."

REVISED RECORDS.--WSP 756: Drainage area. WSP 1171: 1935(M). WSP 1302: 1915-16, 1927-29. WSP 1382: 1932-33, 1935, 1937, 1942, 1947, 1948(M), 1949(P), 1950(M), 1951-52(P), WDR PA-91-1: 1989-90 (adjusted means and monthly runoff).

GAGE.--Water-stage recorder. Datum of gage is 112.66 ft above sea level. June 1914, to Sept. 6, 1921, nonrecording gage at site 1,650 ft downstream at datum 3.29 ft lower. Sept. 7, 1921, to Sept. 13, 1927, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Some regulation since Dec. 21, 1956 by Green Lane Reservoir (station 01472200) 10.5 mi upstream. Diversion from the Delaware River at Point Pleasant to Bradshaw Reservoir (Geddes Creek Basin) has been pumped from the reservoir to the East Branch Perkiomen Creek since August 1989. See station 01472618, Tributary from Bradshaw Reservoir, for pumpage data. Several measurements of water temperature were made during the year. Satellite and landline telemetry at station.

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	112	127	137	e110	205	1200	241	194	141	117	111	120
2	107	128	135	e105	1470	600	282	185	141	117	109	118
3	113	127	134	e1800	1570	393	249	180	150	117	109	115
4	121	128	135	746	666	1280	230	176	147	112	109	113
5	114	129	135	e240	468	614	222	175	134	112	101	116
6	114	128	136	e210	360	461	197	168	130	110	111	133
7	111	127	135	e200	324	753	190	174	129	109	113	129
8	485	130	138	e210	371	382	186	174	124	108	126	132
9	560	130	143	e300	423	310	268	209	115	109	121	130
10	607	130	133	e600	372	291	1450	183	122	109	117	158
11	267	143	130	e250	305	274	658	157	122	101	114	142
12	177	142	130	e210	286	240	1030	145	122	102	122	127
13	155	137	130	e210	845	209	552	141	124	110	122	123
14	137	134	128	e200	477	207	402	137	132	109	548	119
15	129	131	126	e1100	329	336	333	147	142	111	182	132
16	128	130	123	824	298	595	353	139	136	110	132	12700
17	128	130	123	550	287	796	569	144	129	109	122	8600
18	125	131	121	3630	1620	798	387	143	128	108	115	831
19	123	129	120	2660	1150	441	304	226	126	108	111	428
20	127	130	121	684	578	326	280	326	124	114	111	312
21	125	132	121	443	420	822	336	201	128	111	112	305
22	124	130	123	625	317	6900	300	165	120	111	110	442
23	124	130	117	697	253	1460	321	228	125	111	109	353
24	124	129	109	3090	245	766	662	616	122	109	111	262
25	122	130	e108	1760	229	575	371	541	120	110	110	221
26	123	194	e106	791	222	430	301	279	121	108	501	193
27	125	222	e104	509	210	362	262	212	118	104	280	179
28	127	157	e104	412	270	372	236	187	119	108	172	175
29	129	144	e115	337	---	362	222	170	118	107	134	165
30	127	141	e120	276	---	293	209	145	117	103	121	763
31	126	---	e112	238	---	249	---	147	---	112	119	---
TOTAL	5316	4130	3852	24017	14570	23097	11603	6414	3826	3396	4685	27836
MEAN	171	138	124	775	520	745	387	207	128	110	151	928
MAX	607	222	143	3630	1620	6900	1450	616	150	117	548	12700
MIN	107	127	104	105	205	207	186	137	115	101	101	113

e Estimated.

SCHUYLKILL RIVER BASIN

01473000 PERKIOMEN CREEK AT GRATERFORD, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1999, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	211	369	521	572	601	763	636	420	261	203	152	232
MAX	1059	1182	1869	2071	1241	2100	1759	1298	1330	1286	493	1163
(WY)	1997	1973	1997	1979	1971	1994	1983	1989	1972	1984	1971	1971
MIN	28.1	43.8	63.3	75.6	156	186	128	84.0	52.9	41.7	37.4	24.8
(WY)	1958	1958	1966	1981	1980	1985	1985	1965	1965	1965	1957	1957

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1957 - 1999
ANNUAL TOTAL	164678	132742	
ANNUAL MEAN	451	364	411
HIGHEST ANNUAL MEAN			767
LOWEST ANNUAL MEAN			165
HIGHEST DAILY MEAN	4830	Apr 10	12700
LOWEST DAILY MEAN	e104	Dec 27,28	101
ANNUAL SEVEN-DAY MINIMUM	a109	Dec 23	107
INSTANTANEOUS PEAK FLOW			b33700
INSTANTANEOUS PEAK STAGE			16.59
10 PERCENT EXCEEDS	1020		615
50 PERCENT EXCEEDS	186		142
90 PERCENT EXCEEDS	114		111

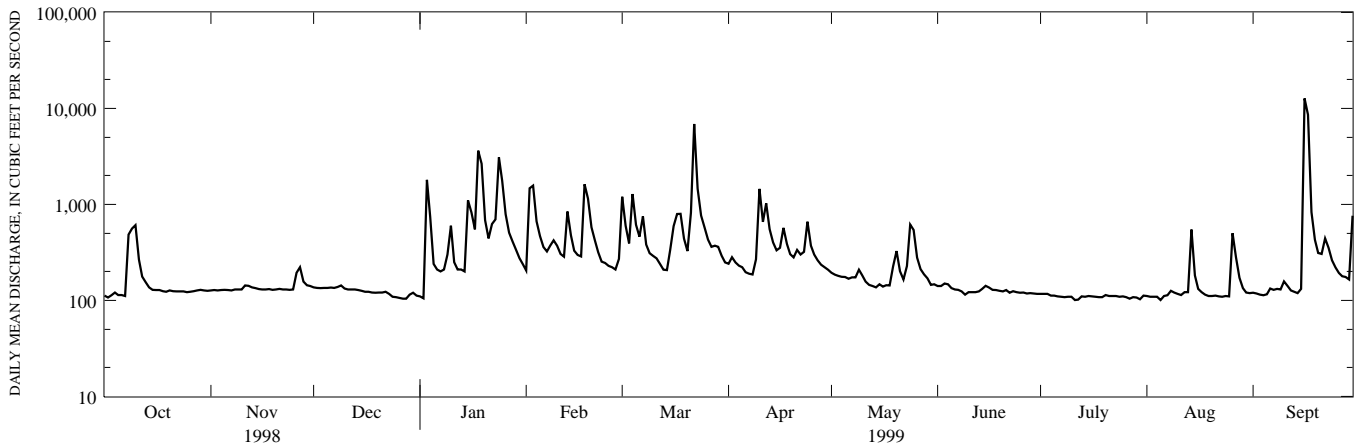
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1956, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	192	345	445	504	641	771	513	346	213	274	261	177
MAX	856	1119	1077	1336	1458	2193	1335	1395	976	1190	1378	869
(WY)	1956	1933	1928	1915	1918	1936	1952	1948	1946	1919	1955	1934
MIN	21.2	38.0	69.8	66.5	80.2	247	167	71.7	32.7	32.4	21.0	23.8
(WY)	1942	1932	1923	1925	1934	1915	1946	1941	1921	1954	1930	1932

SUMMARY STATISTICS WATER YEARS 1915 - 1956

ANNUAL MEAN	389
HIGHEST ANNUAL MEAN	689
LOWEST ANNUAL MEAN	188
HIGHEST DAILY MEAN	18600
LOWEST DAILY MEAN	3.8
ANNUAL SEVEN-DAY MINIMUM	5.2
INSTANTANEOUS PEAK FLOW	b39900
INSTANTANEOUS PEAK STAGE	18.26
INSTANTANEOUS LOW FLOW	4.7
ANNUAL RUNOFF (CFSM)	1.40
ANNUAL RUNOFF (INCHES)	18.96
10 PERCENT EXCEEDS	800
50 PERCENT EXCEEDS	166
90 PERCENT EXCEEDS	42

- a Computed using estimated daily discharges.
- b From rating curve extended above 14,000 ft³/s on basis of slope-area measurement at 32,000 ft³/s, gage height 16.23 ft.
- c Estimated.



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