

SCHUYLKILL RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA
(National Water-Quality Assessment Station)

LOCATION.--Lat 39°58'04", long 75°11'20", Philadelphia County, Hydrologic Unit 02040203, on right bank 150 ft upstream from Fairmount Dam, 1,500 ft upstream from bridge on Spring Garden Street in Philadelphia, and 8.7 mi upstream from mouth.

DRAINAGE AREA.--1,893 mi².

PERIOD OF RECORD.--October 1931 to current year. Records for January 1898 to December 1912, published in WSP 35, 48, 65, 82, 97, 125, 166, 202, 214, 261, 301, and 381 have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 756: Drainage area. WSP 1302: 1936(M). WSP 1432: 1945. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 5.74 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 25, 1956, water-stage recorder at site on right bank just upstream from Fairmount Dam at same datum. Nov. 26, 1956, to Oct. 6, 1966, water-stage recorder at site on left bank 40 ft upstream from Fairmount Dam at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Still Creek Reservoir (station 01469200) since February 1933, Blue Marsh Lake (station 01470870) since April 1979, Green Lane Reservoir (station 01472200) since December 1956 and to some extent by Lake Ontelaunee. Daily mean discharges do not include diversion above station by city of Philadelphia for municipal water supply. Satellite and landline telemetry at station.

COOPERATION.--Records of diversion provided by Philadelphia Water Department.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 4, 1869 reached a stage of 17.0 ft, discharge, about 135,000 ft³/s. Flood of Mar. 1, 1902 reached a stage of 14.8 ft, discharge, about 98,000 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
May 14	1030	*28,400	*9.75	No other peak greater than 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	1040	422	601	476	1630	631	2710	4220	1550	1330	243	755
2	889	410	736	563	1720	613	2630	4160	1420	1090	185	928
3	795	481	846	528	1610	2330	2210	6960	1380	956	203	740
4	746	475	678	569	1420	2330	2080	5260	1250	705	246	550
5	657	496	616	609	1250	1710	1920	4170	1270	698	458	404
6	706	410	620	755	1170	1280	1650	3620	1470	615	277	295
7	650	450	585	1330	1160	1120	1560	3110	5530	597	236	282
8	664	434	676	1100	1110	983	1490	2630	3490	613	275	247
9	588	421	1230	912	1050	1010	1390	2830	2290	539	183	307
10	578	411	1110	796	1000	1030	1450	3250	1880	799	166	214
11	664	462	1070	1100	1040	1060	1560	2700	1500	552	153	218
12	682	495	895	1880	954	1220	1510	2280	1420	536	236	214
13	729	436	869	1420	1040	1140	1310	3070	1310	471	161	213
14	689	398	878	1190	902	1230	1350	18400	2110	512	144	181
15	878	412	1090	1000	828	1160	1590	6830	2550	529	115	314
16	851	368	1070	917	828	1030	4460	4530	2100	451	84	526
17	1070	454	1020	876	827	1030	4060	3550	1770	400	79	566
18	875	497	1160	829	814	1620	3310	7430	1530	376	120	701
19	777	549	1260	823	774	2720	2800	7940	1860	353	259	476
20	787	526	1420	813	735	4290	2460	5450	1750	480	191	256
21	616	507	1160	850	799	7640	2240	4700	1530	409	280	201
22	654	436	1080	873	751	4710	2270	4280	1300	471	234	220
23	582	521	1010	811	734	3700	2260	3730	1170	389	135	342
24	592	456	1330	1840	724	3070	2000	3160	1220	416	362	271
25	548	634	1090	3390	740	2670	1780	2680	1230	466	751	505
26	426	1010	1100	2190	676	2350	1760	2450	881	392	755	541
27	418	1380	909	1850	688	3860	1660	2280	920	406	367	2030
28	468	1030	722	1640	671	4780	2510	2200	2720	388	270	3330
29	495	780	736	1460	---	3740	5940	1960	2500	424	1120	2330
30	457	655	669	1310	---	3120	4870	1760	1640	329	947	1510
31	428	---	634	1540	---	2810	---	1620	---	261	613	---
TOTAL	20999	16416	28870	36240	27645	71987	70790	133210	54541	16953	9848	19667
MEAN	677.4	547.2	931.3	1169	987.3	2322	2360	4297	1818	546.9	317.7	655.6
MAX	1070	1380	1420	3390	1720	7640	5940	18400	5530	1330	1120	3330
MIN	418	368	585	476	671	613	1310	1620	881	261	79	181
(†)	191	194	190	204	198	184	176	180	196	221	228	206

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2002, BY WATER YEAR (WY)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	1398	2284	3145	3331	3610	4844	4232	3127	2114	1607	1365	1425																																																											
MAX	5624	6272	11150	11400	8136	13320	11620	9943	11640	6434	7980	5300																																																											
(WY)	1997	1973	1997	1979	1939	1936	1983	1989	1972	1984	1933	1999																																																											
MIN	89.4	223	444	340	647	1552	1237	693	261	116	140	117																																																											
(WY)	1942	1932	1981	1981	1934	1981	1985	1965	1965	1966	1966	1932																																																											

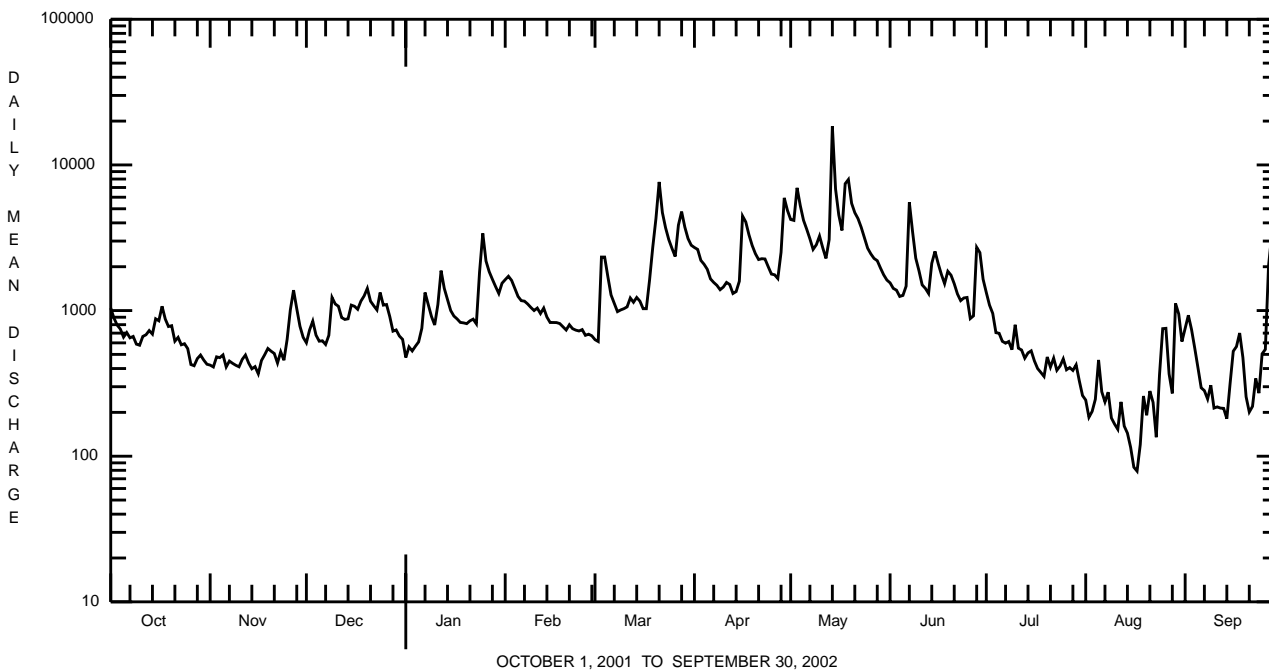
† Diversion for municipal supply of City of Philadelphia, equivalent in cubic feet per second.

SCHUYLKILL RIVER BASIN

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SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR			FOR 2002 WATER YEAR			WATER YEARS 1932 - 2002		
ANNUAL TOTAL	771730			507166					
ANNUAL MEAN	2114			1389			2702		
HIGHEST ANNUAL MEAN							4791		
LOWEST ANNUAL MEAN							1014		
HIGHEST DAILY MEAN	12200	Mar 30		18400	May 14		93400	Jun 23	1972
LOWEST DAILY MEAN	368	Nov 16		79	Aug 17		0.60	Sep 2	1966
ANNUAL SEVEN-DAY MINIMUM	426	Nov 10		134	Aug 12		24	Sep 28	1941
MAXIMUM PEAK FLOW				28400	May 14		a103000	Jun 23	1972
MAXIMUM PEAK STAGE				9.75	May 14		14.65	Jun 23	1972
INSTANTANEOUS LOW FLOW				54	Aug 16		0.00	Sep 2	1966
10 PERCENT EXCEEDS	4610			3090			5780		
50 PERCENT EXCEEDS	1290			889			1660		
90 PERCENT EXCEEDS	495			302			434		

a From rating curve extended above 92,000 ft³/s.



SCHUYLKILL RIVER BASIN

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA--Continued
(National Water-Quality Assessment Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1998, revised, to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1998 to April 1999, July 1999 to September 1999.

WATER TEMPERATURE: September 1998 to September 2001.

REMARKS.--These samples were collected as part of the Delaware River Basin National Water-Quality Assessment Program (NAWQA). For the definition of the type of quality-control data listed under SAMPLE TYPE refer to "Quality-Control Data" in the "Introduction."

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (µS/CM) (00095)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
NOV 13...	1130	ENVIRONMENTAL	519	773	95	10.9	7.9	607	14.5	9.8	106
DEC 12...	1150	ENVIRONMENTAL	986	770	96	11.1	7.9	491	12.3	9.0	95
JAN 15...	1140	ENVIRONMENTAL	1120	762	101	13.3	7.8	558	8.0	3.8	78
FEB 04...	1200	ENVIRONMENTAL	1490	752	108	13.5	7.9	482	5.0	5.4	71
MAR 07...	1130	ENVIRONMENTAL	1230	766	109	13.3	7.8	432	20.2	7.0	72
APR 08...	1050	ENVIRONMENTAL	1570	772	109	12.2	7.8	374	12.0	11.0	59
MAY 16...	1209	FIELD BLANK	--	--	--	--	--	--	--	--	--
MAY 16...	1210	ENVIRONMENTAL	4520	755	104	10.3	7.5	266	--	15.4	53
JUN 13...	1130	ENVIRONMENTAL	1410	756	90	7.3	7.6	389	29.0	25.2	--
JUN 13...	1131	SPLIT REPLICATE	--	--	--	--	--	--	--	--	--
JUL 08...	1050	ENVIRONMENTAL	648	764	84	6.6	7.8	458	31.0	27.6	81
SEP 05...	1140	ENVIRONMENTAL	519	761	90	7.7	7.8	535	27.0	23.2	81

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
NOV 13...	130	66.5	78.6	.73	.14	4.32	.057	.51	.55	1.4	1.0
DEC 12...	117	49.3	68.4	.59	.12	3.80	.075	.41	.45	96.6	36
JAN 15...	95	83.2	51.4	.68	.18	3.17	.084	.24	.28	9.7	3.2
FEB 04...	87	63.3	48.5	.67	.23	3.78	.122	.26	.31	8.9	2.2
MAR 07...	89	46.7	47.6	.81	.09	2.77	.061	.23	.27	21.9	6.6
APR 08...	72	38.8	44.5	.47	.16	2.97	.052	.22	.25	15.3	3.6
MAY 16...	--	<.30	<.1	<.10	<.04	<.05	<.008	<.02	<.004	--	--
MAY 16...	64	19.3	30.9	.68	.12	2.06	.035	.10	.172	255	21
JUN 13...	--	32.5	48.9	.62	.13	3.10	.065	.27	.31	47.2	12
JUN 13...	--	--	--	--	--	--	--	--	--	--	--
JUL 08...	98	41.8	56.4	.55	.10	3.31	.055	.33	.37	5.8	3.3
SEP 05...	99	55.2	75.2	.49	.09	3.23	.043	.45	.47	4.3	3.1

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WATER-COLUMN PESTICIDE ANALYSES

REMARKS.--Selected samples were analyzed for pesticides with laboratory schedule 2001 (listed in its entirety, with laboratory reporting levels, on page 179). Only pesticides identified by the analyses in one or more surface-water samples are listed in the following table.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	TIME	SAMPLE TYPE	ACETO- CHLOR, WATER, FLTRD REC (µG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (µG/L) (46342)	ALPHA BHC DIS- SOLVED (µG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (µG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 µ GF, REC (µG/L) (82673)	CAR- BARYL WATER FLTRD 0.7 µ GF, REC (µG/L) (82680)	CHLOR- PYRIFOS DIS- SOLVED (µG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (µG/L) (04041)	DCPA WATER FLTRD 0.7 µ GF, REC (µG/L) (82682)
NOV 13...	1130	ENVIRONMENTAL	<.004	<.002	<.005	.037	<.010	<.041	<.005	<.018	<.003
DEC 12...	1150	ENVIRONMENTAL	<.004	<.002	<.005	.035	<.010	<.041	<.005	<.018	<.003
JAN 15...	1140	ENVIRONMENTAL	<.006	<.004	<.005	.025	<.010	<.041	<.005	<.018	<.003
FEB 04...	1200	ENVIRONMENTAL	<.006	<.004	<.005	.041	<.010	E.006	<.005	<.018	<.003
MAR 07...	1130	ENVIRONMENTAL	<.006	<.004	<.005	.026	<.010	<.041	<.005	<.018	<.003
APR 08...	1050	ENVIRONMENTAL	<.006	<.004	<.005	.021	<.010	E.004	<.005	<.018	<.003
MAY 16...	1210	ENVIRONMENTAL	.046	.017	<.005	.556	<.010	E.033	E.005	.019	<.003
JUN 13...	1130	ENVIRONMENTAL	.035	<.015	<.005	.557	<.010	E.008	<.005	<.018	<.003
JUN 13...	1131	SPLIT REPLICATE	.034	<.015	<.005	.563	<.010	E.007	<.005	<.018	<.003
JUL 08...	1050	ENVIRONMENTAL	.024	<.004	<.005	.341	<.010	<.041	<.005	E.006	<.003
SEP 05...	1140	ENVIRONMENTAL	<.006	<.004	<.005	.092	<.010	E.007	<.005	<.018	<.003

DATE	DEETHYL ATRA- ZINE, WATER, DISS, REC (µG/L) (04040)	DI- AZINON, DIS- SOLVED (µG/L) (39572)	EPTC WATER FLTRD 0.7 µ GF, REC (µG/L) (82668)	LINDANE DIS- SOLVED (µG/L) (39341)	LIN- URON WATER FLTRD 0.7 µ GF, REC (µG/L) (82666)	MALA- THION, DIS- SOLVED (µG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 µ GF, REC (µG/L) (82686)	METO- LACHLOR WATER DISSOLV (µG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (µG/L) (82630)	NAPROP- AMIDE WATER FLTRD 0.7 µ GF, REC (µG/L) (82684)	PENDI- METH- ALIN WAT FLT 0.7 µ GF, REC (µG/L) (82683)	PRO- METON, WATER, DISS, REC (µG/L) (04037)	PRO- PANIL WATER FLTRD 0.7 µ GF, REC (µG/L) (82679)
NOV 13...	E.033	<.005	<.002	<.004	<.035	<.027	<.050	E.011	<.006	<.007	<.010	<.01	<.011
DEC 12...	E.025	.006	<.002	<.004	<.035	<.027	<.050	.014	<.006	<.007	<.010	.02	<.011
JAN 15...	E.020	<.005	<.002	<.004	<.035	<.027	<.050	E.012	<.006	<.007	<.022	E.01	<.011
FEB 04...	E.045	<.005	<.002	<.004	<.035	<.027	<.050	.021	<.006	<.007	<.022	.02	<.011
MAR 07...	E.026	E.004	<.002	<.004	<.035	<.027	<.050	E.012	<.006	<.007	<.022	<.02	<.011
APR 08...	E.013	<.005	<.002	<.004	<.035	<.027	<.050	.014	<.006	<.007	<.022	E.01	<.011
MAY 16...	E.045	.011	<.002	<.004	<.035	<.027	<.050	.165	<.006	<.007	E.018	.04	<.011
JUN 13...	E.068	.009	<.002	<.004	<.035	<.027	<.050	.170	<.006	<.007	<.022	.04	<.011
JUN 13...	E.061	.009	<.002	<.004	<.035	<.027	<.050	.172	<.006	<.007	<.022	.04	<.011
JUL 08...	E.078	E.004	<.002	<.004	<.035	<.027	<.050	.094	<.006	<.007	<.022	.03	<.011
SEP 05...	E.041	.009	<.002	<.004	<.035	<.027	<.050	.024	<.006	<.007	<.022	.06	<.011

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WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DATE	SI- MAZINE, WATER, DISS, REC ($\mu\text{G/L}$) (04035)	TEBU- THIURON WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82670)	TER- BACILL WATER FLTRD 0.7 μ GF, REC ($\mu\text{G/L}$) (82665)
NOV 13...	.015	E.02	<.034
DEC 12...	.015	<.02	<.034
JAN 15...	.007	<.02	<.034
FEB 04...	.015	E.01	<.034
MAR 07...	.007	<.02	<.034
APR 08...	.010	<.02	<.034
MAY 16...	.042	E.01	<.034
JUN 13...	.037	E.01	<.034
JUN 13...	.036	E.01	<.034
JUL 08...	.052	<.02	<.034
SEP 05...	.026	.02	<.034