Water-Data Report 2012

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA

Lower Delaware Basin
Schuylkill Subbasin

LOCATION.--Lat 39°58′04″, long 75°11′20″ referenced to North American Datum of 1927, Philadelphia County, PA, 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 mi^2.

SURFACE-WATER RECORDS

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. WDR-US-2010: Diversion. 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. Satellite and landline telemetry at station.

COOPERATION.-- Records of diversion provided by the City of Philadelphia, Water Department. Station established and maintained by the U.S. Geological Survey. Funding for this station is provided by the U.S. Army Corps of Engineers, Philadelphia District, and the City of Philadelphia, Water Department and the U.S. Geological Survey through the Cooperative Water Program.

REMARKS.--Records good. No estimated daily discharges. 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct 4, 1869 reached a stage of 17.0 ft, discharge, about 135,000 ft^3/s. Flood of Mar 1, 1902 reached a stage of 14.8 ft, discharge, about 98,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 23	1330	*43,400	*10.75
Dec 8	0615	39,300	10.42
May 16	0500	19,600	8.66

Minimum discharge, 328 ft^3/s, Sept. 1, gage height, 5.74 ft.

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

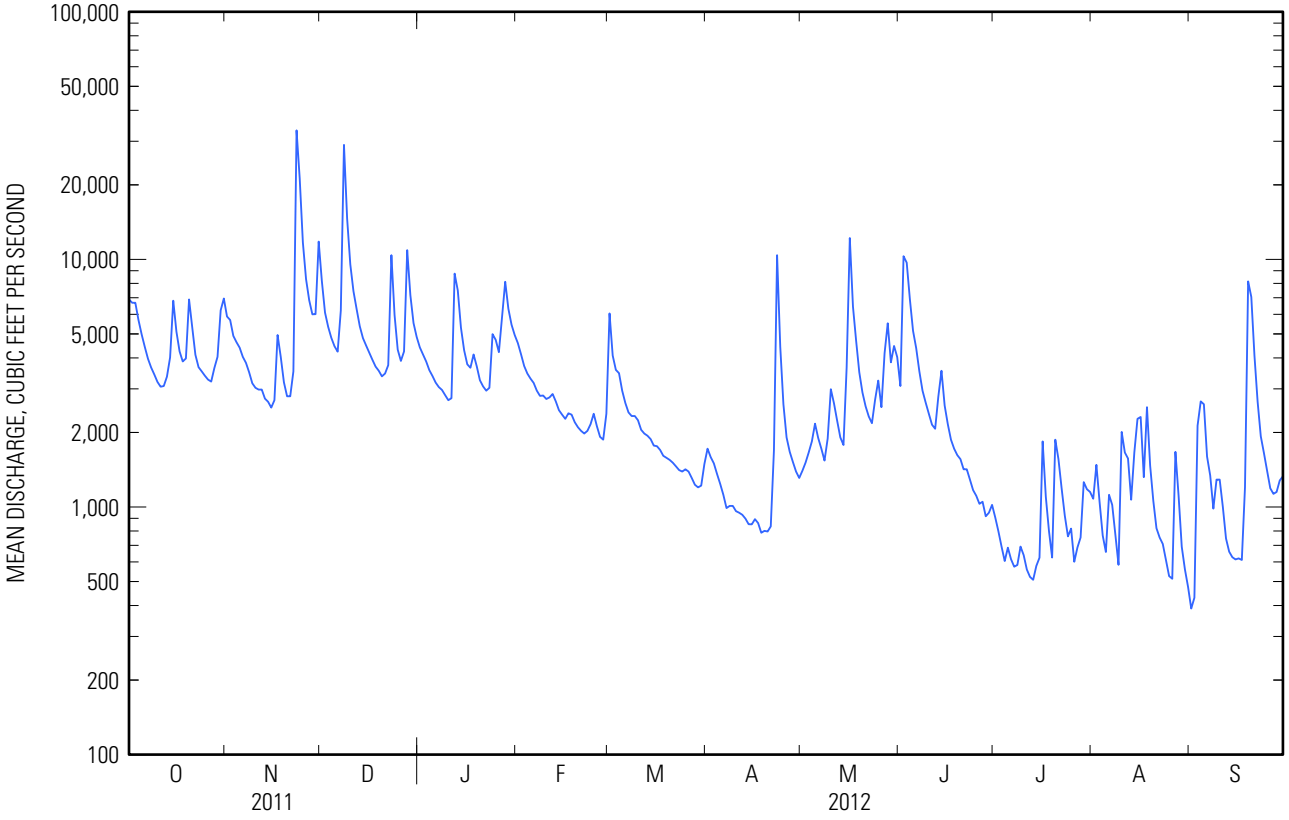
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6,890	5,880	8,180	4,410	4,590	6,050	1,720	1,400	3,080	908	1,080	389
2	6,680	5,690	6,100	4,130	4,140	4,090	1,590	1,510	10,300	798	1,480	430
3	6,680	4,910	5,340	3,870	3,710	3,580	1,500	1,660	9,700	692	1,050	2,130
4	5,690	4,630	4,820	3,570	3,460	3,470	1,360	1,840	6,910	605	767	2,670
5	4,980	4,400	4,460	3,380	3,300	2,950	1,240	2,170	5,150	685	658	2,600
6	4,430	4,040	4,240	3,180	3,170	2,630	1,120	1,900	4,380	615	1,120	1,600
7	3,970	3,820	6,220	3,050	2,950	2,410	990	1,720	3,530	574	1,020	1,340
8	3,660	3,500	29,000	2,970	2,810	2,330	1,010	1,540	2,950	583	773	985
9	3,430	3,160	14,600	2,830	2,820	2,330	1,010	1,890	2,640	692	584	1,290
10	3,200	3,030	9,550	2,700	2,730	2,240	962	2,990	2,380	639	2,010	1,290
11	3,060	2,980	7,440	2,750	2,770	2,050	948	2,620	2,150	559	1,660	1,000
12	3,080	2,980	6,300	8,760	2,860	1,980	930	2,230	2,070	522	1,570	746
13	3,360	2,740	5,370	7,490	2,670	1,940	897	1,910	2,790	508	1,070	660
14	4,020	2,660	4,810	5,300	2,460	1,880	852	1,780	3,550	578	1,660	627
15	6,810	2,520	4,490	4,300	2,360	1,770	851	3,660	2,570	624	2,270	614
16	5,110	2,700	4,200	3,770	2,270	1,760	893	12,200	2,160	1,840	2,310	620
17	4,250	4,950	3,930	3,650	2,390	1,700	861	6,450	1,870	1,100	1,320	611
18	3,870	4,040	3,690	4,130	2,360	1,610	787	4,690	1,720	800	2,530	1,200
19	3,980	3,190	3,550	3,700	2,200	1,580	801	3,500	1,620	625	1,470	8,150
20	6,890	2,800	3,370	3,250	2,100	1,550	796	2,900	1,560	1,870	1,060	7,050
21	5,320	2,800	3,460	3,070	2,030	1,510	835	2,550	1,420	1,560	821	4,080
22	4,120	3,530	3,740	2,950	1,980	1,460	1,690	2,320	1,420	1,190	753	2,660
23	3,670	33,200	10,400	3,030	2,030	1,410	10,400	2,180	1,290	924	709	1,930
24	3,530	21,200	5,960	4,990	2,160	1,390	4,440	2,710	1,170	761	611	1,650
25	3,390	11,700	4,320	4,730	2,380	1,420	2,600	3,240	1,110	818	526	1,400
26	3,270	8,330	3,890	4,220	2,120	1,390	1,910	2,530	1,030	601	513	1,190
27	3,210	6,840	4,250	5,850	1,920	1,310	1,670	4,180	1,050	686	1,670	1,130
28	3,640	6,000	10,900	8,120	1,870	1,230	1,520	5,520	917	753	1,110	1,150
29	4,040	6,010	7,170	6,320	2,380	1,200	1,390	3,840	948	1,260	691	1,280
30	6,230	11,800	5,530	5,450	---	1,220	1,310	4,470	1,020	1,180	560	1,330
31	6,950	---	4,860	4,950	---	1,490	---	4,030	---	1,150	475	---
Total	141,410	186,030	204,140	134,870	76,990	64,930	48,883	98,130	84,455	26,700	35,901	53,802
Mean	4,562	6,201	6,585	4,351	2,655	2,095	1,629	3,165	2,815	861	1,158	1,793
Max	6,950	33,200	29,000	8,760	4,590	6,050	10,400	12,200	10,300	1,870	2,530	8,150
Min	3,060	2,520	3,370	2,700	1,870	1,200	787	1,400	917	508	475	389
Diversion for municipal supply of City of Philadelphia, equivalent in cubic feet per second.												
	157	170	171	179	179	172	162	162	170	194	199	178

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,660	2,465	3,457	3,415	3,623	4,913	4,276	3,097	2,276	1,691	1,507	1,706
Max	5,624	7,090	11,150	11,400	8,136	13,320	11,620	9,943	11,640	6,434	7,980	12,830
(WY)	(1997)	(2007)	(1997)	(1979)	(1939)	(1936)	(1983)	(1989)	(1972)	(1984)	(1933)	(2011)
Min	89.4	223	444	340	647	1,305	1,237	693	261	116	140	117
(WY)	(1942)	(1932)	(1981)	(1981)	(1934)	(2009)	(1985)	(1965)	(1965)	(1966)	(1966)	(1932)

01474500 SCHUYLKILL RIVER AT PHILADELPHIA, PA—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1932 – 2012	
Annual total	1,975,227		1,156,241			
Annual mean	5,412		3,159		2,836	
Highest annual mean					4,838	2011
Lowest annual mean					1,014	1965
Highest daily mean	66,200	Aug 28	33,200	Nov 23	93,400	Jun 23, 1972
Lowest daily mean	377	Jul 23	389	Sep 1	0.60	Sep 2, 1966
Annual seven-day minimum	494	Jul 18	582	Jul 7	24	Sep 28, 1941
Maximum peak flow			43,400	Nov 23	[a]103,000	Jun 23, 1972
Maximum peak stage			10.75	Nov 23	14.65	Jun 23, 1972
Instantaneous low flow			328	Sep 1	0.00	Sep 2, 1966[b]
10 percent exceeds	9,890		6,060		6,060	
50 percent exceeds	3,680		2,400		1,760	
90 percent exceeds	1,080		765		468	

[a] From rating curve extended above 91,700 ft³/s at gage height 13.99 ft, based on straight-line extension.
[b] No flow over dam at times.