

SCHUYLKILL RIVER BASIN

01472104 SCHUYLKILL RIVER AT VINCENT DAM AT LINFIELD, PA

LOCATION--Lat 40°12'22", long 75°33'57", Montgomery County, Hydrologic Unit 02040203, on left bank 100 ft upstream from Vincent Dam, and 0.3 mi south of Linfield.

DRAINAGE AREA--1,189 mi².

PERIOD OF RECORD--Water years 1986 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: January 1986 to September 1990.

WATER TEMPERATURE: September 1989 to current year.

DISSOLVED OXYGEN: January 1986 to September 1990; March 1997 to current year.

INSTRUMENTATION--Water-quality monitor January 1986 to September 1990, March 1997 to current year. In situ water temperature probe since October 1990. Probes interfaced with a data collection platform.

REMARKS--Water temperature records rated good. Dissolved oxygen records rated fair except for period Aug. 25 to Sept. 14, which is poor. Dissolved oxygen collection discontinued October through March. Other interruptions in the record were due to pump intake sedimentation and instrument malfunctions.

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum, 752 microsiemens, Sept. 15, 1989; minimum, 118 microsiemens, Sept. 15, 1987.

WATER TEMPERATURE: Maximum, 33.5°C, July 6, 1999; minimum, 0.0°C, many days during winters.

DISSOLVED OXYGEN: Maximum, 19.6 mg/L, Mar. 24, 1988; minimum, 0.8 mg/L, July 26, 1986.

EXTREMES FOR CURRENT YEAR--

WATER TEMPERATURE: Maximum, 32.2°C, Aug. 14; minimum, 0.0°C, several days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.4	16.5	17.0	13.5	12.5	13.0	8.9	8.4	8.6	6.3	5.3	5.9
2	17.0	16.8	16.9	13.2	12.4	12.9	8.5	7.6	8.1	6.1	5.3	5.5
3	17.2	16.2	16.7	13.5	12.3	13.0	7.6	6.8	7.2	6.2	5.4	5.7
4	16.7	15.5	16.2	12.3	10.3	11.0	6.8	6.3	6.5	7.1	6.2	6.7
5	16.4	15.4	15.9	10.4	9.6	10.0	7.0	6.2	6.6	7.0	6.2	6.7
6	15.4	14.1	14.8	10.3	9.1	9.8	6.7	6.4	6.5	6.2	5.4	5.7
7	15.3	13.6	14.6	10.8	9.3	10.1	6.8	6.5	6.6	5.4	4.8	5.0
8	16.0	14.2	15.2	10.6	9.2	10.1	7.8	6.8	7.3	4.9	4.7	4.8
9	16.0	15.1	15.6	9.2	7.8	8.6	7.4	7.1	7.3	5.0	4.7	4.9
10	16.6	15.4	15.8	7.8	6.8	7.3	7.9	7.3	7.6	5.5	5.0	5.2
11	15.5	14.4	14.9	8.3	6.8	7.5	8.0	7.7	7.9	5.4	4.9	5.0
12	14.7	13.3	14.0	8.1	7.8	8.0	7.7	7.4	7.5	5.3	4.9	5.0
13	14.0	12.9	13.6	8.3	7.3	7.8	7.4	6.8	7.2	6.3	5.3	5.7
14	13.7	13.4	13.6	7.3	6.3	6.9	6.8	5.6	6.3	8.4	6.3	7.7
15	14.3	13.6	14.0	7.1	5.9	6.6	5.6	4.4	4.9	7.2	5.1	6.1
16	14.2	13.3	13.7	7.5	6.3	6.9	4.4	3.7	4.1	5.1	4.6	4.8
17	13.4	12.1	12.6	7.9	6.7	7.4	4.7	3.9	4.3	4.7	3.3	4.2
18	12.4	11.0	11.8	9.2	7.9	8.5	4.2	3.6	4.0	3.3	1.5	2.3
19	12.2	12.0	12.1	10.0	9.1	9.5	4.2	3.6	3.9	1.5	0.9	1.1
20	12.2	12.0	12.1	10.1	9.9	10.0	3.6	1.0	2.1	1.8	1.0	1.4
21	12.4	12.1	12.2	10.5	10.0	10.2	1.2	0.5	0.9	1.8	0.9	1.4
22	12.6	12.0	12.3	10.0	9.5	9.8	2.2	1.0	1.6	0.9	0.0	0.2
23	12.4	11.5	12.0	9.8	9.5	9.7	5.5	2.2	3.8	0.2	0.0	0.0
24	11.8	11.0	11.3	10.9	9.8	10.2	5.3	3.5	4.5	0.1	0.0	0.0
25	12.1	11.2	11.6	11.7	10.2	11.2	3.5	2.4	3.1	0.8	0.0	0.3
26	12.3	11.8	12.1	10.2	8.1	8.9	2.4	1.8	2.1	2.1	0.8	1.5
27	12.4	11.4	11.9	8.3	7.5	7.9	2.2	1.4	1.9	1.8	0.4	1.1
28	12.8	11.6	12.1	10.4	8.3	9.7	1.6	0.9	1.3	0.4	0.0	0.1
29	12.0	11.4	11.7	9.6	8.5	9.1	2.9	1.5	2.1	0.5	0.0	0.2
30	13.0	11.8	12.3	8.5	8.3	8.4	4.0	2.9	3.5	1.5	0.3	0.9
31	13.8	12.8	13.3	---	---	---	5.6	4.0	4.7	1.8	0.5	1.2
MONTH	17.4	11.0	13.7	13.5	5.9	9.3	8.9	0.5	5.0	8.4	0.0	3.4

SCHUYLKILL RIVER BASIN

01472104 SCHUYLKILL RIVER AT VINCENT DAM AT LINFIELD, PA--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.6	10.1	10.4	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	9.0	8.9	8.9	---	---	---
10	---	---	---	---	---	---	9.2	8.9	9.0	---	---	---
11	---	---	---	---	---	---	9.0	8.8	8.9	---	---	---
12	---	---	---	---	---	---	9.2	8.7	8.9	---	---	---
13	---	---	---	---	---	---	9.2	8.9	9.1	---	---	---
14	---	---	---	---	---	---	9.3	9.1	9.2	---	---	---
15	---	---	---	---	---	---	9.7	9.2	9.4	---	---	---
16	---	---	---	---	---	---	10.8	9.5	10.0	---	---	---
17	---	---	---	---	---	---	10.4	9.3	9.7	---	---	---
18	---	---	---	---	---	---	11.2	9.2	9.6	---	---	---
19	---	---	---	---	---	---	---	---	---	8.4	7.8	8.1
20	---	---	---	---	---	---	---	---	---	7.9	7.4	7.7
21	---	---	---	---	---	---	---	---	---	8.2	7.4	7.8
22	---	---	---	---	---	---	---	---	---	8.1	7.5	7.8
23	---	---	---	---	---	---	---	---	---	8.1	7.3	7.7
24	---	---	---	---	---	---	---	---	---	8.0	7.0	7.5
25	---	---	---	---	---	---	---	---	---	8.1	7.1	7.6
26	---	---	---	12.6	11.0	11.7	---	---	---	---	---	---
27	---	---	---	11.9	10.8	11.3	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	10.6	10.3	10.6	---	---	---	---	---	---
MONTH	---	---	---	12.6	10.3	11.2	11.2	8.7	9.4	8.4	7.0	7.7
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.8	7.2	8.1	7.1	5.0	6.0	8.6	5.6	7.2	8.5	6.3	7.4
2	8.7	6.7	7.7	7.7	5.1	6.3	8.3	5.6	6.9	9.1	6.5	7.7
3	8.2	7.0	7.6	7.9	5.0	6.6	7.9	5.6	6.6	9.5	6.6	8.0
4	8.8	6.8	7.7	8.0	5.5	6.8	---	---	---	9.3	6.8	8.2
5	9.3	7.4	8.3	7.0	5.5	6.2	---	---	---	9.6	7.0	8.2
6	9.1	7.2	8.1	6.7	5.5	5.9	---	---	---	9.7	7.2	8.4
7	7.4	5.6	6.3	---	---	---	---	---	---	9.9	7.1	8.4
8	7.7	5.5	6.5	---	---	---	---	---	---	10.3	7.2	8.5
9	7.3	5.6	6.4	---	---	---	---	---	---	9.9	7.2	8.4
10	6.9	5.2	6.0	---	---	---	7.0	6.0	6.5	10.1	7.3	8.5
11	6.7	4.8	5.8	---	---	---	7.3	5.6	6.4	10.1	7.2	8.6
12	7.0	4.9	5.9	---	---	---	7.3	5.6	6.3	9.8	7.2	8.4
13	7.1	5.0	5.9	---	---	---	7.5	5.2	6.2	9.7	6.9	8.2
14	7.2	4.9	6.0	---	---	---	7.3	5.0	6.1	9.7	6.4	7.6
15	7.3	5.0	6.1	---	---	---	6.6	4.8	5.7	8.3	5.7	6.8
16	7.5	5.2	6.4	7.0	5.9	6.4	6.3	5.1	5.7	9.2	5.5	6.8
17	8.2	5.7	6.9	---	---	---	6.9	5.4	6.1	7.8	5.2	6.3
18	8.6	6.2	7.4	---	---	---	7.2	4.6	5.7	8.2	5.1	6.5
19	8.8	6.4	7.4	---	---	---	6.5	5.4	5.9	9.1	5.7	7.0
20	9.3	6.5	7.7	---	---	---	7.2	5.5	6.2	8.7	5.8	7.0
21	---	---	---	---	---	---	7.2	5.6	6.3	8.4	6.1	7.2
22	---	---	---	8.1	6.3	7.1	7.2	5.6	6.4	8.6	6.3	7.3
23	---	---	---	8.3	6.2	7.1	7.5	5.6	6.5	8.9	6.4	7.4
24	---	---	---	8.8	6.6	7.6	---	---	---	8.7	6.3	7.4
25	---	---	---	9.1	6.7	7.8	---	---	---	8.8	6.6	7.4
26	---	---	---	9.2	6.4	7.8	8.5	6.5	7.4	8.6	6.7	7.4
27	---	---	---	9.0	6.2	7.5	8.4	6.5	7.4	8.6	6.4	7.5
28	10.0	5.3	7.3	8.5	5.5	6.9	7.7	6.4	7.0	8.8	7.0	7.8
29	8.8	5.0	6.8	9.1	5.8	7.4	8.8	6.3	7.2	8.4	6.9	7.6
30	8.2	4.9	6.5	9.2	6.4	7.7	8.6	6.4	7.3	9.3	7.4	8.3
31	---	---	---	9.2	6.4	7.8	8.2	6.3	7.1	---	---	---
MONTH	10.0	4.8	6.9	9.2	5.0	7.0	8.8	4.6	6.5	10.3	5.1	7.7

SCHUYLKILL RIVER BASIN

01472104 SCHUYLKILL RIVER AT VINCENT DAM AT LINFIELD, PA--Continued

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency col- lecting sample, code (00027)	Agency ana- lyzing sample, code (00028)	Sam- pling depth, feet (00003)	Dis- solved oxygen, mg/L (00300)	Temper- ature, water, deg C (00010)	Loca- tion in X-sect. dwnstrm ft from l bank (00009)
SEP 2005							
29...	1354	1028	1028	1.00	7.8	20.0	15
29...	1355	1028	1028	4.00	7.6	20.0	15
29...	1356	1028	1028	1.00	7.7	20.0	45
29...	1357	1028	1028	4.00	7.6	19.9	45
29...	1358	1028	1028	1.00	7.5	20.1	75
29...	1359	1028	1028	4.00	7.5	20.1	75
29...	1407	1028	1028	1.00	7.7	20.2	105
29...	1408	1028	1028	4.00	7.6	20.2	105
29...	1410	1028	1028	1.00	7.8	20.1	135
29...	1412	1028	1028	1.00	7.8	20.2	165
29...	1415	1028	1028	1.00	7.9	20.1	195
29...	1418	1028	1028	1.00	7.8	20.1	225
29...	1421	1028	1028	1.00	7.9	20.1	255
29...	1422	1028	1028	4.00	7.7	20.2	255
29...	1425	1028	1028	1.00	7.8	20.2	294
29...	1426	1028	1028	--	--	--	306