

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 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 27.5°C, June 11, Aug. 10; minimum, 0.0°C, many days during winter.

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.0	16.5	17.0	15.0	12.5	13.5	6.0	4.5	5.0	4.0	2.5	3.0
2	18.0	16.0	17.0	15.0	13.5	14.0	5.0	4.0	4.5	5.5	3.0	4.0
3	18.5	16.5	17.5	14.5	11.5	13.0	5.5	4.5	5.0	7.0	5.5	6.0
4	18.0	17.0	17.5	11.5	10.0	11.0	7.5	5.5	6.5	9.0	6.5	7.5
5	17.0	15.0	16.0	10.5	9.0	9.5	8.5	6.5	7.5	8.5	6.0	7.0
6	15.5	13.5	14.5	12.0	9.5	10.5	9.5	8.0	8.5	6.0	4.0	5.0
7	15.0	13.5	14.5	11.0	9.5	10.0	9.5	8.0	9.0	5.0	3.5	4.0
8	14.5	13.0	13.5	10.0	8.5	9.0	---	---	---	4.5	3.0	3.5
9	15.0	14.0	14.5	10.5	8.0	9.0	7.0	6.0	6.5	4.5	3.5	4.0
10	15.5	15.0	15.5	11.5	9.5	10.5	7.0	6.0	6.5	5.5	4.5	5.0
11	17.0	15.5	16.0	12.5	10.5	11.5	7.0	5.5	6.0	6.0	5.0	5.5
12	16.5	14.5	15.5	10.5	9.0	9.5	5.5	4.5	5.0	5.0	4.0	4.5
13	16.0	14.0	15.0	11.5	9.5	10.5	5.0	4.5	4.5	5.0	3.0	4.0
14	16.0	14.5	15.0	10.5	9.0	10.0	5.5	5.0	5.5	3.0	1.0	2.0
15	14.5	13.0	14.0	10.0	8.5	9.0	6.5	6.0	6.0	1.5	.5	1.0
16	14.5	12.5	13.5	8.5	6.0	7.5	7.0	6.5	6.5	3.0	1.0	1.5
17	15.0	13.5	14.5	7.0	5.0	6.0	6.5	5.5	6.0	1.0	.0	.0
18	16.0	14.5	15.0	7.0	4.5	5.5	6.0	5.0	5.5	.0	.0	.0
19	14.5	13.0	13.5	8.0	5.5	6.5	5.5	5.0	5.0	.5	.0	.0
20	13.0	12.5	13.0	9.0	6.5	7.5	5.5	5.0	5.0	.5	.0	.0
21	13.5	11.5	12.5	---	---	---	5.5	5.0	5.5	.0	.0	.0
22	13.0	11.0	12.0	---	---	---	5.5	4.5	5.0	.0	.0	.0
23	13.0	11.5	12.0	12.5	11.0	12.0	4.5	3.5	4.0	.0	.0	.0
24	12.0	10.5	11.5	13.5	12.5	13.0	3.5	2.0	3.0	.0	.0	.0
25	12.5	10.0	11.0	---	---	---	2.0	1.0	1.5	.0	.0	.0
26	13.0	10.0	11.5	13.5	12.0	13.0	1.5	1.0	1.5	.0	.0	.0
27	12.0	10.5	11.5	13.0	12.0	12.5	2.5	1.5	2.0	.0	.0	.0
28	12.5	10.5	11.5	12.0	9.5	11.0	2.5	1.5	2.0	.0	.0	.0
29	13.0	10.0	11.5	9.5	8.0	9.0	2.5	1.5	2.0	.0	.0	.0
30	13.5	11.0	12.0	8.0	6.0	7.0	3.0	1.5	2.5	.0	.0	.0
31	14.0	11.5	12.5	---	---	---	4.0	2.5	3.0	.0	.0	.0
MONTH	18.5	10.0	13.9	15.0	4.5	10.0	9.5	1.0	4.9	9.0	.0	2.2

SCHUYLKILL RIVER BASIN

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	10.4	8.4	9.4
4	---	---	---	---	---	---	9.5	8.8	9.1	10.3	8.1	9.3
5	---	---	---	---	---	---	10.4	9.1	9.8	10.1	7.7	8.8
6	---	---	---	---	---	---	10.9	10.2	10.5	10.4	7.5	8.8
7	---	---	---	---	---	---	10.9	9.8	10.3	10.4	7.0	8.7
8	---	---	---	---	---	---	10.7	9.7	10.1	10.9	6.7	8.8
9	---	---	---	---	---	---	10.8	8.8	9.9	10.8	6.3	8.6
10	---	---	---	---	---	---	11.4	10.2	10.7	---	---	---
11	---	---	---	---	---	---	11.1	10.3	10.7	---	---	---
12	---	---	---	---	---	---	11.8	10.3	10.9	---	---	---
13	---	---	---	---	---	---	11.9	10.5	11.1	---	---	---
14	---	---	---	---	---	---	12.0	10.0	10.9	---	---	---
15	---	---	---	---	---	---	10.9	9.7	10.3	---	---	---
16	---	---	---	---	---	---	11.1	9.3	10.0	8.1	7.2	7.7
17	---	---	---	---	---	---	9.4	8.5	8.9	8.0	7.4	7.7
18	---	---	---	---	---	---	10.2	9.0	9.6	7.7	7.2	7.4
19	---	---	---	---	---	---	11.2	9.9	10.5	7.2	6.9	7.0
20	---	---	---	---	---	---	10.7	9.5	10.1	8.4	7.1	7.7
21	---	---	---	---	---	---	9.8	8.5	8.9	8.6	8.4	8.5
22	---	---	---	---	---	---	9.6	9.0	9.2	8.6	8.4	8.5
23	---	---	---	---	---	---	10.7	9.5	10.0	8.5	8.2	8.4
24	---	---	---	---	---	---	10.7	9.8	10.2	8.3	7.7	8.0
25	---	---	---	---	---	---	10.2	9.3	9.8	7.8	7.6	7.7
26	---	---	---	---	---	---	10.6	9.4	9.9	8.1	7.8	8.0
27	---	---	---	---	---	---	10.0	9.2	9.7	8.1	7.8	8.0
28	---	---	---	---	---	---	10.4	9.3	9.8	8.4	7.9	8.2
29	---	---	---	---	---	---	---	---	---	8.4	8.1	8.2
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	12.0	8.5	10.0	10.9	6.3	8.3

SCHUYLKILL RIVER BASIN

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.2	7.5	7.9	8.0	7.7	7.8	---	---	---	9.9	5.7	7.6
2	7.8	6.9	7.3	8.2	7.6	7.8	---	---	---	8.9	5.8	7.2
3	7.9	6.5	7.2	8.0	7.4	7.6	---	---	---	8.3	5.7	6.8
4	8.2	6.8	7.4	8.0	7.2	7.6	---	---	---	8.5	5.8	7.0
5	8.5	7.1	7.8	8.3	7.1	7.7	---	---	---	8.6	6.3	7.4
6	8.1	7.4	7.6	8.6	7.2	7.8	---	---	---	8.8	6.9	7.8
7	8.1	7.3	7.7	8.6	7.2	7.9	---	---	---	8.7	7.2	7.9
8	8.6	7.8	8.1	9.0	7.5	8.2	7.4	6.7	7.1	8.5	6.6	7.5
9	8.5	7.4	7.9	9.0	7.5	8.2	7.0	6.4	6.7	8.4	6.5	7.4
10	---	---	---	8.9	7.0	7.9	7.0	6.0	6.5	---	---	---
11	---	---	---	---	---	---	7.2	6.2	6.6	---	---	---
12	---	---	---	---	---	---	7.3	6.4	6.8	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	7.5	7.1	7.3	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	7.9	7.3	7.6	8.0	6.1	7.0	---	---	---	---	---	---
21	8.1	7.0	7.4	8.0	6.1	7.0	9.7	7.6	8.6	---	---	---
22	7.5	6.4	6.8	7.8	6.0	6.8	10.1	7.6	8.8	---	---	---
23	7.3	6.6	6.9	8.1	5.9	6.9	9.3	7.5	8.4	---	---	---
24	8.3	7.2	7.7	7.5	6.1	6.8	8.6	7.6	8.1	---	---	---
25	8.5	7.4	7.9	8.3	6.5	7.3	10.2	7.5	9.0	---	---	---
26	7.7	6.7	7.3	7.5	6.5	6.9	10.7	7.2	8.8	---	---	---
27	---	---	---	---	6.6	---	11.1	7.0	8.9	---	---	---
28	---	---	---	---	---	---	10.1	6.8	8.4	---	---	---
29	---	---	---	---	---	---	9.5	6.9	8.1	---	---	---
30	7.9	7.6	7.7	---	---	---	10.2	6.2	8.0	---	---	---
31	---	---	---	---	---	---	9.5	6.1	7.8	---	---	---
MONTH	8.6	6.4	7.5	9.0	5.9	7.5	11.1	6.0	7.9	9.9	5.7	7.4

SCHUYLKILL RIVER BASIN

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

CROSS-SECTION ANALYSES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (μ S/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SAM- PLING DEPTH (FEET) (00003)
AUG							
29...	1352	8.4	8.1	458	23.7	20	.5
29...	1353	8.8	8.1	457	23.7	20	5.0
29...	1355	8.9	8.1	457	23.8	50	.5
29...	1359	8.7	8.1	457	23.8	70	.5
29...	1400	8.8	8.1	457	23.8	70	5.0
29...	1403	8.7	8.1	456	23.8	90	.5
29...	1404	8.3	8.1	457	23.7	90	5.0
29...	1406	9.0	8.1	457	23.8	120	.5
29...	1408	8.9	8.1	456	23.8	120	5.0
29...	1411	8.9	8.2	456	23.8	150	.5
29...	1413	9.1	8.2	456	23.8	150	5.0
29...	1416	9.5	8.2	451	23.8	180	.5
29...	1418	9.8	8.2	451	23.8	180	5.0
29...	1425	9.0	8.2	456	23.6	210	.5
29...	1429	9.7	8.3	449	23.8	210	5.0
29...	1431	10.2	8.4	467	24.1	240	.5
29...	1432	10.3	8.4	470	24.2	240	5.0