

SCHUYLKILL RIVER BASIN

01470853 FURNACE CREEK AT ROBESONIA, PA

LOCATION.--Lat 40°20'24", long 76°08'37", Berks County, Hydrologic Unit 02040202, on left bank 500 ft upstream from Furnace Street in Robesonia.

DRAINAGE AREA.--4.18 mi².

PERIOD OF RECORD.--October 1982 to current year.

REVISED RECORDS.--WDR PA-87-1: 1986 (P).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 520 ft above sea level, from topographic map. Prior to Mar. 27, 1986, 760 ft downstream at different datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow slightly regulated by Furnace Creek Reservoir 0.6 mi upstream. Reservoir drained for maintenance during summer. Water was diverted around gage while reservoir drained. Aug. 16 to Sept. 20 show natural flow while reservoir was refilling. Several measurements of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Mar. 21	1945	*162	*2.36	No other peak greater than base discharge.			

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	3.4	4.6	4.4	e4.1	11	15	8.4	5.6	6.9	3.3	1.2
2	5.1	3.6	4.4	4.5	e3.8	9.8	14	9.4	5.4	6.0	3.6	1.2
3	4.3	4.0	4.3	5.0	e3.7	9.0	14	8.5	5.2	5.8	3.4	1.2
4	6.0	3.8	4.1	5.6	e3.5	8.2	22	7.9	5.0	6.0	3.4	1.1
5	10	3.8	4.0	5.3	e3.3	7.6	15	7.7	5.0	5.3	3.3	1.1
6	5.8	3.8	6.9	4.5	e3.2	7.2	14	8.2	11	4.8	3.3	1.1
7	5.0	3.8	5.2	4.5	e3.2	6.8	13	7.2	7.4	4.5	3.4	1.1
8	4.3	3.8	4.4	4.1	e3.2	6.4	14	6.8	5.2	4.1	3.3	1.1
9	4.3	3.8	4.1	4.0	e3.1	6.4	22	6.5	4.5	4.1	3.2	1.1
10	14	3.8	5.4	14	e3.1	6.1	16	7.8	4.0	4.7	3.1	1.1
11	8.1	3.8	5.2	9.5	e3.1	13	15	7.7	3.7	4.0	2.9	1.1
12	6.3	3.7	4.5	6.9	e3.0	20	14	6.5	11	3.6	2.9	1.1
13	5.6	3.3	4.8	6.2	e3.0	11	13	6.8	14	3.5	2.9	1.3
14	5.5	3.6	14	5.4	e6.4	9.6	12	7.8	11	3.6	2.9	1.2
15	4.8	3.8	11	5.2	e5.8	9.0	12	6.0	8.5	6.8	2.3	1.3
16	4.5	3.8	8.7	e4.8	5.6	8.9	12	5.6	8.3	5.2	1.3	1.2
17	4.5	3.8	7.6	e4.6	5.8	16	13	5.5	8.0	4.0	1.4	1.1
18	4.8	3.8	6.9	e4.5	5.5	10	13	5.3	7.4	3.5	1.7	1.1
19	4.5	3.8	6.2	e4.4	5.8	9.3	12	9.6	6.4	3.4	1.5	1.2
20	5.3	3.9	6.9	e4.3	5.0	9.1	11	11	5.7	3.2	1.4	1.6
21	4.7	4.3	7.6	e4.3	4.7	45	12	9.1	8.1	3.5	1.4	2.1
22	4.5	4.3	6.1	e4.2	4.7	75	12	9.9	14	3.7	1.2	2.2
23	4.9	4.3	5.7	e4.1	5.8	36	11	10	7.0	3.6	1.1	2.2
24	4.3	4.3	5.5	e4.7	8.2	28	11	15	5.8	3.6	1.1	2.1
25	4.2	3.3	5.1	e4.3	13	24	10	10	15	3.6	1.1	2.1
26	4.0	15	5.2	e4.0	15	20	9.9	8.1	21	3.6	1.1	2.2
27	3.8	16	5.2	e3.8	13	19	11	7.6	10	3.6	1.0	2.2
28	3.5	7.1	5.2	e3.7	23	25	10	7.6	9.0	3.6	1.1	1.9
29	3.2	5.8	4.9	e3.7	12	19	9.5	7.2	9.2	3.6	1.1	1.8
30	3.3	5.3	4.6	e3.6	---	17	8.9	6.4	8.4	3.6	1.1	1.8
31	3.3	---	4.5	e5.0	---	16	---	5.9	---	3.5	1.1	---
TOTAL	163.1	144.6	182.8	157.1	182.6	518.4	391.3	247.0	249.8	132.5	66.9	44.1
MEAN	5.26	4.82	5.90	5.07	6.30	16.7	13.0	7.97	8.33	4.27	2.16	1.47
MAX	14	16	14	14	23	75	22	15	21	6.9	3.6	2.2
MIN	3.2	3.3	4.0	3.6	3.0	6.1	8.9	5.3	3.7	3.2	1.0	1.1
CFSM	1.26	1.15	1.41	1.21	1.51	4.00	3.12	1.91	1.99	1.02	.52	.35
IN.	1.45	1.29	1.63	1.40	1.63	4.61	3.48	2.20	2.22	1.18	.60	.39

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2000, BY WATER YEAR (WY)

MEAN	3.31	5.68	7.76	7.20	8.62	12.2	12.1	9.61	5.72	4.38	2.96	2.95
MAX	7.31	10.4	22.0	14.3	15.2	26.7	31.8	24.7	14.8	11.7	8.98	9.05
(WY)	1997	1987	1997	1996	1996	1994	1993	1989	1989	1984	1986	1999
MIN	.94	2.25	2.18	2.34	3.06	5.18	3.32	4.29	2.10	1.36	.85	.63
(WY)	1989	1983	1999	1983	1992	1985	1985	1997	1985	1983	1983	1983

e Estimated.

SCHUYLKILL RIVER BASIN

01470853 FURNACE CREEK AT ROBESONIA, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1983 - 2000	
ANNUAL TOTAL	2196.32		2480.2			
ANNUAL MEAN	6.02		6.78		6.86	
HIGHEST ANNUAL MEAN					10.5	1994
LOWEST ANNUAL MEAN					3.82	1985
HIGHEST DAILY MEAN	105	Sep 16	75	Mar 22	139	Dec 5 1993
LOWEST DAILY MEAN	.96	Aug 7,12	1.0	Aug 27	.11	Sep 11 1983
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 1	1.1	Aug 23	.19	Sep 16 1985
INSTANTANEOUS PEAK FLOW			162	Mar 21	ab537	Nov 28 1993
INSTANTANEOUS PEAK STAGE			2.36	Mar 21	c4.72	Jan 19 1996
ANNUAL RUNOFF (CFSM)	1.44		1.62		1.64	
ANNUAL RUNOFF (INCHES)	19.55		22.07		22.31	
10 PERCENT EXCEEDS	10		13		14	
50 PERCENT EXCEEDS	4.7		5.0		4.7	
90 PERCENT EXCEEDS	1.5		1.8		1.4	

- a From rating curve extended above 308 ft³/s on basis of slope-area measurement of peak flow at gage height 3.11 ft.
- b Gage height, 3.79 ft.
- c From peak indicator; ice jam.

