

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 mi<sup>2</sup>.

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

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 527.20 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 27, 1986, 760 ft downstream at different datum.

REMARKS.--Records poor. Flow slightly regulated by Furnace Creek Reservoir 0.6 mi upstream, until drained in early 2002. Reservoir now acts as a retention basin and releases water through an unregulated 10 in. outlet pipe. Several measurements of water temperature were made during the year. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
June 20	2345	*33	*1.13	(No peaks above base discharge.)			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.98	4.6	4.4	13	4.5	7.3	18	8.2	14	9.5	3.4	2.3
2	1.1	4.0	4.2	16	4.7	9.1	17	8.0	15	9.0	3.4	4.2
3	1.1	3.5	e4.2	16	4.7	11	13	7.7	11	8.8	3.5	3.6
4	1.1	3.3	e4.5	16	7.0	9.0	12	7.3	16	8.2	4.0	3.2
5	1.3	3.2	e4.7	15	5.9	8.3	13	7.3	17	6.8	3.7	3.2
6	1.1	4.4	4.8	14	5.1	13	11	7.3	16	7.4	5.1	2.7
7	1.1	4.3	e4.4	10	4.9	11	11	7.1	16	6.9	3.7	2.1
8	0.98	4.2	3.9	9.7	e4.5	9.4	11	7.3	18	6.6	3.6	2.1
9	0.98	4.0	e4.2	10	e4.2	11	13	7.5	18	6.1	3.6	2.0
10	1.8	3.4	11	9.7	3.9	12	15	7.6	17	6.2	3.5	1.9
11	8.5	3.6	6.5	8.4	4.1	9.4	18	7.5	16	6.4	3.5	1.9
12	11	4.0	13	7.7	4.9	8.9	21	7.1	12	5.7	3.8	1.9
13	5.9	5.4	13	6.9	e4.6	11	20	6.6	11	5.3	3.7	2.1
14	1.8	4.4	15	6.8	e4.3	14	19	6.3	10	4.7	2.7	4.6
15	0.48	4.2	17	6.6	4.0	13	18	6.1	9.5	4.7	2.5	4.4
16	11	5.9	16	e6.4	7.9	15	17	6.1	8.7	4.9	2.8	4.0
17	26	13	16	6.2	e10	17	14	6.6	8.4	4.9	3.5	3.1
18	4.9	14	13	e6.0	e25	19	12	6.6	9.7	4.7	3.3	2.9
19	3.2	13	9.2	e5.8	e20	20	12	6.4	9.1	4.9	2.8	6.3
20	2.8	7.5	13	e5.6	16	22	11	5.7	15	4.7	2.3	3.6
21	2.1	6.1	14	5.4	6.8	26	11	5.6	30	4.5	2.3	3.1
22	1.9	7.4	12	e5.3	11	27	11	6.0	30	7.0	2.3	2.9
23	2.3	6.2	10	e5.2	17	26	10	6.0	30	8.0	2.3	21
24	2.3	5.2	9.0	e5.1	17	25	9.5	9.4	29	7.4	2.1	21
25	2.3	5.0	12	e5.0	16	24	9.1	9.0	27	5.1	2.1	18
26	4.7	4.7	13	4.9	12	23	13	13	25	4.8	2.1	12
27	3.7	4.7	9.8	e4.8	7.8	22	11	14	23	4.4	2.2	5.1
28	3.5	4.7	9.2	e4.8	7.4	21	9.3	10	18	3.8	2.7	4.7
29	3.4	4.6	9.0	4.7	---	20	8.8	8.7	11	3.9	2.7	4.5
30	6.4	4.5	8.5	4.5	---	19	8.7	7.9	10	3.7	2.6	3.3
31	12	---	9.1	4.5	---	19	---	7.8	---	3.3	2.3	---
TOTAL	131.72	167.0	297.6	250.0	245.2	502.4	397.4	237.7	500.4	182.3	94.1	157.7
MEAN	4.25	5.57	9.60	8.06	8.76	16.2	13.2	7.67	16.7	5.88	3.04	5.26
MAX	26	14	17	16	25	27	21	14	30	9.5	5.1	21
MIN	0.48	3.2	3.9	4.5	3.9	7.3	8.7	5.6	8.4	3.3	2.1	1.9
CFSM	1.02	1.33	2.30	1.93	2.10	3.88	3.17	1.83	3.99	1.41	0.73	1.26
IN.	1.17	1.49	2.65	2.22	2.18	4.47	3.54	2.12	4.45	1.62	0.84	1.40

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2003, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	3.19	5.32	7.51	6.84	8.20	11.8	11.8	9.20	6.08	4.25	2.84	2.94										
MAX	7.31	10.3	22.0	14.3	15.2	26.7	31.8	24.7	16.7	11.7	8.98	9.05										
(WY)	1997	1987	1997	1996	1996	1994	1993	1989	2003	1984	1986	1999										
MIN	0.94	1.68	2.06	2.34	1.80	2.72	3.32	4.29	2.10	1.36	0.85	0.63										
(WY)	1989	2001	2002	1983	2002	2002	1985	1997	1985	1983	1983	1983										

e Estimated.

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1983 - 2003	
ANNUAL TOTAL	1431.49		3163.52			
ANNUAL MEAN	3.92		8.67		6.65	
HIGHEST ANNUAL MEAN					10.5	1994
LOWEST ANNUAL MEAN					2.76	2002
HIGHEST DAILY MEAN	26	Oct 17	30	Jun 21-23	139	Dec 5 1993
LOWEST DAILY MEAN	0.26	Sep 29	0.48	Oct 15	0.11	Sep 11 1983
ANNUAL SEVEN-DAY MINIMUM	0.88	Sep 10	1.1	Oct 3	0.19	Sep 16 1985
MAXIMUM PEAK FLOW			33	Jun 20,21	a718	Dec 17 2000
MAXIMUM PEAK STAGE			b1.71	Jan 24	c4.72	Jan 19 1996
ANNUAL RUNOFF (CFSM)	0.94		2.07		1.59	
ANNUAL RUNOFF (INCHES)	12.74		28.15		21.62	
10 PERCENT EXCEEDS	9.0		17		13	
50 PERCENT EXCEEDS	2.5		6.8		4.5	
90 PERCENT EXCEEDS	1.1		2.7		1.4	

- a From rating curve extended above 308 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow at gage height 3.11 ft.
- b Ice jam.
- c From peak indicator; ice jam.

