

FRENCH CREEK BASIN

03021350 FRENCH CREEK NEAR WATTSBURG, PA

LOCATION.--Lat 42°00'55", long 79°46'58", Erie County, Hydrologic Unit 05010004, on right bank at downstream side of bridge on Tanner Road, 1,200 ft east of State Highway 74, 1.1 mi west of Pennsylvania-New York border, 1.5 mi northeast of Wattsburg, and 2.4 mi above confluence with West Branch French Creek.

DRAINAGE AREA.--92.0 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,304.84 ft above sea level (U.S. Army Corps of Engineers benchmark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 24	1000	*3,760	*9.22	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.6	13	44	e50	160	396	589	64	58	13	12	7.7
2	5.4	12	56	e48	431	200	588	58	83	14	12	6.2
3	5.0	12	46	e46	927	522	388	52	77	12	6.7	4.8
4	5.4	12	40	e43	543	751	476	48	72	12	5.8	4.0
5	5.4	12	54	e41	408	434	556	44	54	10	6.6	3.8
6	5.0	15	61	e40	281	297	293	42	43	8.8	6.1	3.5
7	22	16	54	e42	228	202	214	40	37	8.7	7.8	3.7
8	279	22	48	e44	184	189	171	43	34	7.1	6.2	5.7
9	116	23	42	e45	176	171	606	66	30	13	4.8	8.2
10	49	25	37	e47	263	153	901	69	36	19	4.2	11
11	32	111	34	e48	230	136	406	52	103	10	4.0	9.0
12	23	75	32	e50	716	124	407	43	36	6.9	3.7	6.3
13	18	50	30	e54	476	113	254	39	25	6.0	5.2	6.5
14	18	40	29	e60	279	106	185	36	24	5.4	3.6	7.3
15	34	34	27	e67	218	98	147	33	29	4.3	3.0	6.6
16	29	31	26	e73	209	97	157	30	25	4.0	2.3	5.8
17	22	28	28	e80	508	187	275	27	21	3.7	2.4	6.6
18	19	26	30	e86	399	1110	307	54	22	3.4	1.7	5.5
19	27	24	32	e240	226	568	209	376	21	3.5	1.7	4.3
20	30	24	49	e300	159	307	162	177	18	3.5	2.2	4.3
21	30	29	220	e500	133	356	130	81	17	4.6	9.1	7.0
22	34	32	1190	585	110	414	118	56	17	4.7	14	6.9
23	29	34	378	1610	91	269	277	57	14	3.9	10	6.8
24	24	40	e140	3340	88	277	473	430	13	3.7	6.7	6.8
25	20	37	e90	1340	76	285	222	855	12	3.1	6.9	6.6
26	17	41	e76	552	72	236	158	832	12	2.6	15	6.4
27	15	47	e66	344	71	264	121	456	12	2.8	40	6.5
28	15	41	e58	548	278	340	97	198	13	2.4	29	6.8
29	14	36	e53	436	---	404	82	114	13	2.2	18	12
30	15	33	e48	272	---	444	71	74	13	2.0	14	131
31	14	---	e52	186	---	419	---	58	---	3.6	9.6	---
TOTAL	976.8	975	3170	11217	7940	9869	9040	4604	984	203.9	274.3	317.6
MEAN	31.5	32.5	102	362	284	318	301	149	32.8	6.58	8.85	10.6
MAX	279	111	1190	3340	927	1110	901	855	103	19	40	131
MIN	5.0	12	26	40	71	97	71	27	12	2.0	1.7	3.5
CFSM	.34	.35	1.11	3.93	3.08	3.46	3.28	1.61	.36	.07	.10	.12
IN.	.39	.39	1.28	4.54	3.21	3.99	3.66	1.86	.40	.08	.11	.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1999, BY WATER YEAR (WY)

MEAN	163	309	306	263	313	439	325	148	123	67.6	78.0	121
MAX	375	669	547	624	792	779	627	409	477	334	272	563
(WY)	1982	1986	1978	1998	1976	1979	1994	1984	1986	1986	1977	1977
MIN	13.3	31.0	81.2	79.3	75.9	191	157	38.2	14.6	6.58	5.93	4.84
(WY)	1992	1992	1990	1977	1987	1981	1976	1985	1991	1999	1991	1995

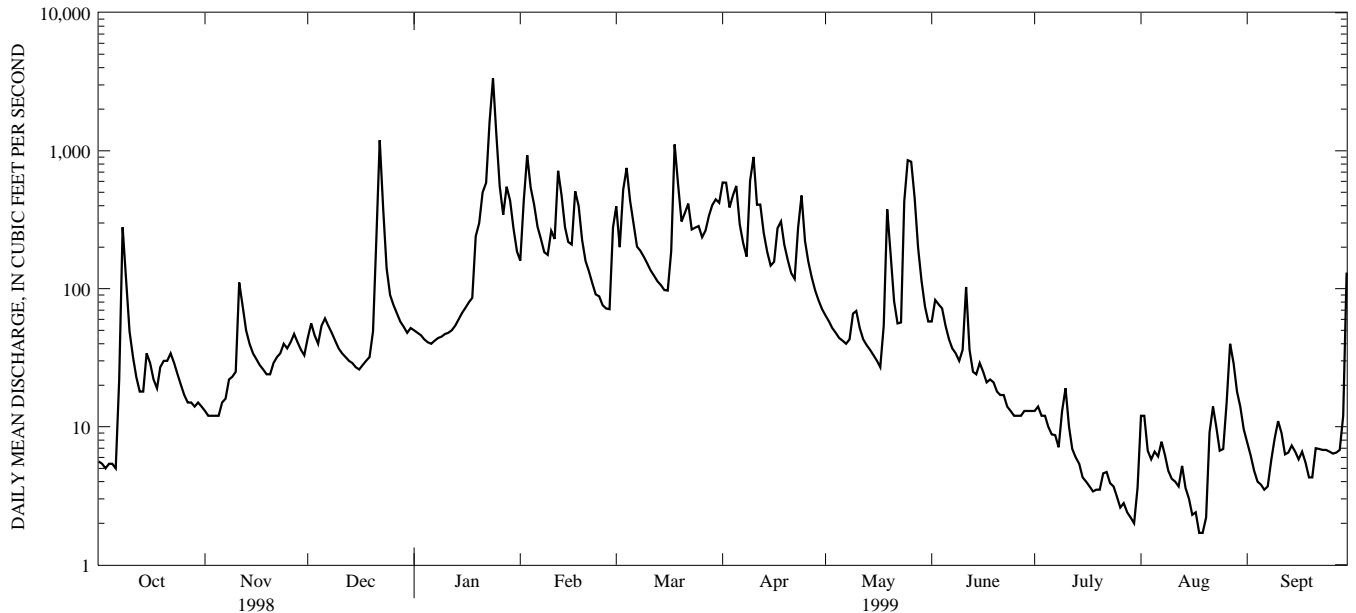
e Estimated.

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03021350 FRENCH CREEK NEAR WATTSBURG, PA--Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR			FOR 1999 WATER YEAR			WATER YEARS 1975 - 1999		
ANNUAL TOTAL	59408.0			49571.6			221		
ANNUAL MEAN	163			136			289		
HIGHEST ANNUAL MEAN							1996		
LOWEST ANNUAL MEAN							1999		
HIGHEST DAILY MEAN	3630	Jan	8	3340	Jan	24	e4900	Jan	19 1996
LOWEST DAILY MEAN	5.0	Oct	3,6	1.7	Aug	18,19	1.7	Aug	18,19 1999
ANNUAL SEVEN-DAY MINIMUM	5.4	Sep	30	2.4	Aug	14	2.4	Aug	14 1999
INSTANTANEOUS PEAK FLOW				3760	Jan	24	a6350	Sep	14 1979
INSTANTANEOUS PEAK STAGE				9.22	Jan	24	11.95	Sep	14 1979
INSTANTANEOUS LOW FLOW				1.5	Jul	31 ^b	1.5	Jul	31 1999 ^c
ANNUAL RUNOFF (CFSM)	1.77			1.48			2.40		
ANNUAL RUNOFF (INCHES)	24.02			20.04			32.57		
10 PERCENT EXCEEDS	342			406			526		
50 PERCENT EXCEEDS	36			40			105		
90 PERCENT EXCEEDS	7.2			5.0			17		

- a From rating curve extended above 4,400 ft³/s.
- b Also Aug. 18, 19.
- c Also Aug. 18, 19, 1999.
- e Estimated.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999