

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)
Feb. 10	1300	*3,160	*8.59	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	31	386	e82	e370	150	367	76	83	38	7.4	61
2	19	30	294	e80	246	132	510	69	594	36	7.0	29
3	17	29	200	e76	181	119	420	65	266	27	82	18
4	63	30	174	e78	186	105	502	56	249	25	46	14
5	242	29	160	e80	167	105	640	49	145	119	20	13
6	906	27	139	e84	152	79	1080	44	100	56	13	11
7	457	27	132	e88	139	105	1480	39	77	34	10	17
8	622	26	137	e82	138	94	1320	39	58	28	9.0	19
9	643	27	125	e78	953	85	924	47	45	25	8.3	13
10	399	51	128	e77	2890	81	705	41	39	21	7.8	11
11	266	120	140	e71	1200	78	395	46	112	20	7.4	9.7
12	147	72	845	e70	491	78	299	185	71	20	6.8	8.5
13	99	54	551	e70	353	377	220	176	49	17	6.8	7.9
14	74	48	286	e82	723	599	171	97	37	15	6.6	8.8
15	61	49	251	e95	1800	382	149	67	31	14	6.1	8.9
16	58	51	354	e92	703	350	444	50	33	12	6.1	9.2
17	55	79	2010	e90	376	319	532	41	39	11	6.5	7.7
18	78	109	1100	e86	252	229	406	39	28	11	6.4	7.2
19	68	108	472	e84	211	213	251	37	23	14	6.3	6.6
20	56	104	295	e82	227	278	211	33	20	35	7.6	8.2
21	50	82	e180	e80	297	406	412	32	166	17	9.9	8.5
22	46	85	e155	e79	158	665	470	78	683	12	8.6	9.0
23	41	122	e140	e78	159	726	294	221	277	11	8.3	8.4
24	42	149	e130	e78	125	709	216	119	172	10	8.3	8.7
25	45	145	e120	e77	386	353	175	85	94	10	7.2	14
26	42	469	e115	e76	762	263	140	118	61	10	10	15
27	40	1290	e110	e76	308	216	126	87	46	9.7	30	43
28	39	1340	e100	e75	196	191	111	136	37	8.4	23	47
29	36	782	e96	e74	---	208	95	141	30	8.4	13	32
30	34	545	e92	e92	---	398	83	88	32	8.2	9.9	25
31	32	---	e84	e180	---	504	---	59	---	7.7	27	---
TOTAL	4798	6110	9501	2592	14149	8597	13148	2460	3697	690.4	432.3	499.3
MEAN	155	204	306	83.6	505	277	438	79.4	123	22.3	13.9	16.6
MAX	906	1340	2010	180	2890	726	1480	221	683	119	82	61
MIN	17	26	84	70	125	78	83	32	20	7.7	6.1	6.6
CFSM	1.68	2.21	3.33	.91	5.49	3.01	4.76	.86	1.34	.24	.15	.18
IN.	1.94	2.47	3.84	1.05	5.72	3.48	5.32	.99	1.49	.28	.17	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

MEAN	160	308	303	254	318	422	331	146	121	65.6	79.1	114
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	139	157	38.2	14.6	6.58	5.93	4.84
(WY)	1992	1992	1990	1977	1987	2000	1976	1985	1991	1999	1991	1995

e Estimated.

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03021350 FRENCH CREEK NEAR WATTSBURG, PA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1975 - 2001	
ANNUAL TOTAL	65022.7		66674.0			
ANNUAL MEAN	178		183		218	
HIGHEST ANNUAL MEAN					289	1996
LOWEST ANNUAL MEAN					136	1999
HIGHEST DAILY MEAN	2310	Feb 25	2890	Feb 10	e4900	Jan 19 1996
LOWEST DAILY MEAN	9.0	Jul 27	6.1	Aug 15,16	1.7	Aug 18 1999
ANNUAL SEVEN-DAY MINIMUM	11	Sep 4	6.4	Aug 13	2.4	Aug 14 1999
MAXIMUM PEAK FLOW			3160	Feb 10	a6350	Sep 14 1979
MAXIMUM PEAK STAGE			8.59	Feb 10	11.95	Sep 14 1979
INSTANTANEOUS LOW FLOW			5.8	Aug 15,16	1.5	Jul 31 1999b
ANNUAL RUNOFF (CFSM)	1.93		1.99		2.37	
ANNUAL RUNOFF (INCHES)	26.29		26.96		32.14	
10 PERCENT EXCEEDS	396		471		519	
50 PERCENT EXCEEDS	78		79		101	
90 PERCENT EXCEEDS	23		9.5		17	

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

