

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 National Geodetic Vertical Datum of 1929 (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. 30	1900	2,520	7.92	May 14	0200	2,950	8.37
Feb. 1	1600	*3,320	*8.76				

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	131	604	e80	3010	188	361	231	139	28	25	6.3
2	15	104	272	e77	1540	180	303	224	92	25	20	6.2
3	12	135	177	e72	432	941	1450	217	72	23	17	6.8
4	11	104	135	e68	302	493	602	156	81	21	15	8.3
5	10	82	123	e63	230	305	316	129	1270	19	14	6.8
6	58	69	105	e68	231	288	275	107	689	17	12	6.3
7	92	57	92	e65	200	410	269	105	260	16	11	5.8
8	63	52	82	e65	186	461	245	103	150	15	10	5.4
9	40	79	76	e75	187	567	519	147	106	17	9.5	5.2
10	30	73	68	e77	237	548	613	204	82	29	9.1	5.1
11	23	60	61	e85	537	327	280	123	69	24	8.6	4.5
12	21	51	60	e85	326	318	200	1030	58	17	8.4	4.6
13	20	45	73	e100	228	427	635	2480	54	15	8.3	4.0
14	24	41	228	e102	174	428	1070	2630	60	14	8.6	6.3
15	57	40	976	e109	169	298	1020	1080	92	14	10	57
16	47	39	371	e104	208	409	423	393	153	13	17	99
17	155	38	649	e114	224	292	267	1240	125	12	21	41
18	138	34	1530	e112	167	241	200	672	76	11	15	24
19	80	41	600	e112	158	210	177	385	56	10	14	18
20	55	240	360	e112	320	387	206	238	46	10	12	15
21	42	161	295	e114	891	506	191	190	39	9.6	10	13
22	115	105	233	e114	533	289	167	156	36	11	9.0	12
23	98	79	718	134	281	249	165	131	33	12	9.1	11
24	114	64	1230	590	220	250	137	111	31	13	9.8	9.6
25	140	542	395	678	232	236	129	104	29	13	11	9.1
26	137	418	198	383	254	287	127	287	34	12	10	8.6
27	280	190	144	324	262	731	105	178	66	12	9.0	90
28	293	144	e117	454	188	468	287	115	49	30	8.2	230
29	245	390	e104	890	---	840	967	96	40	145	7.6	79
30	270	678	e94	2270	---	2170	416	142	33	68	7.2	44
31	181	---	e88	1820	---	651	---	180	---	36	6.6	---
TOTAL	2885	4286	10258	9516	11927	14395	12122	13584	4120	711.6	363.0	841.9
MEAN	93.1	143	331	307	426	464	404	438	137	23.0	11.7	28.1
MAX	293	678	1530	2270	3010	2170	1450	2630	1270	145	25	230
MIN	10	34	60	63	158	180	105	96	29	9.6	6.6	4.0
CFSM	1.01	1.55	3.60	3.34	4.63	5.05	4.39	4.76	1.49	0.25	0.13	0.31
IN.	1.17	1.73	4.15	3.85	4.82	5.82	4.90	5.49	1.67	0.29	0.15	0.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2002, BY WATER YEAR (WY)

MEAN	157	302	304	256	322	423	333	156	121	64.1	76.7	111
MAX	375	669	547	624	792	779	627	438	477	334	272	563
(WY)	1982	1986	1978	1998	1976	1979	1994	2002	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1975 - 2002	
ANNUAL TOTAL	63694.0		85009.5			
ANNUAL MEAN	175		233		218	
HIGHEST ANNUAL MEAN					289	1996
LOWEST ANNUAL MEAN					136	1999
HIGHEST DAILY MEAN	2890	Feb 10	3010	Feb 1	e4900	Jan 19 1996
LOWEST DAILY MEAN	6.1	Aug 15,16	4.0	Sep 13	1.7	Aug 18 1999
ANNUAL SEVEN-DAY MINIMUM	6.4	Aug 13	4.9	Sep 7	2.4	Aug 14 1999
MAXIMUM PEAK FLOW			3320	Feb 1	a6350	Sep 14 1979
MAXIMUM PEAK STAGE			8.76	Feb 1	11.95	Sep 14 1979
INSTANTANEOUS LOW FLOW			3.7	Sep 13	1.5	Jul 31 1999 ^b
ANNUAL RUNOFF (CFSM)	1.90		2.53		2.37	
ANNUAL RUNOFF (INCHES)	25.75		34.37		32.22	
10 PERCENT EXCEEDS	419		576		522	
50 PERCENT EXCEEDS	79		105		101	
90 PERCENT EXCEEDS	9.5		10		17	

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

