

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)
May 14	0300	*2,670	*8.08	No other peak greater than 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	30	46	e121	1750	e67	154	246	52	448	27	67	758
2	22	72	e121	687	e65	125	533	160	182	25	58	1990
3	32	71	e121	315	e62	115	312	159	102	25	55	560
4	45	82	e118	228	e220	117	277	100	87	24	52	226
5	35	95	e118	184	e394	137	1260	84	133	46	62	140
6	30	204	e118	163	e301	224	578	109	171	48	165	105
7	24	185	e118	137	e218	202	335	110	114	39	164	80
8	20	130	e115	154	e174	167	297	104	93	37	117	67
9	17	90	e115	158	e146	373	317	108	160	84	152	59
10	15	87	e115	e132	e127	304	388	102	118	86	93	53
11	14	673	e129	e119	e108	211	375	89	120	59	82	47
12	14	341	e183	e112	e97	166	253	232	196	54	147	41
13	15	170	e344	e108	e90	166	187	1680	805	40	72	37
14	13	122	e511	e104	e85	153	152	2000	455	30	53	36
15	14	94	e690	e101	e82	179	131	484	200	24	43	49
16	15	93	451	e98	e77	619	112	276	124	34	83	76
17	28	253	280	e96	e74	1610	95	201	91	41	781	52
18	35	434	217	e96	e68	2160	83	153	123	81	169	39
19	189	254	232	e94	e61	1990	78	118	109	86	82	84
20	225	278	1990	e91	e55	1750	72	96	93	48	59	209
21	99	191	1350	e91	e52	1270	152	118	81	117	47	101
22	60	277	439	e88	e53	1240	185	94	81	657	541	78
23	44	439	290	e86	e463	703	157	79	66	900	234	471
24	36	254	217	e85	864	429	121	259	52	534	92	211
25	32	225	185	e82	570	470	96	218	46	298	60	115
26	70	199	160	e81	384	1530	81	122	41	131	111	94
27	92	161	143	e79	328	685	70	84	36	340	190	842
28	64	136	127	e76	236	344	63	108	33	1010	95	794
29	49	125	133	e74	---	488	58	85	30	239	228	841
30	43	e121	125	e71	---	544	54	66	29	117	596	670
31	37	---	1080	e69	---	280	---	132	---	78	157	---
TOTAL	1458	5902	10456	5809	5521	18905	7118	7782	4419	5359	4907	8925
MEAN	47.0	197	337	187	197	610	237	251	147	173	158	298
MAX	225	673	1990	1750	864	2160	1260	2000	805	1010	781	1990
MIN	13	46	115	69	52	115	54	52	29	24	43	36
CFSM	0.51	2.14	3.67	2.04	2.14	6.63	2.58	2.73	1.60	1.88	1.72	3.23
IN.	0.59	2.39	4.23	2.35	2.23	7.64	2.88	3.15	1.79	2.17	1.98	3.61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

MEAN	154	298	305	254	318	429	330	160	122	67.8	79.5	117
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	85396.5		86561			
ANNUAL MEAN	234		237		219	
HIGHEST ANNUAL MEAN					289	
LOWEST ANNUAL MEAN					136	
HIGHEST DAILY MEAN	3010	Feb 1	2160	Mar 18	e4900	Jan 19 1996
LOWEST DAILY MEAN	4.0	Sep 13	13	Oct 14	1.7	Aug 18 1999
ANNUAL SEVEN-DAY MINIMUM	4.9	Sep 7	14	Oct 10	2.4	Aug 14 1999
MAXIMUM PEAK FLOW			2670	May 14	a6350	Sep 14 1979
MAXIMUM PEAK STAGE			8.08	May 14	11.95	Sep 14 1979
INSTANTANEOUS LOW FLOW			12	Oct 14	1.5	Jul 31 1999 ^b
ANNUAL RUNOFF (CFSM)	2.54		2.58		2.38	
ANNUAL RUNOFF (INCHES)	34.53		35.00		32.32	
10 PERCENT EXCEEDS	535		550		524	
50 PERCENT EXCEEDS	115		118		103	
90 PERCENT EXCEEDS	10		40		17	

^a From rating curve extended above 4,400 ft³/s.

^b Also Aug. 18, 19, 1999.

^e Estimated.

