

FRENCH CREEK BASIN

03023100 FRENCH CREEK AT MEADVILLE, PA

LOCATION.--Lat 41°37'57", long 80°09'35", Crawford County, Hydrologic Unit 05010004, on left bank 30 ft upstream from bridge on Mercer Street at Meadville, 300 ft downstream from Mill Run, 2,600 ft downstream from Cussewago Creek, at mile 30.5.

DRAINAGE AREA.--788 mi².

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,058.83 ft above sea level (U.S. Army Corps of Engineers benchmark). Prior to October 27, 1989, water-stage recorder at site 2,300 ft upstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since October 1971 by Union City Reservoir 43 mi upstream, serving as a retarding basin, and since January 1974 by Woodcock Creek Lake (station 03022550) 9.0 mi upstream. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge 25,800 ft³/s April 1947, gage height, 17.05 ft; maximum gage height 17.60 ft, January 1959 (backwater from ice), site and datum then in use.

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	310	361	3360	e1000	e2000	1740	2620	723	724	248	98	180
2	289	350	2830	e940	e2000	1570	2290	647	1530	255	94	394
3	270	343	2370	e860	e1700	1440	2120	584	2200	262	186	319
4	310	333	2020	e820	e1500	1330	2000	534	1750	234	1240	240
5	628	329	1900	e780	e1300	1180	1870	482	1650	220	761	185
6	1890	323	1760	e760	e1200	1010	1960	461	1300	311	448	152
7	2360	311	1650	e750	e1100	827	2420	398	1020	307	295	143
8	2410	300	1600	e800	e1000	798	2400	379	802	247	218	121
9	2820	301	1510	e800	e1400	782	2230	392	620	212	172	116
10	3860	352	1330	e760	e2800	747	2270	404	493	196	147	115
11	3860	645	1220	e760	7960	728	2250	389	524	181	126	106
12	3030	972	2980	e750	5320	695	2080	612	642	165	115	100
13	2320	848	3520	e740	4030	1330	1870	1150	571	155	112	98
14	1640	653	3010	e720	3610	3220	1700	1050	448	146	106	96
15	1220	551	2640	e700	5320	3240	1600	829	375	137	101	90
16	904	527	2590	e700	5230	3010	2390	627	323	129	98	90
17	734	544	6500	e840	4250	3200	2890	483	307	124	95	87
18	695	701	7150	e960	3260	2930	2900	412	312	118	91	84
19	687	837	5620	e1200	2500	2450	2520	373	281	119	92	84
20	663	828	3880	e1100	2370	2140	2130	349	259	153	94	93
21	592	795	3160	e950	2350	2120	2300	333	254	235	97	90
22	529	685	2670	e850	2070	2500	3010	452	730	180	101	96
23	487	619	2240	e800	1910	2620	2860	978	1210	152	128	94
24	464	811	e2000	e720	1770	2390	2450	1110	990	129	112	107
25	478	921	e1800	e700	1820	2260	2010	1460	794	124	107	106
26	541	1580	e1700	e660	2420	2100	1680	2360	530	171	135	106
27	526	3400	e1600	e640	2320	1930	1440	1950	378	217	158	125
28	483	4300	e1400	e600	1990	1820	1180	1700	309	160	234	168
29	431	4200	e1300	e640	---	1870	976	1360	274	128	233	280
30	405	3810	e1200	e860	---	2230	814	1090	250	113	196	256
31	378	---	e1100	e1100	---	3080	---	840	---	105	179	---
TOTAL	36214	31530	79610	25260	76500	59287	63230	24911	21850	5633	6369	4321
MEAN	1168	1051	2568	815	2732	1912	2108	804	728	182	205	144
MAX	3860	4300	7150	1200	7960	3240	3010	2360	2200	311	1240	394
MIN	270	300	1100	600	1000	695	814	333	250	105	91	84
CFSM	1.48	1.33	3.26	1.03	3.47	2.43	2.67	1.02	.92	.23	.26	.18
IN.	1.71	1.49	3.76	1.19	3.61	2.80	2.98	1.18	1.03	.27	.30	.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

MEAN	1039	1829	1945	2363	2135	2404	2408	1345	850	439	470	694
MAX	3181	3205	3039	4233	4190	4059	4023	2998	2659	1337	1771	2786
(WY)	1991	1997	1991	1998	1990	1997	1994	1996	1989	1992	2000	1990
MIN	104	154	510	815	757	1313	1556	451	155	134	81.3	52.6
(WY)	1992	1992	1999	2001	1993	2000	1995	1993	1991	1998	1998	1991

e Estimated.

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03023100 FRENCH CREEK AT MEADVILLE, PA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1989 - 2001	
ANNUAL TOTAL	529602		434715			
ANNUAL MEAN	1447		1191		1489	
HIGHEST ANNUAL MEAN					1982	1996
LOWEST ANNUAL MEAN					824	1999
HIGHEST DAILY MEAN	8620	Aug 4	7960	Feb 11	14300	Jan 20 1996
LOWEST DAILY MEAN	147	Sep 9	84	Sep 18,19	37	Sep 22 1991
ANNUAL SEVEN-DAY MINIMUM	165	Sep 5	88	Sep 15	42	Sep 19 1991
MAXIMUM PEAK FLOW			8360	Feb 11	^a 14800	Jan 20 1996
MAXIMUM PEAK STAGE			11.97	Feb 11	15.52	Jan 20 1996
ANNUAL RUNOFF (CFSM)	1.84		1.51		1.89	
ANNUAL RUNOFF (INCHES)	25.00		20.52		25.67	
10 PERCENT EXCEEDS	3400		2810		3460	
50 PERCENT EXCEEDS	879		760		976	
90 PERCENT EXCEEDS	310		119		125	

a From rating curve extended above 10,300 ft³/s.

