

FRENCH CREEK BASIN

03024000 FRENCH CREEK AT UTICA, PA

LOCATION.--Lat 41°26'15", long 79°57'22", Venango County, Hydrologic Unit 05010004, on right bank at downstream side of bridge on SR 3017 at Utica and 2,000 ft upstream from Mill Creek.

DRAINAGE AREA.--1,028 mi².

PERIOD OF RECORD.--August 1932 to current year.

REVISED RECORDS.--WSP 743: Drainage area. WSP 823: 1936 (M). WSP 1275: 1933, 1936.

GAGE.--Water-stage recorder. Datum of gage is 1,019.44 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 27, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since July 1970 by Union City Reservoir (station 03021518) 50 mi upstream, serving as a retarding basin, and since January 1974 by Woodcock Creek Lake (station 03022550), 25 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 stage since at least 1912, 15.7 ft in March 1913, discharge about 36,000 ft³/s.

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	529	445	1230	5200	e791	e1970	3580	823	3450	545	2350	1370
2	370	439	1300	5880	e777	e1860	3460	909	2940	514	2100	2950
3	284	487	1110	5050	e929	e1770	3360	1440	2600	509	1960	3350
4	237	599	1040	4240	e1880	e1670	3110	1500	2060	524	1870	2660
5	228	643	e1030	3480	e3010	e1740	e7190	1290	1730	500	1680	2270
6	228	710	e1020	2980	e3680	e1820	e7610	1670	1610	561	1570	1900
7	232	800	e967	2670	e3340	e1970	6500	2220	1530	618	1500	1630
8	220	912	e940	2510	e2910	e2320	5550	1990	1430	555	1640	1460
9	293	854	e913	2360	e2480	e2670	5000	2010	1630	529	1980	1290
10	252	763	e900	2390	e2080	e3690	4570	2300	1950	682	4870	1100
11	219	e1690	e886	2270	e1690	e3070	3990	2210	1850	897	3430	845
12	208	e2630	e1030	1980	e1440	e2490	3330	2200	2350	838	2270	637
13	205	e2140	e1680	1730	e1210	e2170	2970	3590	4570	749	1700	529
14	196	1690	e3010	1610	e1110	e2090	2680	5530	5090	682	1440	477
15	187	1390	e4680	1440	e1030	e2320	2530	5420	4160	560	1240	470
16	199	1120	4150	1260	e971	e3340	2330	4370	3440	544	1140	571
17	217	1140	3500	1160	e943	e4520	2130	3490	2570	656	993	627
18	225	1660	2720	1000	e920	e5820	1890	2830	2150	609	974	644
19	325	2090	2240	e1000	e902	7240	1700	2470	2000	685	1280	909
20	631	1990	3490	e937	e888	6450	1420	2280	1990	706	1260	1570
21	1070	1840	4940	e899	e874	5770	1540	2550	1740	4600	1140	1910
22	933	1610	4320	e862	e929	5900	2110	2290	1440	10900	945	1570
23	760	1750	3650	e824	e1680	5660	2230	2000	1270	9110	734	2600
24	568	2080	3010	e799	e2510	4990	1980	2680	1120	9450	776	2850
25	436	2020	2600	e799	e3230	4180	1700	2940	959	7020	770	2240
26	457	1930	2300	e786	e2880	4210	1500	2520	840	4480	1250	1720
27	485	1750	2130	e799	e2600	4860	1290	1930	762	3420	995	2730
28	659	1530	2010	e799	e2270	4320	1120	1630	687	3740	969	4520
29	662	1290	1840	e799	---	3910	993	1410	629	3880	863	4130
30	560	1190	1710	e811	---	4450	888	1240	581	3100	818	4000
31	481	---	2720	e786	---	4130	---	1810	---	2630	1010	---
TOTAL	12556	41182	69066	60110	49954	113370	90251	73542	61128	74793	47517	55529
MEAN	405	1373	2228	1939	1784	3657	3008	2372	2038	2413	1533	1851
MAX	1070	2630	4940	5880	3680	7240	7610	5530	5090	10900	4870	4520
MIN	187	439	886	786	777	1670	888	823	581	500	734	470
CFSM	0.39	1.34	2.17	1.89	1.74	3.56	2.93	2.31	1.98	2.35	1.49	1.80
IN.	0.45	1.49	2.50	2.18	1.81	4.10	3.27	2.66	2.21	2.71	1.72	2.01

e Estimated.

FRENCH CREEK BASIN

03024000 FRENCH CREEK AT UTICA, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2003, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1232	2226	2727	2501	2906	3546	3082	1778	1267	833	723	909
MAX (WY)	1991	1986	1978	1993	1976	1977	1994	2002	1986	1987	1980	1990
MIN (WY)	1992	1992	1999	1977	1987	2000	1976	1985	1991	1995	1991	1995

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1974 - 2003

ANNUAL TOTAL	680570	748998	
ANNUAL MEAN	1865	2052	1972
HIGHEST ANNUAL MEAN			2459
LOWEST ANNUAL MEAN			1044
HIGHEST DAILY MEAN	11800	May 15	10900 Jul 22
LOWEST DAILY MEAN	80	Sep 13	187 Oct 15
ANNUAL SEVEN-DAY MINIMUM	91	Sep 8	204 Oct 11
MAXIMUM PEAK FLOW			13600 Jul 22
MAXIMUM PEAK STAGE			9.96 Jul 22
ANNUAL RUNOFF (CFSM)	1.81		2.00
ANNUAL RUNOFF (INCHES)	24.63		27.10
10 PERCENT EXCEEDS	3840	4270	4470
50 PERCENT EXCEEDS	1430	1680	1330
90 PERCENT EXCEEDS	170	551	234

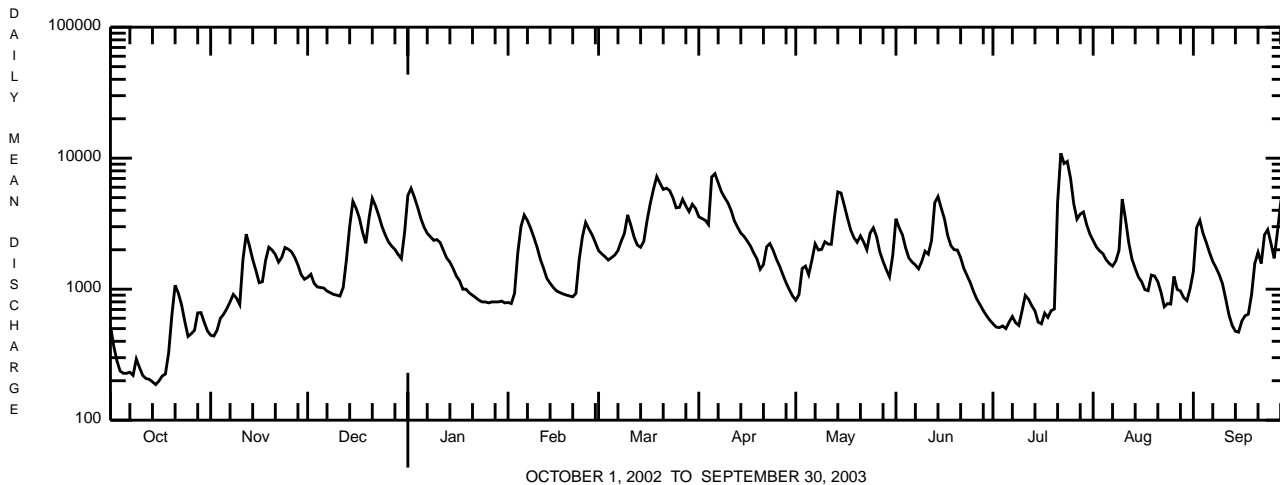
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 1973, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	695	1506	2238	2590	2713	3915	3147	1684	953	555	408	440
MAX (WY)	1946	1971	1951	1937	1938	1964	1947	1956	1947	1967	1956	1958
MIN (WY)	1964	1954	1961	1961	1934	1937	1946	1934	1934	1934	1954	1954

SUMMARY STATISTICS WATER YEARS 1933 - 1973

ANNUAL MEAN	1751
HIGHEST ANNUAL MEAN	2539
LOWEST ANNUAL MEAN	1146
HIGHEST DAILY MEAN	23000
LOWEST DAILY MEAN	45
ANNUAL SEVEN-DAY MINIMUM	48
MAXIMUM PEAK FLOW	a23800
MAXIMUM PEAK STAGE	b13.2
INSTANTANEOUS LOW FLOW	43
ANNUAL RUNOFF (CFSM)	1.70
ANNUAL RUNOFF (INCHES)	23.15
10 PERCENT EXCEEDS	4370
50 PERCENT EXCEEDS	940
90 PERCENT EXCEEDS	147

a From rating curve extended above 20,700 ft³/s.
 b From floodmark in gage well.



OCTOBER 1, 2002 TO SEPTEMBER 30, 2003