

KISKIMINETAS RIVER BASIN

03048500 KISKIMINETAS RIVER AT VANDERGRIFT, PA

LOCATION.--Lat 40°36'16", long 79°33'08", Westmoreland County, Hydrologic Unit 05010008, on left bank 0.5 mi upstream from bridge on State Highway Alternate 66 at Vandergrift, and 2.2 mi upstream from Pine Run.

DRAINAGE AREA.--1,825 mi².

PERIOD OF RECORD.--August 1937 to current year. Monthly discharge only for some periods, published in WSP 1305. October 1920 to September 1932 (gage heights and discharge measurements only) in reports of Pennsylvania Department of Forests and Waters.

GAGE.--Water-stage recorder. Datum of gage is 769.40 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark). Oct. 1, 1920 to Sept. 30, 1930, nonrecording gage, Oct. 1, 1930 to Sept. 30, 1932, water-stage recorder, at site 0.6 mi downstream at different datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated since November 1951 by Conemaugh River Lake, 23 mi upstream, since June 1942 by Loyalhanna Lake, 20 mi upstream, since July 1971 by Yellow Creek Lake (station 03042260), and by other reservoirs above station; the 11 most effective of which have a combined capacity of 105,700 acre-ft. Figures of daily discharge do not include diversion from Beaver Run Reservoir to plants and communities downstream, nor into the Monongahela River Basin. Evaporation from operation of Homer City and Conemaugh generating stations, which began during 1969 and 1970, respectively, can amount to as much as 45 ft³/s. 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.--Flood of March 18, 1936 reached a stage of 41.64 ft, from floodmark at present site, discharge, about 185,000 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	1260	1360	1380	3450	e1280	7830	3390	656	3120	1020	1070	6920
2	798	1340	1500	4030	e1430	6850	3880	981	3800	1020	1210	7180
3	673	1330	1750	4730	e1420	5590	3830	976	5200	1040	2340	7560
4	680	1320	1620	11500	e1420	4450	3870	968	6140	1270	3520	7150
5	621	1230	1220	14600	2020	4530	4050	1000	13400	994	4610	6250
6	596	1050	766	14200	3400	4650	4540	1160	15200	1020	4180	4880
7	540	1250	857	12900	3680	5340	5670	1850	9130	1100	3470	3370
8	505	1900	1290	10200	3520	6390	5070	1910	8300	1260	2730	1990
9	311	1890	1320	8650	3010	7180	7020	2340	9090	1470	2900	1870
10	267	1870	1210	6120	2180	9150	7760	3440	9600	1630	3230	1840
11	274	1860	807	4030	2080	10500	8230	3570	10200	2430	3670	1650
12	280	1850	828	3520	2010	7830	8110	4310	8910	5050	4180	1350
13	286	1780	1050	3410	1870	5440	7780	7320	6780	5320	3700	1110
14	512	1770	2440	3440	1360	6420	7420	8540	5330	4670	2820	1060
15	555	1740	3910	3300	956	8030	6250	8080	4320	3130	2540	1080
16	635	1710	4810	3060	994	8470	4550	6570	3380	1500	1910	1120
17	621	1960	4610	2270	1400	10000	3850	5580	2720	1550	1590	1150
18	678	2130	3970	1450	1140	11400	3330	5060	3080	1720	1490	1150
19	1320	2980	2970	1430	1250	10700	2670	4580	3740	1940	1420	1220
20	1300	3150	3560	1550	1650	6910	2550	4860	3770	1820	1330	1610
21	1200	3490	3410	1870	1610	7810	2570	4390	3170	1100	968	4060
22	752	3390	4050	1630	1640	12400	2300	3960	2850	1520	693	3960
23	740	3150	6330	1400	2920	13400	1860	4800	4130	2210	661	3630
24	635	2610	6940	1400	2140	11000	2030	4880	4090	3310	680	3670
25	635	2290	5430	e1220	2430	5140	2260	4840	2570	3050	682	3780
26	713	1790	5150	e1020	4800	3790	1750	4500	1810	2840	736	2770
27	668	1790	4620	e1080	8410	3690	1720	3650	1700	2430	1060	2220
28	688	1760	3840	e1340	8230	4210	1430	3800	1660	1500	2950	2250
29	954	1680	3560	e1470	---	5010	1210	3600	1620	1440	4190	1980
30	997	1430	2970	e1170	---	4540	620	3350	1310	1350	5470	2470
31	1060	---	2590	e1010	---	3850	---	2800	---	1210	4620	---
TOTAL	21754	58850	90758	132450	70250	222500	121570	118321	160120	62914	76620	92300
MEAN	702	1962	2928	4273	2509	7177	4052	3817	5337	2029	2472	3077
MAX	1320	3490	6940	14600	8410	13400	8230	8540	15200	5320	5470	7560
MIN	267	1050	766	1010	956	3690	620	656	1310	994	661	1060
CFSM	0.38	1.07	1.60	2.34	1.37	3.93	2.22	2.09	2.92	1.11	1.35	1.69
IN.	0.44	1.20	1.85	2.70	1.43	4.54	2.48	2.41	3.26	1.28	1.56	1.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2003, BY WATER YEAR (WY)

MEAN	1282	1951	3326	3677	4658	6425	5639	3728	2492	1504	1150	1038
MAX	6429	7570	9057	8454	10140	12400	12550	7245	8262	5469	4138	4629
(WY)	1955	1998	1973	1991	1956	1945	1993	1978	1972	1977	1958	1996
MIN	255	307	426	847	1724	1802	1727	1127	568	378	363	297
(WY)	1964	1954	1999	1956	1958	1969	1946	1941	1999	1965	1939	1939

e Estimated.

KISKIMINETAS RIVER BASIN

03048500 KISKIMINETAS RIVER AT VANDERGRIFT, PA--Continued

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1938 - 2003	
ANNUAL TOTAL	913516		1228407			
ANNUAL MEAN	2503		3365		3064	
HIGHEST ANNUAL MEAN					4518	1951
LOWEST ANNUAL MEAN					1777	1954
HIGHEST DAILY MEAN	14800	Mar 30	15200	Jun 6	60400	Mar 31 1940
LOWEST DAILY MEAN	197	Sep 20	267	Oct 10	60	Oct 15 1952
ANNUAL SEVEN-DAY MINIMUM	205	Sep 14	348	Oct 8	145	Nov 1 1952
MAXIMUM PEAK FLOW			17300	Jun 5	^a 71900	Mar 31 1940
MAXIMUM PEAK STAGE			12.66	Jun 5	25.70	Mar 31 1940
INSTANTANEOUS LOW FLOW					60	Oct 15 1952
ANNUAL RUNOFF (CFSM)	1.37		1.84		1.68	
ANNUAL RUNOFF (INCHES)	18.62		25.04		22.81	
10 PERCENT EXCEEDS	5740		7480		7100	
50 PERCENT EXCEEDS	1670		2470		1810	
90 PERCENT EXCEEDS	289		955		488	

^a From rating curve extended above 61,000 ft³/s.

