

## 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 mi<sup>2</sup>.

**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 sea level (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 ft<sup>3</sup>/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 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	566	477	4210	e880	e1600	5880	3670	3680	6760	1230	1350	595
2	566	627	3890	e970	e1600	5660	3010	3420	5540	932	1130	613
3	622	973	3330	1060	e1680	4890	2450	2640	2990	951	1700	599
4	633	1540	2750	1320	e1600	3880	3440	1910	2630	979	1530	564
5	559	1710	2300	1630	e1550	3720	3990	2740	2420	976	1610	560
6	547	1580	1780	1640	e1500	3530	4640	2470	1980	1070	1810	567
7	560	1120	1460	1680	e1440	2690	6410	1950	2420	1050	2150	567
8	558	1050	1330	1630	e1400	2000	6290	1860	3650	908	2620	593
9	555	602	725	1550	e1380	1970	6030	1760	3680	845	5560	812
10	579	585	739	1560	e1320	1900	5890	1490	2610	934	6430	828
11	567	586	876	1480	e1320	2040	5790	1370	2370	881	6000	964
12	552	580	1460	1100	e1600	2300	5690	808	1830	567	4660	1280
13	600	575	1470	1110	e2500	2610	5850	970	1800	562	3800	1540
14	693	575	2480	1150	4570	2680	6000	961	1930	947	2530	2080
15	862	562	2280	1430	3960	2760	5030	955	1940	1220	2240	850
16	967	519	2500	1310	4590	2840	3870	944	1930	1170	1170	1110
17	967	502	4890	e590	7600	3110	3200	948	1920	1120	1060	1080
18	964	453	4860	e590	8180	3000	3340	940	1790	1060	1060	960
19	924	514	4560	e610	7100	2940	4570	1060	1510	947	675	967
20	602	289	3820	e640	6600	2920	5040	1260	1930	954	759	968
21	564	259	2980	e700	7440	4040	5120	2610	1890	899	909	950
22	598	255	2680	e750	8800	4750	5350	2590	1840	625	871	603
23	887	253	1860	e840	8840	6910	6100	2700	2470	621	580	608
24	653	257	e1400	e910	8420	7910	8360	3640	2700	613	586	625
25	639	266	e1200	e1000	7800	8200	9890	4990	1710	601	649	656
26	513	1300	e940	e1100	7270	7990	9300	5650	1630	600	887	935
27	488	1780	e700	e1290	7020	7640	7940	4720	1340	549	891	1370
28	487	2080	e670	e1420	6780	6970	6360	4280	1450	591	891	1880
29	481	3560	e690	e1600	6400	6040	5540	4300	1430	723	847	1580
30	477	4340	e720	e1700	---	4790	4280	4490	1350	834	856	1560
31	475	---	e810	e1600	---	3900	---	7290	---	1200	824	---
TOTAL	19705	29769	66360	36840	131860	132460	162440	81396	71440	27159	58635	28864
MEAN	636	992	2141	1188	4547	4273	5415	2626	2381	876	1891	962
MAX	967	4340	4890	1700	8840	8200	9890	7290	6760	1230	6430	2080
MIN	475	253	670	590	1320	1900	2450	808	1340	549	580	560
CFSM	.35	.54	1.17	.65	2.49	2.34	2.97	1.44	1.30	.48	1.04	.53
IN.	.40	.61	1.35	.75	2.69	2.70	3.31	1.66	1.46	.55	1.20	.59

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

MEAN	1299	1985	3376	3736	4706	6468	5676	3713	2455	1519	1152	1027
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

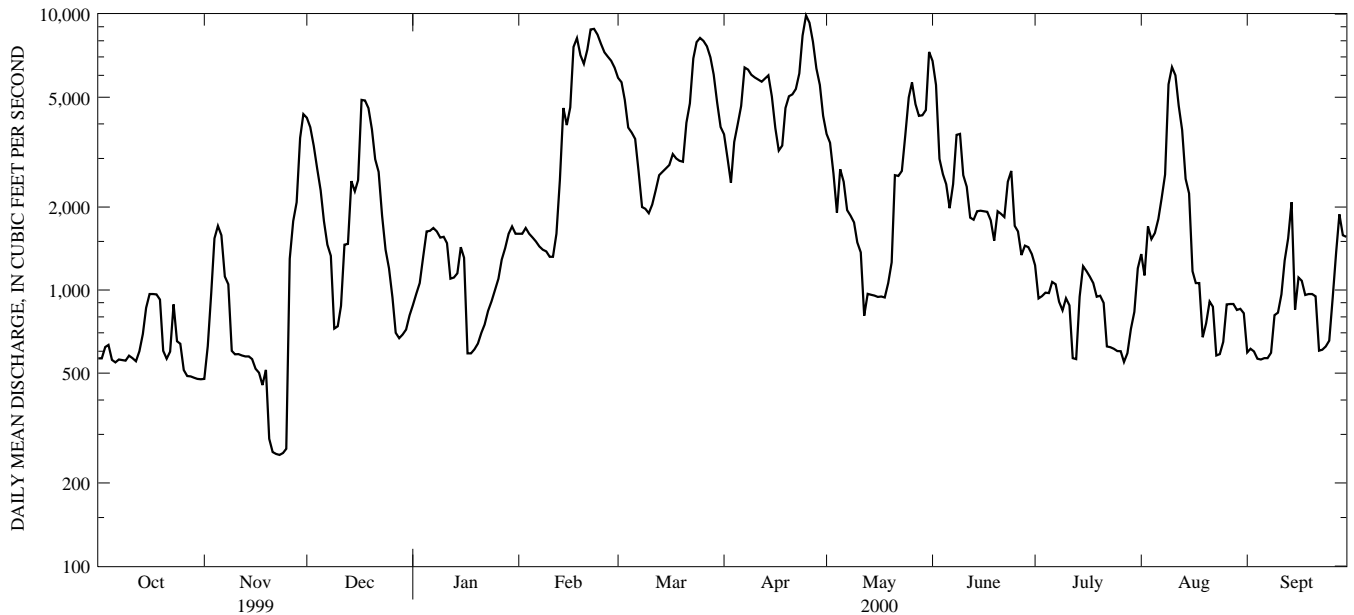
e Estimated.

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SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL TOTAL	835772		846928		3084	
ANNUAL MEAN	2290		2314		4518	
HIGHEST ANNUAL MEAN					1951	
LOWEST ANNUAL MEAN					1954	
HIGHEST DAILY MEAN	16100	Jan 29	9890	Apr 25	60400	Mar 31 1940
LOWEST DAILY MEAN	213	Sep 5	253	Nov 23	60	Oct 15 1952
ANNUAL SEVEN-DAY MINIMUM	219	Jul 19	299	Nov 19	145	Nov 1 1952
INSTANTANEOUS PEAK FLOW			10000	Apr 24	<sup>a</sup> 71900	Mar 31 1940
INSTANTANEOUS PEAK STAGE			9.80	Apr 24	25.70	Mar 31 1940
INSTANTANEOUS LOW FLOW					60	Oct 15 1952
ANNUAL RUNOFF (CFSM)	1.25		1.27		1.69	
ANNUAL RUNOFF (INCHES)	17.04		17.26		22.96	
10 PERCENT EXCEEDS	6530		5860		7120	
50 PERCENT EXCEEDS	862		1480		1820	
90 PERCENT EXCEEDS	262		575		490	

<sup>a</sup> From rating curve extended above 61,000 ft<sup>3</sup>/s.



1-YEAR HYDROGRAPH  
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000