

## 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	1340	2870	e960	2520	2280	2770	1970	1500	1150	194	687
2	908	934	2460	e1000	5710	1740	3000	1990	1980	1800	203	603
3	647	930	2330	e1100	8890	1760	3410	1480	3170	3360	232	590
4	600	928	2470	e1100	8070	1760	3390	1330	4120	2970	494	518
5	640	930	3090	e950	7190	1860	3390	1330	4160	1860	542	503
6	944	901	1910	e950	7080	1950	2930	1440	3960	1160	493	255
7	1360	739	1860	e960	6100	1930	3890	1790	2930	1090	491	202
8	1990	734	1420	e1100	4890	1860	5470	1210	2450	1150	513	192
9	1930	726	1430	e1100	3970	1910	6890	791	1890	1140	498	192
10	1720	738	1500	e1020	4370	1900	7000	712	1760	1320	286	195
11	1250	972	1430	e1000	5900	1920	7530	715	1430	1240	230	195
12	949	2200	1610	e830	6870	1940	7840	933	1420	965	224	191
13	935	2250	1930	e730	6720	2180	9360	1170	984	1000	475	190
14	933	2200	3140	e750	6390	3530	9080	1120	929	984	528	201
15	932	1860	3180	e760	6480	7340	8760	1130	926	923	521	186
16	898	1370	3320	e800	6990	8670	10400	1100	932	872	283	450
17	870	1400	3490	959	7370	8340	13100	947	926	545	331	488
18	1530	1350	3870	1310	8820	9110	15500	652	934	554	261	474
19	3390	1390	4990	1330	11400	10000	15500	786	1040	560	266	223
20	5000	1280	5590	1470	9970	9210	12600	719	993	572	274	176
21	3540	954	4820	1910	8070	8130	8580	675	815	572	264	175
22	3500	917	3620	2140	6090	7760	6190	800	823	575	471	173
23	2660	929	2690	2110	4190	7600	5000	771	883	675	495	173
24	1970	919	2230	1920	4330	6840	3990	842	1210	608	486	180
25	1600	920	1670	1870	4560	5410	3940	1020	2310	294	480	533
26	1660	991	e1500	1500	3370	4500	3530	1640	1920	275	468	600
27	1880	1090	e1300	1530	3060	4360	2740	1720	1370	220	261	608
28	1730	1370	e1200	1530	2600	3880	2460	2040	915	196	230	603
29	1710	2340	e1050	1590	---	2860	2050	1990	872	424	248	545
30	1630	2710	e960	1840	---	2790	2020	1770	853	463	235	535
31	1370	---	e930	2980	---	2780	---	1480	---	282	589	---
TOTAL	51906	38312	75860	41099	171970	138100	192310	38063	50405	29799	11566	10836
MEAN	1674	1277	2447	1326	6142	4455	6410	1228	1680	961	373	361
MAX	5000	2710	5590	2980	11400	10000	15500	2040	4160	3360	589	687
MIN	600	726	930	730	2520	1740	2020	652	815	196	194	173
CFSM	.92	.70	1.34	.73	3.37	2.44	3.51	.67	.92	.53	.20	.20
IN.	1.06	.78	1.55	.84	3.51	2.81	3.92	.78	1.03	.61	.24	.22

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

MEAN	1305	1974	3362	3699	4729	6436	5687	3674	2442	1510	1140	1017
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	897172		850226		3072	
ANNUAL MEAN	2451		2329		4518	
HIGHEST ANNUAL MEAN					1951	
LOWEST ANNUAL MEAN					1954	
HIGHEST DAILY MEAN	9890	Apr 25	15500	Apr 18,19	60400	Mar 31 1940
LOWEST DAILY MEAN	549	Jul 27	173	Sep 22,23	60	Oct 15 1952
ANNUAL SEVEN-DAY MINIMUM	580	Sep 2	193	Sep 9	145	Nov 1 1952
MAXIMUM PEAK FLOW			16600	Apr 18	<sup>a</sup> 71900	Mar 31 1940
MAXIMUM PEAK STAGE			12.41	Apr 18	25.70	Mar 31 1940
INSTANTANEOUS LOW FLOW					60	Oct 15 1952
ANNUAL RUNOFF (CFSM)	1.34		1.28		1.68	
ANNUAL RUNOFF (INCHES)	18.29		17.33		22.87	
10 PERCENT EXCEEDS	5860		6430		7100	
50 PERCENT EXCEEDS	1610		1370		1810	
90 PERCENT EXCEEDS	737		316		490	

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

