

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 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 1971 by Yellow Creek Lake (station 03042260), since 1952 by Conemaugh River Lake, 23 mi upstream, since 1942 by Loyalhanna Lake, 20 mi upstream, 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, 185,000 ft³/s, by slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	514	523	245	e580	13200	1380	4240	2810	915	509	573	516
2	266	280	244	e590	10500	2250	4010	2680	931	618	562	479
3	473	254	245	e600	7930	2360	3710	2590	962	586	561	485
4	561	256	249	e610	6510	3060	3720	1940	918	560	555	239
5	258	259	250	e620	5930	4010	3400	1920	890	651	503	213
6	256	261	249	e620	4960	4750	4360	1910	875	651	500	215
7	505	261	258	e620	4970	5050	5790	1890	786	681	490	229
8	613	259	529	e610	5390	5020	6850	1560	575	598	289	223
9	583	237	544	e610	5620	4800	6550	1520	562	513	252	224
10	629	520	545	e620	5660	4550	6610	1470	564	560	244	223
11	851	511	542	e630	5060	4320	5730	1440	553	510	249	229
12	856	511	542	e640	4210	4020	8960	1430	551	504	249	246
13	845	554	530	e650	4040	3320	13700	1320	546	504	264	469
14	606	560	280	e700	3440	2930	15600	1320	551	508	303	495
15	549	550	253	e790	2280	2930	15100	1310	553	508	256	489
16	548	315	254	e870	2210	2740	13400	1370	514	474	476	524
17	543	266	264	e960	2200	2440	10300	1230	515	459	492	535
18	537	263	261	e1500	2160	3480	9690	974	522	244	502	530
19	541	239	253	e1800	2130	5670	8760	1180	528	217	505	486
20	533	238	261	e2200	2040	7130	7230	1010	523	218	508	499
21	530	237	539	e3150	2030	7060	7520	983	512	219	506	515
22	298	234	e580	e3800	1880	7630	9820	987	516	222	490	536
23	263	235	e590	e4000	1460	9190	11900	1200	507	221	484	533
24	262	483	e600	e3500	1430	8240	12100	1400	280	220	488	527
25	264	509	e595	e4200	1320	8090	12900	2160	256	219	288	526
26	264	522	e595	e4600	1260	7490	11100	3430	251	219	271	272
27	260	499	e590	7740	962	7150	8030	2900	252	442	255	243
28	264	287	e580	13200	1100	6840	5050	1630	269	476	254	245
29	518	251	e580	16100	---	5600	4020	1030	338	538	250	286
30	534	251	e580	15200	---	4550	3500	976	518	515	248	514
31	536	---	e580	14800	---	3690	---	931	---	556	490	---
TOTAL	15060	10625	13207	107110	111882	151740	243650	50501	17033	13920	12357	11745
MEAN	486	354	426	3455	3996	4895	8122	1629	568	449	399	392
MAX	856	560	600	16100	13200	9190	15600	3430	962	681	573	536
MIN	256	234	244	580	962	1380	3400	931	251	217	244	213
CFSM	.27	.19	.23	1.89	2.19	2.68	4.45	.89	.31	.25	.22	.21
IN.	.31	.22	.27	2.18	2.28	3.09	4.97	1.03	.35	.28	.25	.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

MEAN	1310	2001	3396	3777	4709	6503	5680	3730	2456	1529	1140	1028
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

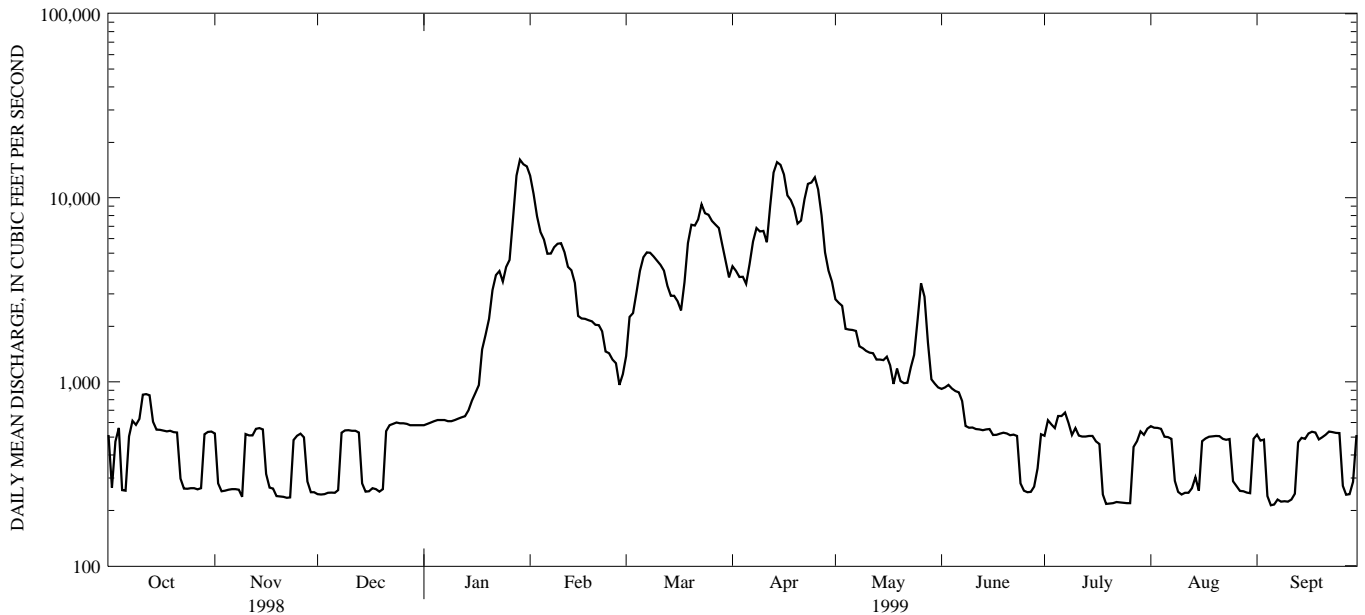
e Estimated.

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SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1938 - 1999	
ANNUAL TOTAL	1016336		758830		3096	
ANNUAL MEAN	2784		2079		4518	
HIGHEST ANNUAL MEAN					1777	
LOWEST ANNUAL MEAN					1951	
HIGHEST DAILY MEAN	12300	Jan 16	16100	Jan 29	60400	Mar 31 1940
LOWEST DAILY MEAN	211	Sep 18,19	213	Sep 5	60	Oct 15 1952
ANNUAL SEVEN-DAY MINIMUM	245	Nov 17	219	Jul 19	145	Nov 1 1952
INSTANTANEOUS PEAK FLOW			16700	Jan 28	a71900	Mar 31 1940
INSTANTANEOUS PEAK STAGE			12.43	Jan 28	25.70	Mar 31 1940
INSTANTANEOUS LOW FLOW					60	Oct 15 1952
ANNUAL RUNOFF (CFSM)	1.53		1.14		1.70	
ANNUAL RUNOFF (INCHES)	20.72		15.47		23.05	
10 PERCENT EXCEEDS	7650		6530		7140	
50 PERCENT EXCEEDS	1290		573		1830	
90 PERCENT EXCEEDS	263		250		488	

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



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999