

KISKIMINETAS RIVER BASIN

03045000 LOYALHANNA CREEK AT KINGSTON, PA

LOCATION.--Lat 40°17'33", long 79°20'27", Westmoreland County, Hydrologic Unit 05010008, on right bank 60 ft downstream from bridge on State Highway 217 at Kingston, 100 ft downstream from Miller Run, 1.9 mi upstream from Ninemile Run, and 3 mi southeast of Latrobe.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only October to December 1939, published in WSP 1305.

REVISED RECORDS.--WSP 1335: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,013.16 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Oct. 1, 1969, at datum 1.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Latrobe Reservoir, capacity, 3,670 acre-ft, and diversion works at Kingston. Figures of daily discharge do not include diversion from reservoir and at Kingston intake to borough of Latrobe. 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 1918, 15.8 ft, present datum, Oct. 15, 1954. Flood of Mar. 17 or 18, 1936 reached a stage of about 15.5 ft, present datum, from information by local residents, discharge, 21,000 ft³/s, from rating curve extended above 8,700 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 3,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Jan. 24	0900	3,830	7.47	Apr. 9	2200	*6,840	*9.24

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	28	e23	22	e28	254	356	293	226	70	24	41	9.1
2	27	e21	e19	e26	298	279	291	204	79	28	45	8.6
3	27	e20	e19	e29	274	399	260	181	112	79	21	8.3
4	42	e20	e20	e33	261	719	309	164	76	35	16	8.2
5	31	e20	21	e39	262	498	638	149	62	23	14	8.0
6	27	e21	e20	e40	257	571	445	139	55	20	13	9.8
7	29	e21	e20	e40	291	694	384	129	49	18	12	54
8	82	e20	23	e40	816	492	314	146	44	16	14	22
9	80	e20	57	e56	549	428	2440	141	39	15	22	16
10	46	30	39	e70	437	364	2780	118	35	22	17	15
11	40	39	29	e98	353	298	1460	101	32	27	14	13
12	30	28	e25	e115	325	269	1350	94	29	20	13	11
13	27	e23	e21	e125	300	250	948	90	26	15	12	10
14	32	e22	e19	e380	255	246	695	98	27	14	39	11
15	31	e22	e18	e350	235	247	555	82	37	13	24	14
16	27	e22	e18	e320	e210	248	627	73	30	12	22	14
17	e26	e21	e20	e300	e190	542	525	69	28	12	17	31
18	e25	e21	e21	e310	e175	1280	570	65	30	12	14	23
19	e25	e20	e21	e350	e160	953	501	76	27	11	13	15
20	e23	e21	e22	e310	e150	634	1140	69	25	11	16	13
21	e22	22	e22	e300	e130	723	902	60	22	10	74	17
22	e23	e20	e84	e470	e120	1020	843	67	22	9.9	27	18
23	e23	e20	e49	e900	e110	684	1130	242	21	11	18	15
24	e23	e20	e41	2660	e110	527	1090	200	19	10	15	13
25	e22	22	e36	1390	e110	441	760	279	18	11	14	13
26	e21	21	e38	853	e115	355	587	173	18	10	13	12
27	e21	21	e34	595	e120	310	464	133	17	9.2	14	11
28	e22	e20	e34	514	e125	293	360	110	18	9.4	14	11
29	e22	e20	e34	423	---	289	294	94	43	117	14	13
30	e22	e20	e34	332	---	290	257	83	40	58	12	68
31	e23	---	e30	279	---	281	---	74	---	27	10	---
TOTAL	949	661	910	11775	6992	14980	23212	3929	1150	709.5	624	505.0
MEAN	30.6	22.0	29.4	380	250	483	774	127	38.3	22.9	20.1	16.8
MAX	82	39	84	2660	816	1280	2780	279	112	117	74	68
MIN	21	20	18	26	110	246	257	60	17	9.2	10	8.0
(†)	+ .05	-3.2	+4.1	+24	+7.1	+15	+22	+3.9	+1.2	-.02	-.08	-.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1999, BY WATER YEAR (WY)

MEAN	108	213	354	384	470	614	528	373	228	119	98.0	88.7
MAX	689	785	834	850	1210	1305	1007	779	997	344	667	635
(WY)	1955	1986	1973	1952	1986	1963	1940	1952	1972	1990	1979	1971
MIN	2.76	5.09	29.4	79.0	137	175	178	115	38.3	7.76	7.04	4.20
(WY)	1954	1954	1999	1940	1978	1969	1997	1963	1999	1966	1957	1957

† Diversion from and change in contents in Latrobe Reservoir and diversion from Kingston intake, equivalent in cubic feet per second, furnished by Latrobe Municipal Authority.

e Estimated.

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SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1940 - 1999	
ANNUAL TOTAL	90098		66396.5			
ANNUAL MEAN	247	†+4.4	182	†+6.2	297	
HIGHEST ANNUAL MEAN					447	1971
LOWEST ANNUAL MEAN					160	1954
HIGHEST DAILY MEAN	3890	Apr 10	2780	Apr 10	14200	Jun 23 1972
LOWEST DAILY MEAN	e18	Aug 23a	8.0	Sep 5	.20	Oct 23,24 1953
ANNUAL SEVEN-DAY MINIMUM	b20	Dec 13	8.9	Aug 31	.63	Oct 19 1953
INSTANTANEOUS PEAK FLOW			6840	Apr 9	c29700	Oct 15 1954
INSTANTANEOUS PEAK STAGE			9.24	Apr 9	d15.80	Oct 15 1954
INSTANTANEOUS LOW FLOW					.10	Sep 4 1953
10 PERCENT EXCEEDS	594		518		700	
50 PERCENT EXCEEDS	101		35		159	
90 PERCENT EXCEEDS	21		13		20	

† Diversion from and change in contents in Latrobe Reservoir and diversion from Kingston intake, equivalent in cubic feet per second, furnished by Latrobe Municipal Authority.

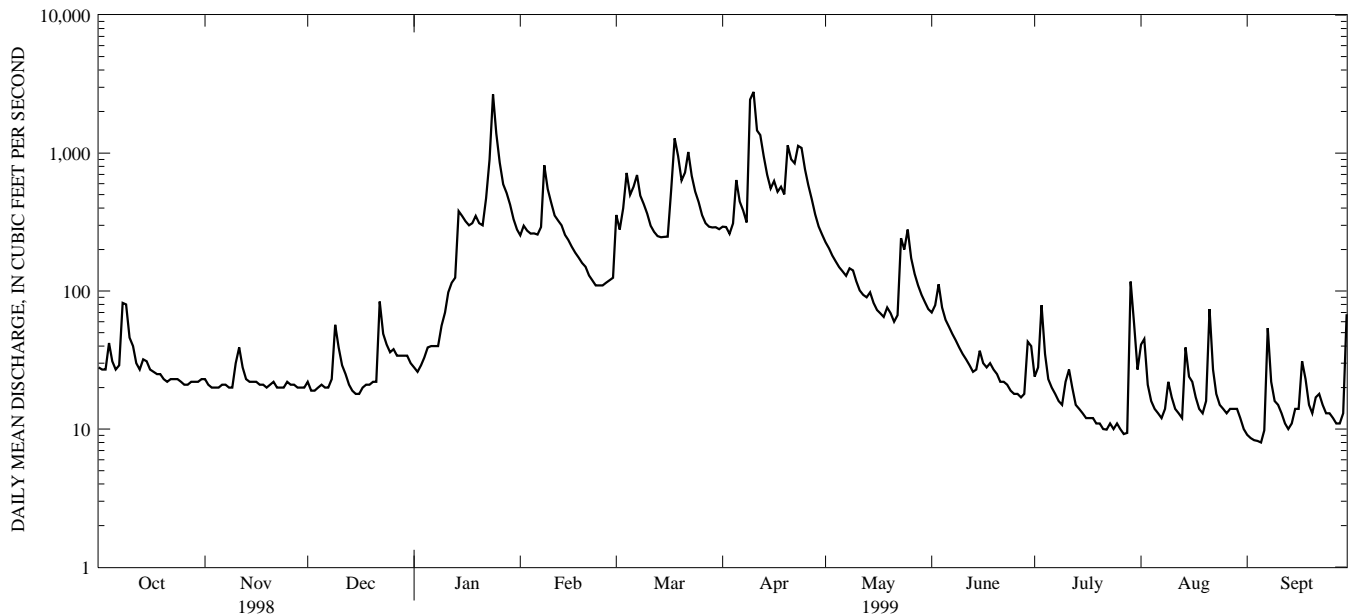
a Also Sept. 19 and Dec. 15, 16.

b Computed using estimated daily discharges.

c From rating curve extended above 8,700 ft³/s on basis of slope-area measurement at gage height 13.37 ft.

d Present datum, from floodmarks.

e Estimated.



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