

## KISKIMINETAS RIVER BASIN

## 03042500 TWO LICK CREEK AT GRACETON, PA

**LOCATION.**--Lat 40°31'02", long 79°10'19", Indiana County, Hydrologic Unit 05010007, on right bank 0.8 mi upstream from highway bridge on road leading west from Graceton, 1.1 mi downstream from Tearing Run, 1.5 mi upstream from Cherry Run, and 8 mi northeast of Blairsville.

**DRAINAGE AREA.**--171 mi<sup>2</sup>.

**PERIOD OF RECORD.**--September 1951 to current year.

**GAGE.**--Water-stage recorder. Datum of gage is 981.63 ft above National Geodetic Vertical Datum of 1929.

**REVISED RECORDS.**--WDR PA-78-3: 1977 (M).

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Diurnal fluctuation caused by mine pumpage and by sewage-disposal plant above station. Flow regulated since December 1968 by Two Lick Creek Reservoir 10 mi upstream, capacity, 16,240 acre-ft and since July 1971 by Yellow Creek Lake (station 03042260) 11 mi upstream. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	63	103	e90	377	150	519	371	412	94	67	59
2	58	63	73	e81	359	221	396	768	244	92	62	59
3	58	76	64	e81	319	288	383	744	150	101	56	59
4	58	65	60	e78	278	283	343	566	135	91	57	59
5	57	63	57	e77	233	200	277	406	180	89	114	58
6	60	62	57	e75	218	195	260	342	918	83	100	59
7	58	61	58	e74	209	202	223	320	1350	76	67	60
8	58	61	66	e74	200	206	194	304	814	73	64	60
9	66	62	80	e72	188	269	199	876	627	84	62	60
10	69	61	69	e81	186	258	200	1240	374	108	60	63
11	68	60	69	187	458	179	190	747	187	72	60	65
12	70	60	67	200	461	147	158	699	186	63	63	65
13	67	62	78	195	394	129	171	1370	213	61	67	65
14	69	67	83	178	351	106	205	2150	1720	58	61	66
15	73	67	89	165	335	104	329	1280	1990	56	63	69
16	70	66	81	151	320	739	1180	937	1130	51	70	67
17	74	63	321	141	226	641	759	780	734	51	78	65
18	66	60	574	130	204	779	564	1800	476	79	74	64
19	71	60	443	121	192	674	420	1290	296	74	71	82
20	72	74	402	117	189	943	371	924	248	68	75	69
21	71	62	334	116	216	1290	316	675	191	66	65	65
22	70	60	288	114	193	796	319	561	147	65	66	60
23	68	60	269	114	184	650	269	378	141	73	87	59
24	120	59	334	174	175	559	231	250	137	71	121	58
25	69	148	301	216	166	445	234	219	265	68	73	58
26	59	92	282	209	169	1310	189	212	117	73	58	70
27	59	84	266	198	165	2240	173	202	200	76	55	225
28	59	89	252	184	158	1130	367	213	191	75	52	94
29	60	127	185	170	---	733	478	506	123	74	50	53
30	63	118	160	225	---	723	419	243	106	82	57	44
31	63	---	e113	339	---	557	---	176	---	69	59	---
TOTAL	2062	2175	5678	4427	7123	17146	10336	21549	14002	2316	2134	2059
MEAN	66.5	72.5	183	143	254	553	345	695	467	74.7	68.8	68.6
MAX	120	148	574	339	461	2240	1180	2150	1990	108	121	225
MIN	57	59	57	72	158	104	158	176	106	51	50	44
(†)	0	-18	+55	+65	-2.0	+27	0	-9.0	-2.0	-21	-22	-27

† Change in contents, equivalent in cubic feet per second, in Yellow Creek Lake and Two Lick Creek Reservoir. Records of contents in Two Lick Creek Reservoir furnished by Midwest Generation.

e Estimated.

KISKIMINETAS RIVER BASIN

03042500 TWO LICK CREEK AT GRACETON, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2002, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	147	255	358	345	434	524	429	314	226	179	110	132
MAX	466	689	722	745	925	1230	832	695	1091	1161	310	475
(WY)	1977	1998	1973	1996	1986	1994	1984	2002	1972	1977	1977	1996
MIN	21.0	53.2	87.0	106	116	93.9	179	86.2	53.6	52.1	48.9	41.9
(WY)	1969	1992	1999	1983	1993	1969	1997	1986	1992	1993	1988	1995

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1969 - 2002	
ANNUAL TOTAL	64870		91007			
ANNUAL MEAN	178	† -5.2	249	† +.50	287	
HIGHEST ANNUAL MEAN					375	1994
LOWEST ANNUAL MEAN					178	1969
HIGHEST DAILY MEAN	1320	Apr 16	2240	Mar 27	21900	Jul 20 1977
LOWEST DAILY MEAN	42	Aug 7 <sup>a</sup>	44	Sep 30	12	Oct 1 1968
ANNUAL SEVEN-DAY MINIMUM	43	Jul 28	56	Aug 26	15	Oct 12 1968
MAXIMUM PEAK FLOW			3350	Jun 14	<sup>b</sup> 32000	Jul 20 1977
MAXIMUM PEAK STAGE			7.42	Jun 14	<sup>c</sup> 18.65	Jul 20 1977
INSTANTANEOUS LOW FLOW			41	Sep 30	12	Oct 1,2 1968
10 PERCENT EXCEEDS	457		645		599	
50 PERCENT EXCEEDS	94		118		176	
90 PERCENT EXCEEDS	54		59		58	

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1968, BY WATER YEAR (WY) (PRIOR TO REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	101	139	256	367	444	604	472	346	130	100	90.6	61.1
MAX	628	305	635	811	1093	1097	786	634	271	644	377	199
(WY)	1955	1960	1955	1952	1956	1963	1957	1966	1960	1956	1956	1962
MIN	14.2	23.6	50.1	118	176	234	167	99.7	42.3	25.2	16.9	15.9
(WY)	1964	1954	1961	1956	1963	1957	1968	1955	1965	1962	1957	1952

SUMMARY STATISTICS WATER YEARS 1952 - 1968

ANNUAL MEAN	259
HIGHEST ANNUAL MEAN	415 1956
LOWEST ANNUAL MEAN	185 1954
HIGHEST DAILY MEAN	6800 Oct 16 1954
LOWEST DAILY MEAN	8.7 Sep 14 1952
ANNUAL SEVEN-DAY MINIMUM	12 Sep 6 1957
MAXIMUM PEAK FLOW	<sup>d</sup> 32000 Jul 20 1977
MAXIMUM PEAK STAGE	18.65 Jul 20 1977
INSTANTANEOUS LOW FLOW	11 Sep 30 1968
ANNUAL RUNOFF (CFSM)	1.52
ANNUAL RUNOFF (INCHES)	20.67
10 PERCENT EXCEEDS	640
50 PERCENT EXCEEDS	118
90 PERCENT EXCEEDS	21

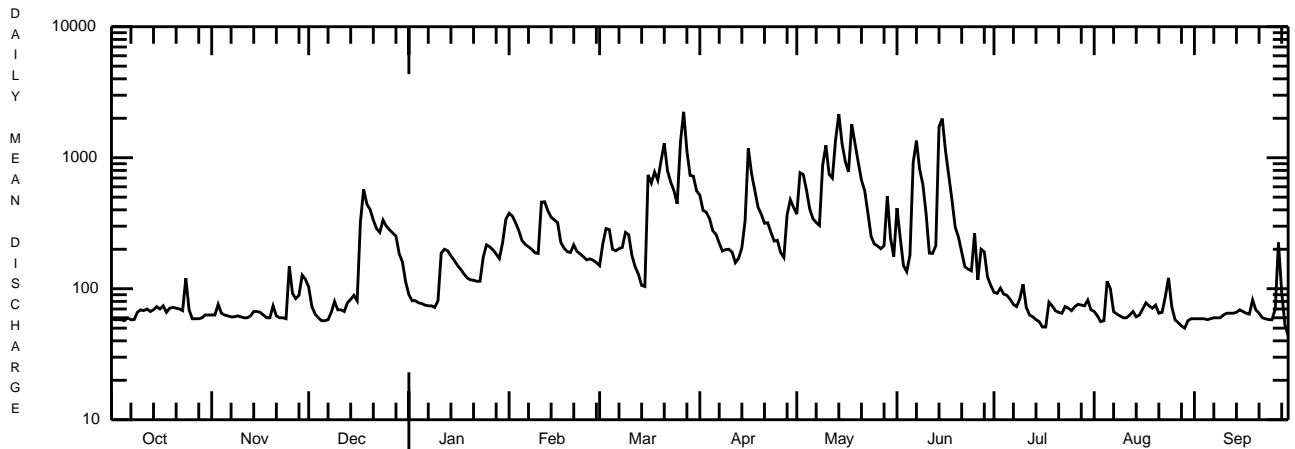
† Change in contents, equivalent in cubic feet per second, in Yellow Creek Lake and Two Lick Creek Reservoir. Records of contents in Two Lick Creek Reservoir furnished by Midwest Generation.

<sup>a</sup> Also Aug. 8, Sept. 16.

<sup>b</sup> From rating curve extended above 4,500 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow and contracted-opening measurement at gage height 12.71 ft at site 1.6 mi upstream from gage, adjusted to gage site.

<sup>c</sup> Backwater, from highwater mark.

<sup>d</sup> From rating curve extended above 4,500 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow at site 1.6 mi upstream from gage, adjusted to gage site.



OCTOBER 1, 2001 TO SEPTEMBER 30, 2002