

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 mi².

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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	93	e100	e980	e90	325	229	96	330	86	989	827
2	38	86	e95	2750	e85	379	230	92	206	77	682	824
3	60	80	e90	1500	e80	368	229	89	284	69	488	1020
4	75	78	e85	986	e385	322	230	85	699	64	662	888
5	76	75	e95	686	349	397	515	93	613	67	481	754
6	63	176	e95	594	293	567	600	101	478	148	401	514
7	60	148	e85	534	236	547	610	119	583	211	353	373
8	59	136	e75	469	e200	552	591	131	504	285	316	332
9	61	125	e65	424	e180	730	515	160	534	254	314	299
10	62	118	e70	414	e170	690	446	603	426	214	1440	244
11	68	131	e75	387	e165	606	733	460	394	670	e475	183
12	78	125	e100	359	e150	561	860	365	366	382	e400	150
13	73	126	e140	289	e150	638	624	349	419	287	e295	146
14	62	116	e380	215	e145	769	547	316	296	217	e230	148
15	58	109	e530	203	e130	865	422	262	238	172	e200	165
16	90	110	e460	192	e120	737	386	273	203	172	191	168
17	74	251	e390	177	e85	792	347	235	191	138	192	315
18	69	231	e320	e165	e95	773	319	211	361	132	172	305
19	77	226	e280	e160	e90	575	220	194	227	239	130	298
20	66	225	e750	e155	e95	564	177	205	186	136	112	137
21	57	205	e830	e140	e110	578	199	439	272	121	103	104
22	56	190	e700	e135	e300	554	184	398	182	885	104	122
23	57	182	e650	e135	791	517	168	340	164	1040	94	235
24	56	159	e520	e130	637	488	141	331	149	613	76	164
25	57	143	e470	e130	530	460	132	241	132	697	69	179
26	150	130	e400	e125	445	372	128	212	114	393	e240	169
27	84	132	e340	e120	401	325	122	227	103	355	e575	254
28	74	119	e300	e120	345	267	113	220	90	482	e375	394
29	83	113	e280	e115	---	257	104	186	83	296	296	296
30	113	e105	e245	e100	---	263	99	169	84	207	2140	251
31	105	---	e280	e95	---	240	---	201	---	174	1340	---
TOTAL	2201	4243	9295	12984	6852	16078	10220	7403	8911	9283	13935	10258
MEAN	71.0	141	300	419	245	519	341	239	297	299	450	342
MAX	150	251	830	2750	791	865	860	603	699	1040	2140	1020
MIN	38	75	65	95	80	240	99	85	83	64	69	104
(†)	-3.2	+48	+6.8	+2.2	+9.6	+4.4	+0.4	+6.8	-5.5	+6.4	+11	-12

† 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.

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03042500 TWO LICK CREEK AT GRACETON, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2003, BY WATER YEAR (WY) (SINCE REGULATION)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	145	252	356	347	428	524	427	312	228	183	120	138
MAX (WY)	1977	1998	1973	1996	1986	1994	1984	2002	1972	1977	2003	1996
MIN (WY)	1969	1992	1999	1983	1993	1969	1997	1986	1992	1993	1988	1995

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1969 - 2003

ANNUAL TOTAL	96831	111663	
ANNUAL MEAN	265 † +5.2	306 † +6.3	288
HIGHEST ANNUAL MEAN			375 1994
LOWEST ANNUAL MEAN			178 1969
HIGHEST DAILY MEAN	2240 Mar 27	2750 Jan 2	21900 Jul 20 1977
LOWEST DAILY MEAN	38 Oct 2	38 Oct 2	12 Oct 1 1968
ANNUAL SEVEN-DAY MINIMUM	55 Sep 29	59 Oct 1	15 Oct 12 1968
MAXIMUM PEAK FLOW		3680 Aug 30	a32000 Jul 20 1977
MAXIMUM PEAK STAGE		7.72 Aug 30	b18.65 Jul 20 1977
INSTANTANEOUS LOW FLOW		37 Oct 2	12 Oct 1 1968
10 PERCENT EXCEEDS	685	637	600
50 PERCENT EXCEEDS	148	214	177
90 PERCENT EXCEEDS	60	78	59

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

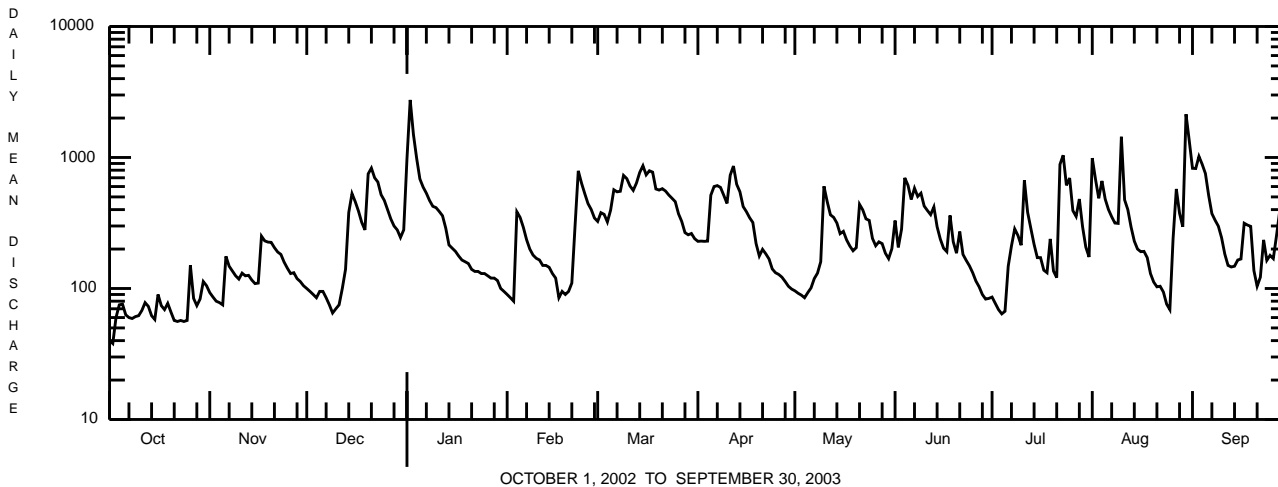
	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	101	139	256	367	444	604	472	346	130	100	90.6	61.1
MAX (WY)	1955	1960	1955	1952	1956	1963	1957	1966	1960	1956	1956	1962
MIN (WY)	1964	1954	1961	1956	1963	1957	1968	1955	1965	1962	1957	1952

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	c12900 Oct 16 1954
MAXIMUM PEAK STAGE	12.71 Oct 16 1954
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.

- a From rating curve extended above 7,800 ft³/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.
- b From highwater mark.
- c From rating curve extended above 4,500 ft³/s on basis of contracted-opening measurement of peak flow at site 1.6 mi upstream from gage, adjusted to gage site.



OCTOBER 1, 2002 TO SEPTEMBER 30, 2003