

CROOKED CREEK BASIN

03038000 CROOKED CREEK AT IDAHO, PA

LOCATION.--Lat 40°39'17", long 79°20'56", Armstrong County, Hydrologic Unit 05010006, on right bank at downstream end of old bridge abutment at Idaho, 0.4 mi downstream from Keystone Generation Station, 1.5 mi downstream from Plum Creek, 1.8 mi upstream of bridge on SR 210, and 2.4 mi west of Shelocla.

DRAINAGE AREA.--191 mi².

PERIOD OF RECORD.--October 1937 to current year. Monthly discharge only for some periods published in WSP 1305.

REVISED RECORDS.--WSP 1385: 1938, 1945.

GAGE.--Water-stage recorder and concrete weir control. Datum of gage is 961.04 ft above sea level (Baltimore and Ohio Railroad bench mark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated to some extent since March 1968 by Keystone Lake 7 mi upstream, usable capacity, 22,010 acre-ft. Evaporation from operation of steam-electric plant 0.4 mi upstream, which began during July 1967, can amount to as much as 30 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 1936 reached a stage of 18.6 ft, from floodmark, discharge, about 19,000 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 2,500 ft³/s and maximum (*):

Date	Time	Discharge ft ³ /s	Gage Height (ft)	Date	Time	Discharge ft ³ /s	Gage Height (ft)
Nov. 26	2130	*3,700	*7.93	Feb. 14	0830	3,420	7.57
Dec. 14	1830	2,630	6.59	Mar. 21	2230	3,270	7.39

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	37	179	70	e20	292	158	133	199	31	84	32
2	45	124	141	71	e28	368	157	214	159	24	42	37
3	38	628	118	95	e26	309	169	158	180	35	128	47
4	66	219	115	339	e26	287	1490	129	122	55	169	45
5	62	120	104	388	e28	261	1430	116	100	29	59	40
6	34	81	127	280	e28	223	795	105	236	26	251	38
7	35	62	110	239	e25	184	522	97	209	30	898	41
8	33	58	88	201	e23	166	556	94	140	47	273	41
9	36	50	77	177	e23	156	655	84	102	41	157	40
10	44	42	98	187	e36	142	504	85	79	34	106	47
11	60	36	143	210	e52	162	442	78	59	47	86	86
12	44	30	114	164	e98	281	471	65	75	41	69	59
13	37	33	116	161	e160	225	377	61	103	32	53	66
14	87	34	1130	127	2420	204	331	61	69	42	48	62
15	60	33	1340	104	1370	188	291	44	53	39	49	61
16	32	34	609	125	723	188	254	36	51	109	51	66
17	31	27	397	70	532	549	277	35	39	46	39	62
18	27	32	296	85	489	424	255	34	38	48	37	61
19	27	34	236	89	1090	358	226	119	48	42	37	56
20	25	30	226	87	645	306	202	144	32	39	33	48
21	34	33	261	67	476	1690	352	80	30	36	34	61
22	35	22	203	68	431	2080	520	59	107	31	37	68
23	47	16	171	67	429	909	550	72	49	32	41	41
24	42	21	134	63	420	572	460	674	57	27	182	63
25	30	30	104	54	410	440	376	337	42	28	102	71
26	30	2420	e92	52	368	354	309	205	38	39	65	85
27	31	2140	e86	40	319	306	261	162	40	43	58	97
28	30	619	e82	31	342	301	225	334	42	47	55	62
29	32	352	e76	e30	273	260	194	743	37	51	49	49
30	36	246	e70	e29	---	220	162	369	42	54	39	51
31	37	---	e70	e29	---	186	---	256	---	84	34	---
TOTAL	1280	7643	7113	3799	11310	12591	12971	5183	2577	1309	3365	1683
MEAN	41.3	255	229	123	390	406	432	167	85.9	42.2	109	56.1
MAX	87	2420	1340	388	2420	2080	1490	743	236	109	898	97
MIN	25	16	70	29	20	142	157	34	30	24	33	32
CFSM	.22	1.33	1.20	.64	2.04	2.13	2.26	.88	.45	.22	.57	.29
IN.	.25	1.49	1.39	.74	2.20	2.45	2.53	1.01	.50	.25	.66	.33

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

MEAN	123	224	358	383	493	592	470	305	197	133	97.1	89.8
MAX	839	820	827	1000	1260	1340	1052	746	1072	987	549	497
(WY)	1955	1986	1991	1952	1956	1994	1940	1989	1972	1956	1984	1945
MIN	7.15	23.8	33.5	59.7	120	83.9	85.1	38.0	25.3	13.9	11.3	6.07
(WY)	1953	1954	1961	1977	1980	1969	1946	1941	1949	1962	1942	1952

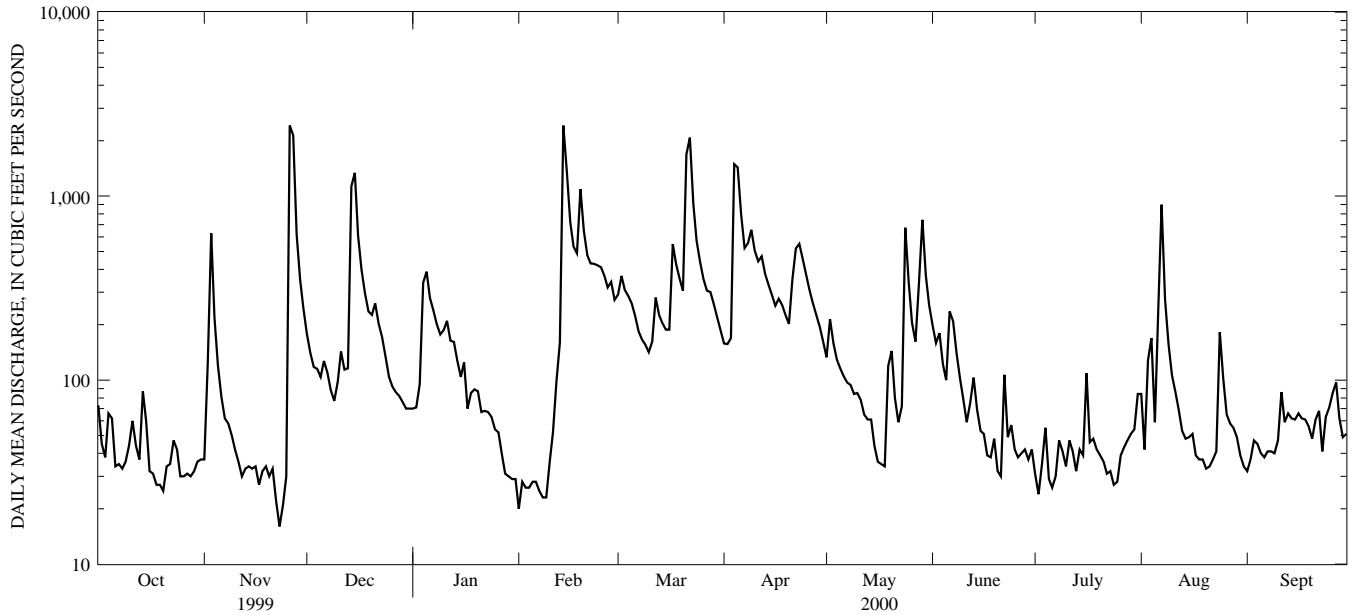
e Estimated.

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03038000 CROOKED CREEK AT IDAHO, PA--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL TOTAL	81243		70824			
ANNUAL MEAN	223		194		288	
HIGHEST ANNUAL MEAN					511	1956
LOWEST ANNUAL MEAN					148	1992
HIGHEST DAILY MEAN	4600	Jan 24	2420	Nov 26 ^a	9800	Jun 23 1972
LOWEST DAILY MEAN	^e 12	Jan 2 ^b	16	Nov 23	^c 1.0	Oct 22 1966
ANNUAL SEVEN-DAY MINIMUM	^d 14	Jan 1	26	Feb 3	4.1	Sep 19 1939
INSTANTANEOUS PEAK FLOW			3700	Nov 26	^f 13200	Jun 23 1972
INSTANTANEOUS PEAK STAGE			7.93	Nov 26	15.93	Jun 23 1972
INSTANTANEOUS LOW FLOW			12	Nov 22	4.6	Nov 1 1968
ANNUAL RUNOFF (CFSM)	1.17		1.01		1.51	
ANNUAL RUNOFF (INCHES)	15.82		13.79		20.47	
10 PERCENT EXCEEDS	529		434		690	
50 PERCENT EXCEEDS	70		78		128	
90 PERCENT EXCEEDS	29		31		23	

- a** Also Feb. 24.
- b** Also Jan. 6, 7.
- c** Result of upstream pumping.
- d** Computed using estimated daily discharges.
- e** Estimated.
- f** From rating curve extended above 12,800 ft³/s.



1-YEAR HYDROGRAPH
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000