



2005 Water Year  
CROOKED CREEK BASIN  
03038000 Crooked Creek at Idaho, PA

Latitude: 40° 39' 17"

Longitude: 079° 20' 56"

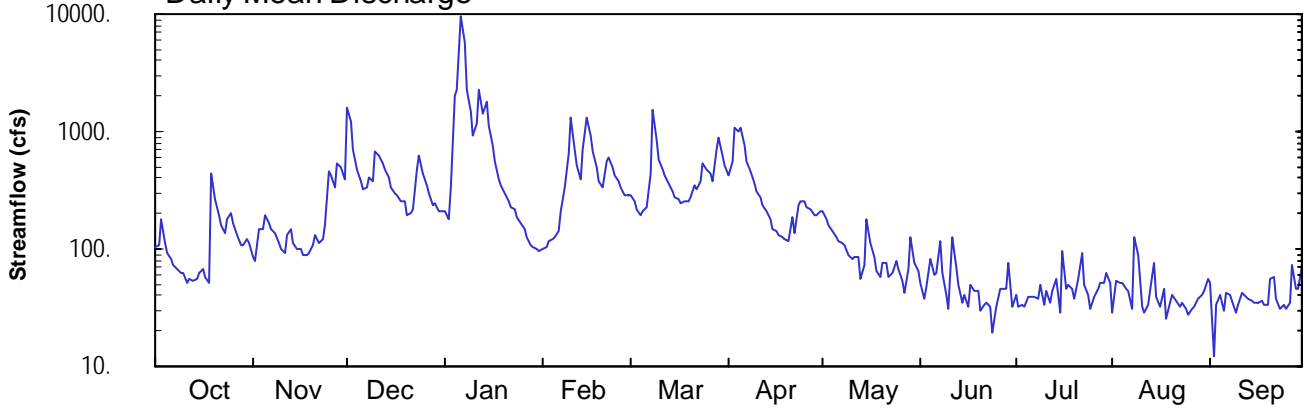
Hydrologic Unit Code: 05010006

Armstrong County

Datum: 961.04 feet

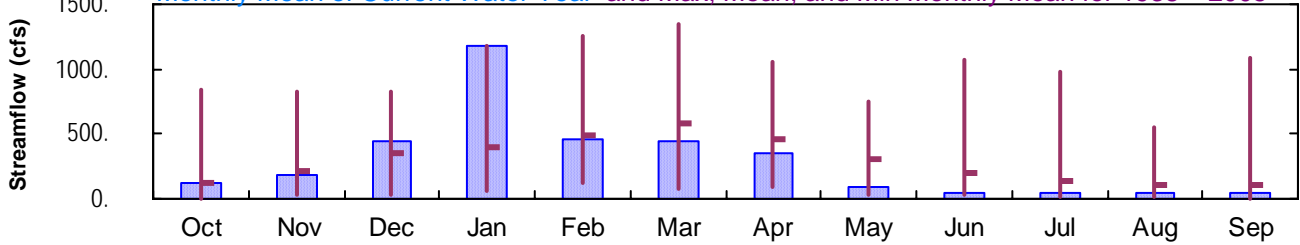
Drainage Area: 191. mi<sup>2</sup>

### Daily Mean Discharge

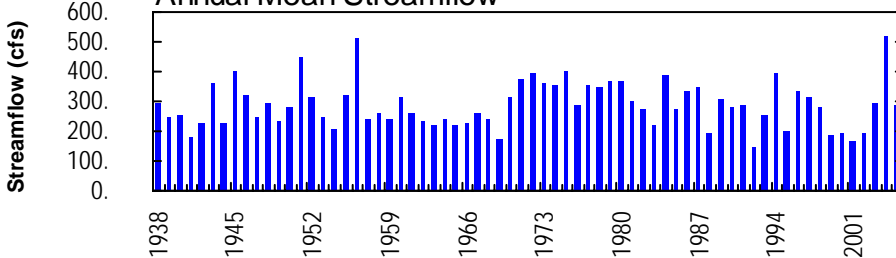


### Monthly Statistics

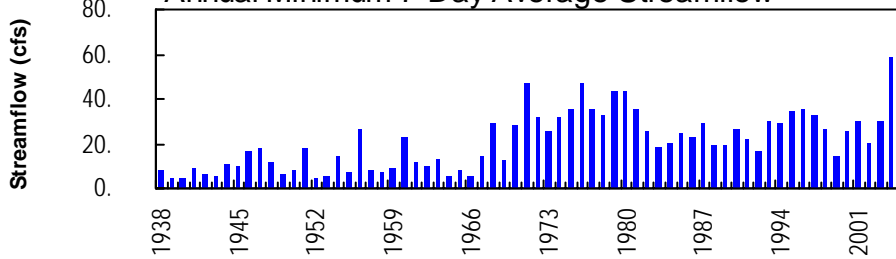
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1938 – 2005



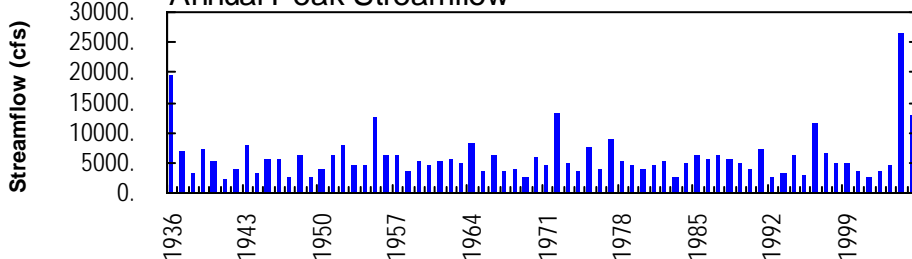
### Annual Mean Streamflow



### Annual Minimum 7-Day Average Streamflow



### Annual Peak Streamflow



## 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 mi<sup>2</sup>.

**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 National Geodetic Vertical Datum of 1929 (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 ft<sup>3</sup>/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 ft<sup>3</sup>/s.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than a base discharge of 2,500 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)	Date	Time	Discharge ft <sup>3</sup> /s	Gage Height (ft)
Jan. 6	1830	*13,000	*15.85	Jan. 8	1430	2,610	6.57

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	85	1590	214	e100	290	416	213	52	41	29	51
2	110	80	1200	179	e105	258	550	181	37	32	54	12
3	177	145	699	333	e115	222	1100	161	47	34	51	33
4	115	145	481	1990	e120	195	1010	143	81	33	51	41
5	93	194	373	2230	e125	214	1080	127	59	39	46	30
6	81	169	317	9460	e140	229	747	116	62	39	43	42
7	74	149	329	5690	212	440	557	112	116	39	31	40
8	67	136	415	2290	335	1530	451	106	62	37	125	37
9	63	111	370	1490	642	845	362	90	41	50	90	29
10	62	99	666	911	1320	572	308	82	31	34	32	33
11	51	92	623	1150	700	480	271	87	127	44	28	42
12	55	132	545	2240	511	426	236	86	71	35	34	39
13	53	148	482	1400	399	356	211	57	49	44	44	37
14	55	112	407	1790	711	310	178	74	35	55	77	36
15	62	101	340	1120	1300	278	149	177	41	29	39	35
16	69	99	298	747	927	262	143	113	33	97	33	35
17	57	89	282	562	676	248	132	84	49	45	46	37
18	51	91	254	e395	494	257	129	66	44	50	26	34
19	440	91	257	e350	377	251	119	58	44	45	34	33
20	269	109	192	e300	338	276	116	76	30	37	41	55
21	194	130	205	e260	554	348	187	77	34	56	36	57
22	161	113	217	e230	606	322	138	58	34	91	32	38
23	137	120	477	e215	492	377	232	61	33	50	35	31
24	180	159	621	e185	421	537	252	78	20	40	31	34
25	205	454	433	e165	378	481	256	69	32	31	28	31
26	163	416	351	e150	332	434	227	54	46	40	32	35
27	134	341	292	e125	289	380	219	42	47	46	33	74
28	110	541	233	e110	289	707	197	68	46	51	38	45
29	109	488	243	e105	---	902	193	125	75	52	41	45
30	123	397	214	e100	---	636	209	76	32	63	44	72
31	113	---	213	e95	---	507	---	66	---	51	55	---
TOTAL	3738	5536	13619	36581	13008	13570	10375	2983	1510	1430	1359	1193
MEAN	121	185	439	1180	465	438	346	96.2	50.3	46.1	43.8	39.8
MAX	440	541	1590	9460	1320	1530	1100	213	127	97	125	74
MIN	51	80	192	95	100	195	116	42	20	29	26	12
CFSM	0.63	0.97	2.30	6.18	2.43	2.29	1.81	0.50	0.26	0.24	0.23	0.21
IN.	0.73	1.08	2.65	7.12	2.53	2.64	2.02	0.58	0.29	0.28	0.26	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005, BY WATER YEAR (WY)

MEAN	122	222	357	391	484	585	464	302	199	134	103	106
MAX	839	820	827	1180	1260	1340	1052	746	1072	987	549	1081
(WY)	1955	1986	1991	2005	1956	1994	1940	1989	1972	1956	1984	2004
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.

CROOKED CREEK BASIN

03038000 CROOKED CREEK AT IDAHO, PA--Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1938 - 2005	
ANNUAL TOTAL	172458		104902			
ANNUAL MEAN	471		287		288	
HIGHEST ANNUAL MEAN					519	2004
LOWEST ANNUAL MEAN					148	1992
HIGHEST DAILY MEAN	17900	Sep 18	9460	Jan 6	17900	Sep 18 2004
LOWEST DAILY MEAN	42	Sep 6	12	Sep 2	a2.8	Oct 8 1939
ANNUAL SEVEN-DAY MINIMUM	57	Oct 9	32	Jun 19	4.1	Sep 19 1939
MAXIMUM PEAK FLOW			13000	Jan 6	b26400	Sep 18 2004
MAXIMUM PEAK STAGE			15.85	Jan 6	19.29	Sep 18 2004
INSTANTANEOUS LOW FLOW			9.8	Sep 2,3	2.4	Oct 8 1939
ANNUAL RUNOFF (CFSM)	2.47		1.50		1.51	
ANNUAL RUNOFF (INCHES)	33.59		20.43		20.49	
10 PERCENT EXCEEDS	920		586		685	
50 PERCENT EXCEEDS	236		116		129	
90 PERCENT EXCEEDS	81		34		24	

a 1.0 ft<sup>3</sup>/s Oct. 22, 1966. Result of upstream pumping.  
 b From rating curve extended above 18,700 ft<sup>3</sup>/s.

