Water-Data Report 2012

01560000 DUNNING CREEK AT BELDEN, PA

Lower Susquehanna Basin
Raystown Subbasin

LOCATION.--Lat 40°04′18″, long 78°29′34″ referenced to North American Datum of 1927, Bedford County, PA, Hydrologic Unit 02050303, on left bank 10 ft upstream from highway bridge on SR 1014, 0.8 mi southeast of Belden, 3.8 mi north of Bedford, and 4.3 mi upstream from confluence with Raystown Branch Juniata River..

DRAINAGE AREA.--172 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1939 to current year. Prior to October 1939 monthly discharge only, published in WSP 1302.

REVISED RECORDS.--WSP 971: 1940(M). WSP 1502: 1940-41. WDR PA-72-1: 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 1,051.16 ft above National Geodetic Vertical Datum of 1929. Satellite and landline telemetry at station.

COOPERATION.--Station established and maintained by the U.S. Geological Survey. Funding for this station is provided by the Pennsylvania Department of Environmental Protection and the U.S. Geological Survey through the Cooperative Water Program.

REMARKS.--Records good except those greater than 1,000 ft^3/s, which are fair, and those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 17.8 ft, Mar 18, 1936, from floodmarks (backwater from Raystown Branch Juniata River), discharge, about 16,900 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 23	1330	4,120	8.75
Dec 8	0045	3,450	8.18
May 27	0530	*4,740	*9.22

Minimum discharge, 21 ft^3/s, Aug. 31, Sept. 1, 2, 3, 4, gage height, 1.26 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	108	267	320	334	360	1,380	408	178	283	39	43	21
2	484	269	288	316	311	834	371	165	630	36	39	21
3	582	279	266	278	266	890	316	266	397	34	34	22
4	522	272	243	e240	246	564	279	286	343	46	32	22
5	381	236	224	242	250	474	241	256	264	45	32	29
6	291	205	262	227	234	388	213	217	220	35	33	28
7	229	182	1,190	219	208	327	188	185	186	33	32	26
8	187	165	1,980	189	190	293	171	262	179	31	28	24
9	153	150	896	169	189	314	156	393	145	29	32	26
10	131	140	591	159	185	256	159	303	122	27	137	26
11	116	128	422	165	183	239	142	272	111	27	76	25
12	117	120	338	1,290	150	230	137	230	103	44	43	24
13	172	113	287	1,070	143	231	120	196	122	31	36	23
14	622	106	260	699	144	215	112	321	91	29	38	23
15	506	116	241	517	145	195	111	549	81	31	49	23
16	349	162	220	388	154	183	106	408	75	40	37	23
17	318	216	188	432	216	170	93	342	67	32	31	23
18	260	153	175	441	185	153	86	277	82	27	33	60
19	224	144	161	325	183	145	84	223	83	39	31	88
20	321	148	160	308	189	143	82	185	65	166	30	43
21	266	184	177	295	182	129	81	156	57	159	31	32
22	249	516	208	e240	186	122	87	154	51	86	29	29
23	227	3,380	335	250	186	121	131	375	47	60	29	27
24	207	1,490	297	359	240	333	166	219	43	53	27	26
25	187	777	301	424	208	508	129	179	41	47	26	26
26	169	518	294	528	184	448	131	546	40	79	25	28
27	162	390	421	1,240	180	367	161	2,330	38	130	27	46
28	159	325	574	1,000	175	335	157	1,950	36	102	28	195
29	180	334	436	712	666	308	158	923	36	86	25	101
30	283	467	412	522	---	254	149	571	41	58	23	73
31	280	---	379	414	---	554	---	354	---	47	21	---
Total	8,442	11,952	12,546	13,992	6,338	11,103	4,925	13,271	4,079	1,728	1,137	1,183
Mean	272	398	405	451	219	358	164	428	136	55.7	36.7	39.4
Max	622	3,380	1,980	1,290	666	1,380	408	2,330	630	166	137	195
Min	108	106	160	159	143	121	81	154	36	27	21	21
Cfsm	1.58	2.32	2.35	2.62	1.27	2.08	0.95	2.49	0.79	0.32	0.21	0.23
In.	1.83	2.58	2.71	3.03	1.37	2.40	1.07	2.87	0.88	0.37	0.25	0.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	97.0	178	268	273	347	567	440	293	168	85.5	54.8	74.2
Max	798	917	859	671	825	1,408	1,370	1,013	1,015	740	214	870
(WY)	(1977)	(1998)	(1973)	(2006)	(1971)	(1994)	(1993)	(1998)	(1972)	(1989)	(1979)	(2004)
Min	14.0	18.3	18.8	45.8	65.2	128	112	45.7	25.6	8.96	8.05	9.86
(WY)	(1970)	(1954)	(1999)	(1981)	(1963)	(2009)	(1946)	(1941)	(1965)	(1966)	(1966)	(1985)

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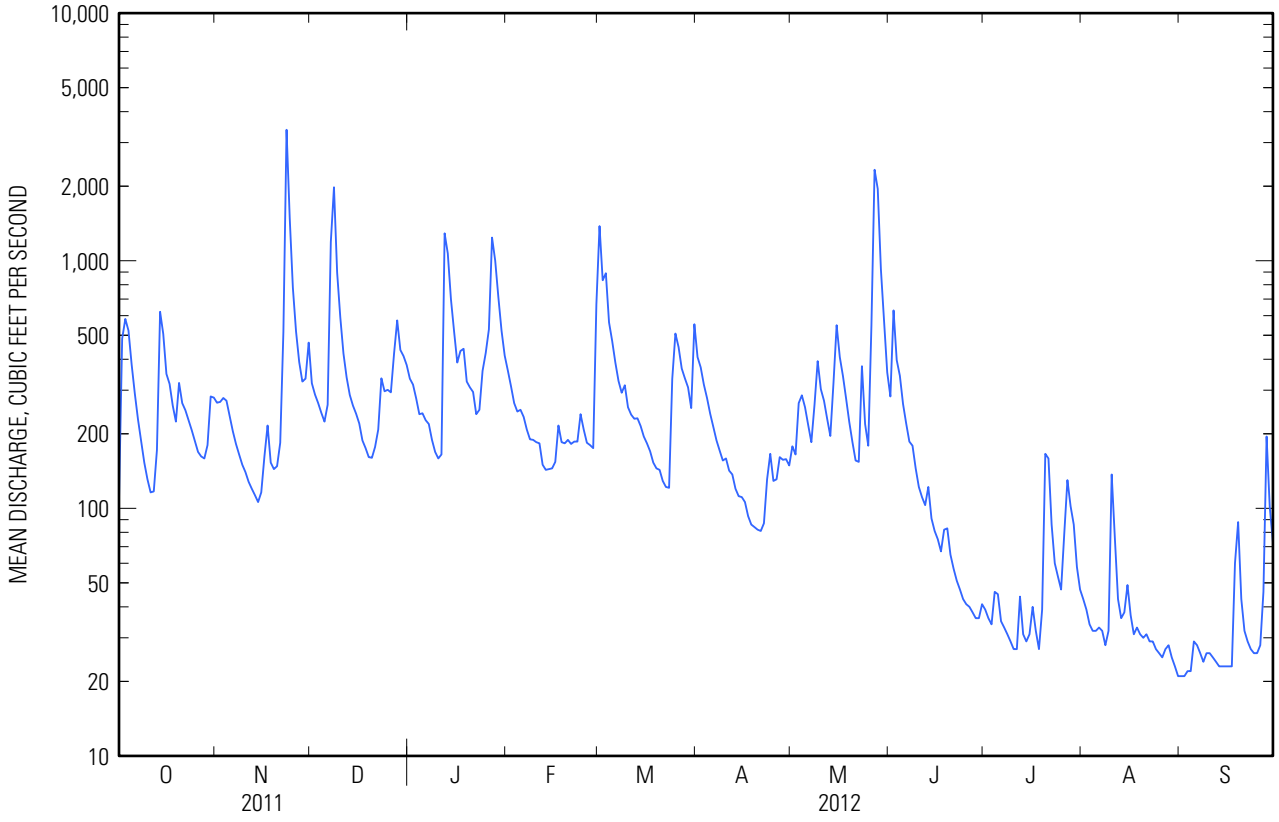
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1940 - 2012	
Annual total	140,598		90,696			
Annual mean	385		248		237	
Highest annual mean					397	1998
Lowest annual mean					107	1954
Highest daily mean	5,940	Mar 11	3,380	Nov 23	9,140	Jun 23, 1972
Lowest daily mean	14	Aug 3	21	Aug 31 [a]	6.4	Sep 6, 1964
Annual seven-day minimum	18	Jul 31	22	Aug 29	6.7	Aug 5, 1966
Maximum peak flow			4,740	May 27	[b]19,400	Jul 20, 1977
Maximum peak stage			9.22	May 27	14.15	Jul 20, 1977
Instantaneous low flow			21	Aug 31 [c]	2.6	Sep 6, 1964
Annual runoff (cfsm)	2.24		1.44		1.38	
Annual runoff (inches)	30.41		19.62		18.69	
10 percent exceeds	937		507		573	
50 percent exceeds	180		180		100	
90 percent exceeds	22		29		20	

[a] Also Sep 1, 2.
[b] From rating curve extended above 9,200 ft³/s on basis of contracted-opening measurement at gage height 12.67 ft and contracted-opening and flow-over-road measurement at gage height 13.03 ft.
[c] Also Sep 1-4.