Water-Data Report 2011

01420500 BEAVER KILL AT COOKS FALLS, NY

Upper Delaware Basin
East Branch Delaware Subbasin

LOCATION.--Lat 41°56′47″, long 74°58′48″ referenced to North American Datum of 1927, Delaware County, NY, Hydrologic Unit 02040102, on left bank 125 ft downstream from bridge on Cooks Brook Road in Cooks Falls, and 5.5 mi downstream from Willowemoc Creek.

DRAINAGE AREA.--241 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1913 to current year.

REVISED RECORDS.--WSP 521: Drainage area. WSP 781: 1933(M). WSP 891: 1936-39(M). WSP 1202: 1950. WSP 1232: 1950(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,151.70 ft above NGVD of 1929. Prior to Oct. 1, 1933, nonrecording gage at site 125 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Satellite and telephone gage-height and temperature telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 62,400 ft^3/s, June 28, 2006, gage height, 20.55 ft, from floodmark in gage house, from rating curve extended above 16,000 ft^3/s on basis of slope-area measurement at gage height 15.52 ft; minimum discharge, 16 ft^3/s, Nov. 22, 23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,700 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 1	0800	*30,700	a*15.69
Dec 1	1845	16,500	12.29
Mar 7	0045	13,600	11.37
Mar 11	0845	19,300	13.07
Apr 17	0445	4,760	7.32
Apr 28	1600	5,740	7.94
Jun 24	2100	5,400	7.73
Jun 29	0215	6,550	8.40
Jul 3	1615	6,170	8.19
Aug 28	1430	30,300	15.60
Sep 7	0830	21,500	13.64
Sep 29	1915	9,160	9.67

a Recorded; outside gage height was 16.56 ft, from crest-stage gage.

Minimum discharge, 152 ft^3/s, Aug. 6, gage height, 1.45 ft.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 01420500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/01420500.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	14,300	469	6,090	307	e160	1,100	574	1,410	885	1,130	169	968
2	2,870	427	4,480	430	e162	810	583	1,150	738	880	196	769
3	1,400	397	2,150	428	e164	658	581	997	620	3,170	174	644
4	984	577	1,480	340	191	601	699	1,600	541	3,020	207	562
5	1,300	889	1,150	335	240	591	1,360	1,470	501	1,590	175	949
6	1,120	665	968	263	410	4,430	1,400	1,140	454	1,120	196	2,500
7	973	558	827	e258	e297	7,320	1,200	986	400	889	513	11,400
8	798	536	715	e254	e248	2,700	1,120	874	364	756	466	8,070
9	667	565	594	e249	e230	1,760	1,010	767	355	676	326	3,490
10	566	622	508	e245	e220	1,780	1,110	674	373	549	704	2,000
11	503	588	565	e242	216	11,100	1,350	600	377	477	408	1,440
12	493	522	718	e237	e214	4,140	1,950	543	1,410	431	299	1,170
13	431	485	1,860	e234	e219	2,470	1,600	494	737	378	256	919
14	382	460	1,130	e227	e244	1,740	1,360	471	550	342	264	761
15	536	434	871	e219	284	1,410	1,110	509	495	304	1,750	696
16	1,370	431	e775	e215	251	1,400	1,040	537	429	279	2,890	622
17	917	1,250	e638	219	279	1,700	3,400	695	590	255	1,540	522
18	727	1,040	e604	261	385	2,510	1,970	865	740	240	961	467
19	623	805	e517	414	753	2,760	1,580	2,460	514	241	749	424
20	550	706	e473	333	561	1,870	1,740	1,910	416	218	606	428
21	505	626	e462	275	e507	1,580	1,350	1,480	368	202	498	404
22	469	572	e443	229	466	1,400	1,110	1,140	565	187	582	435
23	426	541	416	213	431	1,190	1,630	982	930	173	452	469
24	396	506	387	e206	421	1,040	1,640	1,170	2,950	166	375	957
25	372	454	364	e190	693	891	1,600	926	2,810	350	362	666
26	376	718	342	e183	1,110	777	1,890	792	1,480	523	470	530
27	1,070	687	291	e176	815	694	2,440	1,060	1,010	295	385	696
28	873	555	321	e173	1,010	629	3,520	838	873	217	13,600	2,710
29	654	496	356	e170	---	582	2,740	722	3,660	227	4,470	5,210
30	569	488	299	e165	---	547	1,880	1,550	1,660	246	2,040	3,950
31	518	---	e305	e160	---	572	---	1,160	---	185	1,310	---
Total	37,738	18,069	31,099	7,850	11,181	62,752	46,537	31,972	27,795	19,716	37,393	54,828
Mean	1,217	602	1,003	253	399	2,024	1,551	1,031	926	636	1,206	1,828
Max	14,300	1,250	6,090	430	1,110	11,100	3,520	2,460	3,660	3,170	13,600	11,400
Min	372	397	291	160	160	547	574	471	355	166	169	404
Cfsm	5.05	2.50	4.16	1.05	1.66	8.40	6.44	4.28	3.84	2.64	5.01	7.58
In.	5.83	2.79	4.80	1.21	1.73	9.69	7.18	4.94	4.29	3.04	5.77	8.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1913 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	419	615	657	546	493	995	1,261	681	416	291	240	280
Max	1,535	1,427	1,967	1,769	2,026	2,485	2,581	1,584	1,830	1,329	1,206	1,828
(WY)	(1978)	(1973)	(1997)	(1996)	(1981)	(1977)	(1940)	(1989)	(2006)	(1945)	(2011)	(2011)
Min	31.3	42.4	140	93.5	107	262	347	222	107	54.0	40.4	31.8
(WY)	(1965)	(1965)	(1923)	(1981)	(1920)	(2006)	(1946)	(2001)	(1991)	(1962)	(1962)	(1964)

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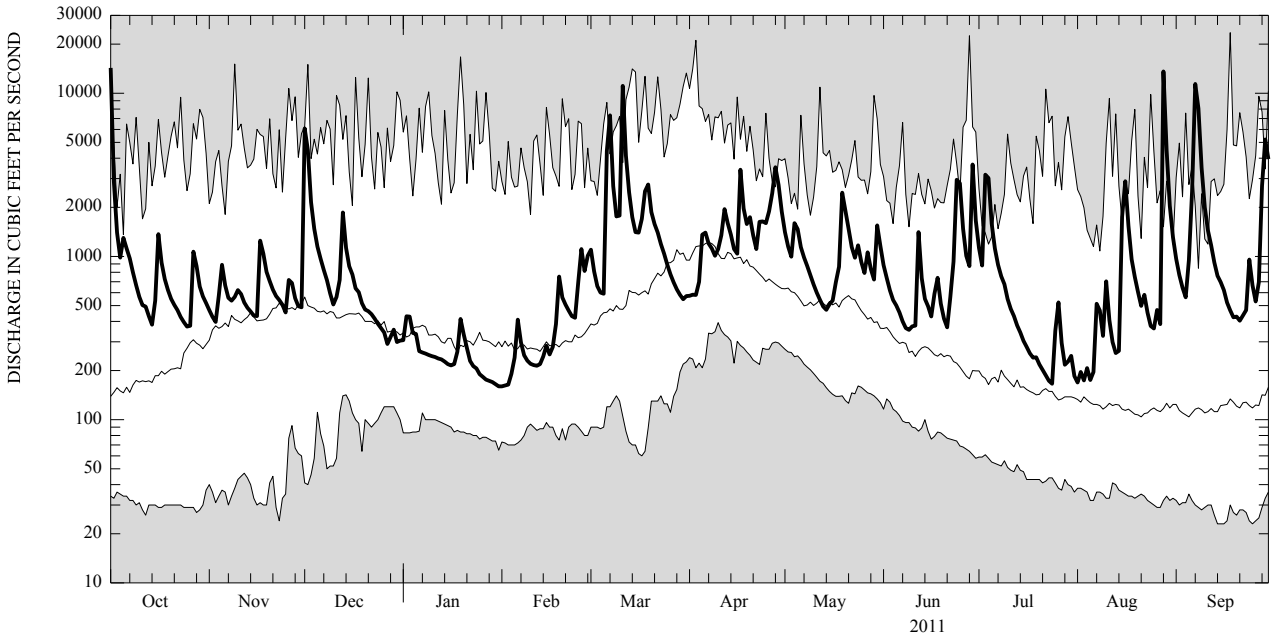
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1913 - 2011	
Annual total	217,416		386,930			
Annual mean	596		1,060		574	
Highest annual mean					1,060	2011
Lowest annual mean					277	1965
Highest daily mean	14,300	Oct 1	14,300	Oct 1	23,500	Sep 18, 2004
Lowest daily mean	57	Sep 26	160	Jan 31	23	Sep 14, 1913
Annual seven-day minimum	61	Sep 21	165	Jan 28	26	Sep 21, 1964
Annual runoff (cfsm)	2.47		4.40		2.38	
Annual runoff (inches)	33.56		59.73		32.36	
10 percent exceeds	1,200		1,960		1,250	
50 percent exceeds	331		591		330	
90 percent exceeds	83		230		87	



CURRENT WATER YEAR DAILY MEAN DISCHARGE (BOLD) WITH DAILY MEDIAN FOR PERIOD OF RECORD.
SHADED AREAS SHOW HIGHEST AND LOWEST DAILY MEAN FOR PERIOD OF RECORD THROUGH PREVIOUS WATER YEAR.