



Water-Data Report 2010

01379530 CANOE BROOK NEAR SUMMIT, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 40°44'40", long 74°21'13" referenced to North American Datum of 1983, Millburn Township, Essex County, NJ, Hydrologic Unit 02030103, on left bank just upstream of pumping station intake, 100 ft upstream of bridge on private driveway within New Jersey-American Water Company property, 0.5 mi upstream of mouth, 1.6 mi east of Chatham, and 2.0 mi north of Summit.

DRAINAGE AREA.--11.0 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Published 1930-65 in Special Reports of predecessors of the New Jersey Department of Environmental Protection. Fragmentary records for water years 1966-2001 are unpublished but available in the files of the New Jersey Water Science Center or on the web at <http://nwis.waterdata.usgs.gov/>. October 2001 to current year.

GAGE.--Water-stage recorder upstream and downstream of concrete weir, velocity meter, water temperature sensor, crest-stage gage downstream of control. Datum of gage is 159.64 ft NGVD of 1929.

REMARKS.--Records fair, except for discharges below 2 ft³/s and above 200 ft³/s and estimated daily discharges, which are poor. Diversion above weir by New Jersey-American Water Company for municipal supply. During extreme backwater conditions from the Passaic River, reverse flow may occur due to pumping from the gage pool by New Jersey-American Water Company. Prior to January 21, 2010, negative flows were reported as missing or zero flow. Satellite telemetry at station.

01379530 CANOE BROOK NEAR SUMMIT, NJ—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.6	3.5	5.5	13	5.1	24	40	5.1	2.2	0.50	14	1.5
2	1.4	5.0	3.3	11	4.6	34	25	4.4	2.7	0.35	4.0	1.2
3	4.7	4.5	106	6.3	5.6	44	21	117	2.2	0.27	1.7	0.96
4	2.5	3.8	17	5.8	5.0	45	-5.0	16	1.9	0.26	1.1	0.81
5	1.5	3.1	11	5.0	4.1	35	3.3	7.8	1.8	0.24	1.4	0.90
6	1.1	2.5	21	4.7	4.0	22	7.6	6.2	1.6	0.20	1.6	0.78
7	1.8	2.3	13	4.5	3.2	22	8.7	5.0	1.4	0.17	0.82	0.78
8	1.7	2.1	8.8	4.4	3.2	29	7.1	4.4	1.4	0.18	0.45	0.75
9	1.2	2.2	507	3.8	3.2	21	20	4.3	2.1	0.36	0.35	0.65
10	1.2	2.1	47	3.0	3.9	14	9.5	3.6	13	0.21	0.32	0.61
11	1.3	2.0	14	3.0	6.3	15	6.7	3.3	3.5	0.24	0.25	0.60
12	0.94	1.9	7.9	3.2	6.1	22	5.8	17	2.1	0.22	0.22	1.1
13	0.76	1.7	124	3.1	5.1	637	4.8	5.5	2.4	0.93	0.32	9.6
14	0.66	3.4	76	3.0	4.6	594	4.7	4.5	4.6	34	0.50	9.4
15	5.2	5.4	24	3.0	4.7	143	4.6	3.9	2.5	5.6	0.58	2.3
16	19	5.0	14	3.5	6.9	52	4.4	3.3	1.7	2.5	6.2	3.5
17	5.6	2.1	7.7	17	6.2	31	5.4	2.9	19	1.5	6.1	8.5
18	7.9	2.3	e7.0	44	4.8	3.1	4.2	33	2.9	1.0	2.4	4.0
19	5.8	2.6	e6.3	13	5.2	-2.0	4.6	18	1.3	1.8	1.3	2.6
20	2.5	51	6.4	8.4	8.5	-23	5.1	6.7	1.3	2.8	0.83	2.2
21	1.5	3.6	8.2	6.0	9.9	-14	4.7	4.6	2.0	1.1	0.44	2.2
22	1.2	4.0	6.7	5.1	9.1	27	6.5	3.6	1.0	0.69	39	2.1
23	0.91	4.4	5.7	4.1	65	273	4.1	4.4	3.0	1.4	45	7.6
24	105	4.0	5.1	3.8	171	27	3.2	3.5	1.4	2.1	7.9	4.6
25	73	3.4	5.4	310	61	12	63	3.3	1.8	2.4	23	3.6
26	11	3.8	309	53	43	17	97	2.9	1.1	4.2	7.9	3.1
27	18	3.4	460	24	22	2.5	57	2.9	0.80	1.1	4.4	8.5
28	166	2.7	26	9.5	16	3.8	11	7.2	0.72	0.60	2.9	6.7
29	37	1.9	13	7.4	---	275	8.0	3.6	2.2	3.3	2.3	6.7
30	10	2.6	13	5.6	---	429	8.8	2.8	0.91	2.9	1.8	88
31	3.9	---	12	4.1	---	124	---	2.3	---	0.98	1.7	---
Total	495.87	142.3	1,891.0	595.3	497.3	2,938.4	450.8	313.0	86.53	74.10	180.78	185.84
Mean	16.0	4.74	61.0	19.2	17.8	94.8	15.0	10.1	2.88	2.39	5.83	6.19
Max	166	51	507	310	171	637	97	117	19	34	45	88
Min	0.66	1.7	3.3	3.0	3.2	-23	-5.0	2.3	0.72	0.17	0.22	0.60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	24.2	15.0	27.7	17.0	19.8	31.1	22.8	10.2	17.6	10.4	10.3	11.6
Max	80.4	44.3	61.0	29.3	49.1	94.8	76.2	20.2	65.5	27.6	31.3	26.0
(WY)	(2006)	(2007)	(2010)	(2006)	(2004)	(2010)	(2007)	(2009)	(2003)	(2004)	(2009)	(2004)
Min	1.56	0.65	0.86	1.71	1.15	3.35	6.71	2.63	2.85	2.35	1.39	2.06
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2006)	(2002)	(2005)	(2002)	(2002)	(2005)	(2007)

01379530 CANOE BROOK NEAR SUMMIT, NJ—Continued

SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 2002 - 2010	
Annual total	7,049.35		7,851.22			
Annual mean	19.3		21.5		18.1	
Highest annual mean					26.9	2007
Lowest annual mean					3.91	2002
Highest daily mean	507	Dec 9	637	Mar 13	^a 970	Apr 16, 2007
Lowest daily mean	0.66	Oct 14	-23	Mar 20	^b -23	Mar 20, 2010
Annual seven-day minimum	1.0	Sep 20	0.23	Jul 6	0.00	Jun 30, 2002
10 percent exceeds	37		38		32	
50 percent exceeds	5.2		4.2		4.4	
90 percent exceeds	1.6		0.79		0.66	

^a Estimated.

^b Negative discharge have only been reported starting Jan 21, 2010.

