

01405030 LAWRENCE BROOK AT WESTONS MILLS, NJ

LOCATION.--Lat 40°28'59", long 74°24'46", Middlesex County, Hydrologic Unit 02030105, on left bank at dam on Westons Mill Pond at Westons Mills, 200 ft downstream from bridge on State Route 18, and 1.3 mi upstream from mouth.

DRAINAGE AREA.--44.9 mi².

PERIOD OF RECORD.--Water-quality records water years 1976-81. December 1988 to October 1994, July 1995 to current year.

REVISED RECORDS.--WDR NJ-89-1: Drainage area.

GAGE.--Water-stage recorder above masonry dam. Datum of gage is NGVD of 1929.

REMARKS.--Records fair. Flow regulated by Farrington Lake, capacity, 655,250,000 gal. Diversion at gage by New Brunswick Water Department (see Raritan River basin, diversions). Several measurements of water temperature were made during the year.

COOPERATION.--Water-stage recorder inspected by and records of gate openings and diversions provided by employees of City of New Brunswick.

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	63	16	265	27	28	52	78	187	15	63	3.7	5.6
2	37	18	162	25	28	48	470	74	17	129	2.6	4.4
3	24	20	70	24	28	39	460	55	21	33	6.7	4.6
4	20	81	51	39	41	36	120	41	104	21	14	5.9
5	14	188	39	56	48	34	83	32	40	18	7.8	5.4
6	12	45	39	256	50	36	82	28	23	29	2.6	3.4
7	11	31	123	128	53	45	77	27	38	29	3.8	3.4
8	11	23	192	131	55	106	387	25	18	320	4.0	3.1
9	12	20	88	117	65	71	160	23	13	267	5.4	2.1
10	13	18	298	66	113	48	97	21	14	89	3.8	3.5
11	9.5	16	207	56	88	43	79	22	14	41	3.2	4.6
12	9.4	59	93	109	55	65	69	19	10	27	3.5	4.2
13	9.0	180	63	68	46	53	60	20	8.4	40	4.1	2.1
14	10	63	48	327	78	42	55	18	6.1	38	4.1	13
15	14	40	39	222	291	37	50	18	14	25	6.7	18
16	20	35	37	85	114	33	48	18	11	21	9.4	12
17	16	30	38	60	92	35	48	15	7.8	252	7.7	11
18	11	26	35	45	56	38	44	16	12	482	8.2	9.9
19	54	22	34	40	44	36	44	14	12	60	12	7.6
20	40	24	29	37	39	40	42	73	12	32	13	6.4
21	19	51	23	35	48	42	38	57	11	20	9.2	6.0
22	46	31	22	e30	58	35	37	27	11	16	8.2	5.9
23	24	24	93	e35	62	99	39	23	12	12	6.6	5.8
24	18	35	175	33	52	204	47	21	9.4	13	6.6	8.3
25	14	59	63	32	50	81	41	44	11	12	5.5	7.2
26	13	43	43	32	45	56	38	55	10	8.6	7.5	7.3
27	12	28	37	32	40	45	58	34	33	7.4	7.1	12
28	14	380	29	29	42	496	47	29	138	8.3	6.3	6.3
29	25	205	28	28	---	602	38	32	186	5.6	7.3	8.2
30	40	73	28	30	---	154	56	20	398	5.5	7.7	7.9
31	18	---	27	28	---	96	---	17	---	3.7	7.0	---
TOTAL	652.9	1,884	2,518	2,262	1,809	2,847	2,992	1,105	1,229.7	2,128.1	205.3	205.1
MEAN	21.1	62.8	81.2	73.0	64.6	91.8	99.7	35.6	41.0	68.6	6.62	6.84
MAX	63	380	298	327	291	602	470	187	398	482	14	18
MIN	9.0	16	22	24	28	33	37	14	6.1	3.7	2.6	2.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2005, BY WATER YEAR (WY)

MEAN	35.6	42.6	66.4	62.9	57.3	81.7	71.2	60.6	48.9	40.1	40.0	43.7
MAX	104	114	174	114	113	179	116	169	161	92.7	103	184
(WY)	(1997)	(2004)	(1993)	(1996)	(1998)	(1993)	(1993)	(1989)	(2003)	(1989)	(1990)	(1989)
MIN	9.72	1.33	5.57	9.99	2.55	30.3	27.4	24.9	3.91	2.70	6.62	6.84
(WY)	(2002)	(1999)	(1999)	(2002)	(2002)	(2002)	(1995)	(1995)	(1999)	(1999)	(2005)	(2005)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1989 - 2005	
ANNUAL TOTAL	21,842.5		19,838.1		52.7	
ANNUAL MEAN	59.7		54.4		81.0	
HIGHEST ANNUAL MEAN					23.9	
LOWEST ANNUAL MEAN					2,200	
HIGHEST DAILY MEAN	1,350	Sep 29	602	Mar 29	2,200	Sep 21, 1989
LOWEST DAILY MEAN	7.6	Sep 27	2.1	Sep 9, 13	0.00	Aug 19, 1995
ANNUAL SEVEN-DAY MINIMUM	8.8	Sep 21	3.3	Sep 7	0.00	Aug 19, 1995
MAXIMUM PEAK FLOW			1,400	Mar 28	4,850a	Sep 21, 1989
MAXIMUM PEAK STAGE			17.39	Mar 28	19.20	Sep 21, 1989
INSTANTANEOUS LOW FLOW			0.05	Many days	0.00	Sep 29, 1989
10 PERCENT EXCEEDS	122		115		103	
50 PERCENT EXCEEDS	34		32		28	
90 PERCENT EXCEEDS	11		6.6		7.7	

a From rating curve extended above 1,000 ft³/s.

e Estimated

