



Water-Data Report 2010

01383500 WANAQUE RIVER AT AWOSTING, NJ

PASSAIC RIVER BASIN

LOCATION.--Lat 41°09'37", long 74°20'01" referenced to North American Datum of 1983, West Milford Township, Passaic County, NJ, Hydrologic Unit 02030103, on right bank 700 ft downstream from dam at outlet of Greenwood Lake at Awosting, and 3.7 mi northeast of West Milford.

DRAINAGE AREA.--27.1 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1919 to current year. Prior to October 1940, published as "at Greenwood Lake".

REVISED RECORDS.--WSP 781: Drainage area. WSP 1552: 1922(M), 1928(M), 1936. WDR NJ-79-1: 1933(M), 1936(M), 1945(M), 1948(P), 1951(P), 1952(P), 1953(M), 1955(P), 1956(M), 1957(M), 1958(M), 1960(P), 1961(M), 1968(P), 1969(P). WDR NJ-80-1: 1960(P).

GAGE.--Water-stage recorder. Concrete control since Oct 31, 1938. Datum of gage is 601.32 ft above NGVD of 1929 (levels from New Jersey Geological Survey benchmark). Prior to Apr 1, 1926, non-recording gage, and Apr 1, 1926 to Oct 31, 1938, water-stage recorder at site 100 ft upstream at same datum.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Flow occasionally regulated by gates in dam on Greenwood Lake (see 01393000). Water diverted into basin above gage from Upper Greenwood Lake (Hudson River basin) by North Jersey District Water Supply Commission since 1968. Several measurements of water temperature were made during the year. Satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 28	0200	224	3.18
Jan 26	1245	284	3.37
Mar 14	1300	*1,630	*5.63
Mar 24	0315	360	3.59
Mar 31	0515	462	3.86

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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	6.4	77	34	123	98	65	377	73	17	13	5.6	5.3
2	5.8	65	32	110	84	58	287	65	15	13	5.6	5.3
3	5.8	55	101	94	75	59	224	71	14	13	5.6	5.3
4	6.5	47	137	79	67	57	176	72	14	13	5.0	5.3
5	6.4	42	135	70	59	57	139	63	14	13	3.7	5.1
6	5.1	39	127	62	53	58	117	57	15	11	4.8	5.1
7	5.7	31	109	54	47	59	99	48	14	7.7	5.1	4.9
8	4.4	31	97	51	43	66	88	40	12	7.6	5.3	4.8
9	3.4	29	125	46	38	79	90	37	12	7.3	5.3	4.8
10	5.0	29	157	41	44	99	79	30	12	7.1	5.3	4.8
11	3.7	30	147	38	48	119	68	23	11	6.7	5.3	3.8
12	3.1	27	129	35	41	151	62	28	12	6.7	4.8	3.7
13	3.0	25	123	32	37	347	54	30	12	6.7	3.8	3.7
14	2.5	30	144	30	34	1,510	50	28	12	6.6	4.5	3.8
15	3.1	32	142	29	30	1,210	46	30	12	6.4	5.1	3.7
16	4.5	33	136	27	33	742	42	26	12	6.7	5.3	3.7
17	3.1	31	125	29	35	477	46	23	12	6.6	5.3	3.7
18	5.4	28	107	38	32	348	43	28	11	6.7	5.3	3.7
19	2.4	28	95	39	31	261	40	45	12	6.7	5.3	3.7
20	4.0	45	93	38	27	205	36	43	12	6.2	5.3	3.6
21	4.6	49	80	37	26	166	35	39	12	6.1	5.3	4.8
22	4.6	48	69	35	24	149	35	35	12	6.1	5.5	6.2
23	6.2	45	62	33	29	315	35	33	12	5.9	5.4	6.4
24	11	42	56	31	45	328	29	30	12	5.8	5.4	6.3
25	31	40	49	116	e62	252	44	28	13	5.8	5.0	4.9
26	29	41	59	275	96	220	62	26	13	5.6	5.2	3.2
27	31	42	179	253	83	173	91	24	13	5.6	5.4	4.4
28	e67	40	220	212	73	143	102	23	13	5.7	5.4	5.3
29	100	31	193	175	---	215	93	22	14	5.7	5.3	5.5
30	90	34	156	142	---	329	80	21	13	5.4	5.3	8.3
31	81	---	138	117	---	447	---	18	---	5.6	5.3	---
Total	544.7	1,166	3,556	2,491	1,394	8,764	2,769	1,159	384	235.0	159.8	143.1
Mean	17.6	38.9	115	80.4	49.8	283	92.3	37.4	12.8	7.58	5.15	4.77
Max	100	77	220	275	98	1,510	377	73	17	13	5.6	8.3
Min	2.4	25	32	27	24	57	29	18	11	5.4	3.7	3.2
Cfsm	0.65	1.43	4.23	2.97	1.84	10.4	3.41	1.38	0.47	0.28	0.19	0.18
In.	0.75	1.60	4.88	3.42	1.91	12.03	3.80	1.59	0.53	0.32	0.22	0.20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	32.2	57.8	68.8	65.2	62.2	102	93.5	58.9	38.6	25.7	25.7	29.6
Max	231	210	197	221	168	283	333	233	178	132	208	231
(WY)	(2006)	(2007)	(1974)	(1979)	(1981)	(2010)	(1984)	(1989)	(1972)	(1938)	(1955)	(1927)
Min	0.20	0.18	1.88	3.00	3.04	5.32	6.02	13.4	4.37	2.76	0.01	0.06
(WY)	(1932)	(1932)	(1985)	(1922)	(1922)	(2007)	(2002)	(1941)	(1957)	(1981)	(1929)	(1929)

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	Calendar Year 2009		Water Year 2010		Water Years 1919 - 2010	
Annual total	18,785.8		22,765.6			
Annual mean	51.5		62.4		54.9	
Highest annual mean					105	1984
Lowest annual mean					19.2	2002
Highest daily mean	220	Dec 28	1,510	Mar 14	2,350	Apr 6, 1984
Lowest daily mean	2.4	Oct 19	2.4	Oct 19	0.00	Oct 15, 1928
Annual seven-day minimum	3.3	Oct 11	3.3	Oct 11	0.00	Jul 27, 1929
Maximum peak flow			1,630	Mar 14	^a 2,800	Apr 5, 1984
Maximum peak stage			5.63	Mar 14	6.65	Apr 5, 1984
Instantaneous low flow			2.1	Oct 19, 20	0.00	Oct 11, 1961 ^b
Annual runoff (cfsm)	1.90		2.30		2.02	
Annual runoff (inches)	25.79		31.25		27.51	
10 percent exceeds	101		142		126	
50 percent exceeds	41		31		33	
90 percent exceeds	8.9		5.0		5.1	

^a From rating curve extended above 1,200 ft³/s based on theoretical weir formula.

^b No flow at times when gates at Greenwood Lake were closed and no water passed over spillway.

