01121000 MOUNT HOPE RIVER NEAR WARRENVILLE, CT

Connecticut Coastal Basin
Shetucket Subbasin

LOCATION.--Lat 41°50′37″, long 72°10′10″ referenced to North American Datum of 1927, Windham County, CT, Hydrologic Unit 01100002, On left bank 250 ft downstream from Knowlton Brook, 700 ft upstream from bridge on State Rt. 89, 1.8 mi south of Warrenville, and 3.2 mi southwest of Ashford.

DRAINAGE AREA.--28.6 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1940 to current year.

REVISED RECORDS.--WSP 1331: 1941, 1951-53 (M). WSP 1721: Drainage area. WDR CT-75-1: 1974 (P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 335.68 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

REMARKS.--Records good except for periods of estimated daily discharges, which are fair. Chemical analyses available for water year 1959 (WSP 1641). Occasional regulation from ponds upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1938 reached a stage of about 14.5 ft, from floodmarks.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 31	1030	465	4.66
Feb 27	1830	613	5.31
Mar 12	2215	710	5.67
Jun 8	0345	*1,330	*7.17
Jun 11	2145	515	4.89
Jun 14	0745	956	6.39

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	17	45	15	47	111	204	68	24	36	33	8.0	30
2	17	32	15	e47	e83	154	67	23	29	33	12	26
3	25	24	16	e41	e61	127	54	22	53	29	10	23
4	17	20	15	38	e56	111	48	21	46	24	13	18
5	18	20	15	36	e54	101	44	19	30	21	10	15
6	15	21	15	34	39	104	42	21	23	17	7.6	10
7	12	19	14	33	e40	105	39	19	178	15	6.2	7.8
8	13	26	24	34	e35	99	39	26	778	13	5.8	6.7
9	12	31	26	32	e85	108	37	66	207	22	54	5.6
10	12	34	33	31	e103	110	45	66	118	18	57	5.1
11	16	38	30	31	85	129	54	45	352	32	23	5.5
12	13	37	23	56	91	293	61	42	292	26	14	7.0
13	12	51	19	74	75	384	71	31	182	20	11	28
14	13	45	17	89	59	185	52	25	687	31	9.9	16
15	15	32	17	67	52	131	45	24	255	20	7.9	12
16	17	27	16	57	55	111	40	22	142	15	6.5	16
17	13	25	28	55	49	96	38	19	114	11	6.1	11
18	12	22	87	48	e60	84	34	17	114	9.4	5.9	13
19	21	21	61	e49	e61	95	33	20	102	8.0	5.1	13
20	33	20	41	44	e64	99	68	25	70	8.2	4.5	13
21	21	20	149	e42	e60	86	55	23	56	8.4	4.0	12
22	16	19	128	e40	e54	78	42	41	47	7.0	3.9	33
23	15	19	74	e33	45	76	37	34	40	31	3.8	23
24	14	20	55	e29	105	78	37	113	39	25	3.3	17
25	13	18	50	e24	105	78	35	82	49	25	3.0	14
26	14	17	43	e24	83	71	31	58	49	57	2.9	14
27	15	17	106	e23	319	66	30	41	39	30	16	11
28	14	23	93	e25	350	62	28	32	54	19	10	16
29	34	19	62	30	---	60	27	41	50	15	8.5	19
30	92	16	63	42	---	57	26	106	36	13	8.1	12
31	65	---	e58	248	---	53	---	55	---	9.2	6.3	---
Total	636	778	1,408	1,503	2,439	3,595	1,327	1,203	4,267	645.2	347.3	452.7
Mean	20.5	25.9	45.4	48.5	87.1	116	44.2	38.8	142	20.8	11.2	15.1
Max	92	51	149	248	350	384	71	113	778	57	57	33
Min	12	16	14	23	35	53	26	17	23	7.0	2.9	5.1
Cfsm	0.72	0.91	1.59	1.70	3.05	4.05	1.55	1.36	4.97	0.73	0.39	0.53
In.	0.83	1.01	1.83	1.95	3.17	4.68	1.73	1.56	5.55	0.84	0.45	0.59

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	29.2	47.7	65.2	69.5	73.6	109	93.3	60.0	40.9	16.4	17.0	17.0
Max	177	131	200	264	203	219	197	119	207	105	148	118
(WY)	(2006)	(1956)	(1997)	(1979)	(1970)	(1972)	(1983)	(1984)	(1982)	(2009)	(1955)	(1954)
Min	3.44	4.27	12.4	12.0	16.2	32.2	29.7	19.0	4.99	1.35	0.73	0.56
(WY)	(1958)	(2002)	(2002)	(1981)	(1980)	(2006)	(1985)	(1957)	(1957)	(1957)	(2005)	(2005)

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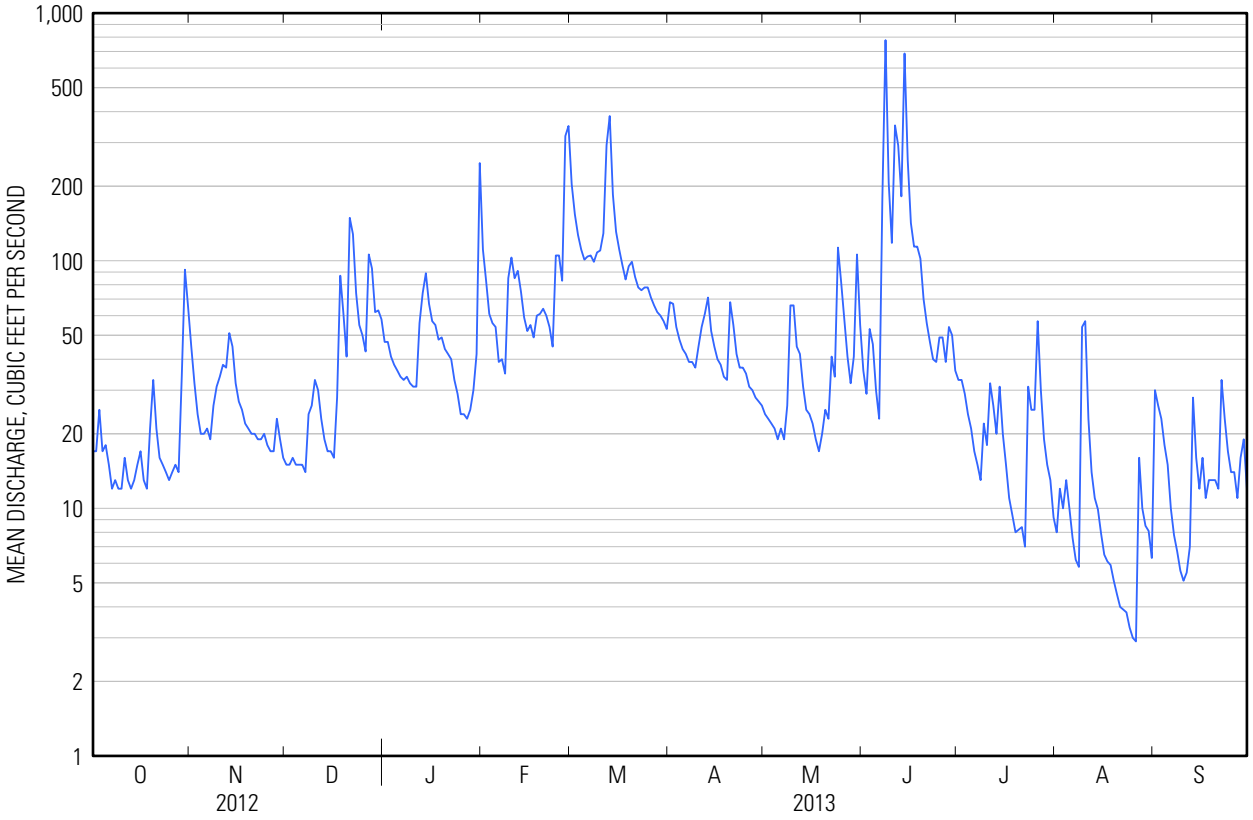
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1941 - 2013	
Annual total	11,483.1		18,601.2			
Annual mean	31.4		51.0		53.1	
Highest annual mean					87.3	2006
Lowest annual mean					25.0	2002
Highest daily mean	277	Apr 23	778	Jun 8	2,640	Aug 19, 1955
Lowest daily mean	2.0	Aug 9	2.9	Aug 26	0.05	Sep 11, 2005
Annual seven-day minimum	2.4	Jul 11	3.6	Aug 20	0.06	Sep 8, 2005
Maximum peak flow			1,330	Jun 8	[a]5,590	Aug 19, 1955
Maximum peak stage			7.17	Jun 8	[b]10.41	Aug 19, 1955
Instantaneous low flow			2.7	Aug 26	0.04	Sep 11, 2005
Annual runoff (cfsm)	1.10		1.78		1.86	
Annual runoff (inches)	14.94		24.19		25.22	
10 percent exceeds	65		104		114	
50 percent exceeds	23		31		32	
90 percent exceeds	4.4		11		4.1	

[a] From rating curve extended above 890 ft³/s on basis of contracted opening of peak flow.
[b] From floodmarks in gage well.