Water-Data Report 2010

01208500 NAUGATUCK RIVER AT BEACON FALLS, CT

Connecticut Coastal Basin
Housatonic Subbasin

LOCATION.--Lat 41°26′32″, long 73°03′47″ referenced to North American Datum of 1927, New Haven County, CT, Hydrologic Unit 01100005, on left bank at downstream side of bridge on Bridge St. at Beacon Falls, 0.4 mi upstream from Bronson Brook, and at mile 10.1.

DRAINAGE AREA.--260 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1955 to current year. June 1918 to September 1924, September 1928 to September 1955, published as "near Naugatuck".

REVISED RECORDS.--WSP 1171: 1918-24, 1928-49. WSP 1501: 1956 (P). WDR CT-83-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 117.28 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1955, water-stage recorder at site 2.5 mi upstream at datum 37.89 ft higher. Oct. 1, 1955, to Mar. 21, 1957, nonrecording gage at present site and datum. Telephone telemetry at station. Satellite telemetry at station.

REMARKS.--Records good. Peak flows are affected by flood-control regulation at Thomaston Dam, Hall Meadow Brook Dam, Black Rock Lake, Hop Brook Lake, East Branch Dam, Northfield Brook Lake, and Hancock Brook Lake. The natural flow regime can be altered by regulation at water-supply reservoirs (Pitch, Morris, and Wigwam) and flood-control reservoirs (Thomaston Dam, Hall Meadow Brook Dam, Black Rock Lake, Hop Brook Lake East Branch Dam, Northfield Brook Lake, and Hancock Brook Lake). Flow increased by diversion from Shepaug Reservoir into Naugatuck River Basin. Town of Watertown diverts about 0.5 Mgal/d from Pomperaug River Basin into Naugatuck River about 10 mi upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in November 1927 reached a stage of 14 ft, former site and datum, discharge, about 26,000 ft^3/s.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2010: U.S. Geological Survey Water-Data Report WDR-US-2010, site 01208500, accessed at http://wdr.water.usgs.gov/wy2010/pdfs/01208500.2010.pdf

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	156	667	518	778	601	1,130	4,090	342	167	92	71	88
2	142	565	444	736	541	1,090	3,390	322	213	86	71	83
3	511	490	1,470	650	529	1,070	2,590	446	224	83	70	81
4	639	446	1,270	604	502	961	1,950	364	198	81	69	77
5	313	421	845	535	467	892	1,140	322	183	78	330	70
6	225	400	774	515	458	803	943	295	175	81	183	68
7	357	369	636	491	409	785	870	268	171	80	112	71
8	317	355	567	467	402	818	791	297	148	76	87	70
9	236	343	746	429	388	849	813	284	142	76	81	66
10	261	336	980	384	400	803	752	269	278	84	78	67
11	242	322	756	385	405	771	659	267	266	111	75	65
12	204	304	601	391	380	758	605	308	227	99	71	63
13	193	310	710	344	361	1,530	555	303	519	425	71	64
14	176	614	1,390	349	352	4,700	522	423	312	458	67	64
15	178	892	1,100	341	341	4,070	495	366	239	198	65	61
16	213	621	1,030	341	355	3,010	481	289	191	145	220	68
17	203	487	802	351	370	1,880	662	248	168	109	127	102
18	300	419	623	578	359	1,350	572	305	151	93	81	66
19	358	389	584	552	356	1,160	505	515	137	122	71	62
20	271	941	590	507	357	954	461	388	128	94	68	59
21	231	806	552	432	370	848	432	302	121	105	64	56
22	210	569	514	388	353	829	413	253	120	183	415	63
23	194	485	465	357	404	3,140	392	227	286	125	1,430	75
24	640	458	432	331	1,160	1,940	364	213	223	251	474	60
25	1,850	434	419	2,480	2,460	1,490	396	205	216	191	264	58
26	826	429	548	2,380	4,270	1,240	483	189	145	129	208	55
27	517	554	3,740	2,480	3,520	1,040	623	309	126	101	158	89
28	1,320	613	2,530	2,050	1,530	898	504	217	116	89	129	512
29	1,630	517	1,230	1,310	---	2,660	418	179	110	84	112	177
30	821	502	848	738	---	3,790	372	163	101	79	101	765
31	641	---	821	678	---	3,410	---	150	---	74	94	---
Total	14,375	15,058	28,535	23,352	22,400	50,669	27,243	9,028	5,801	4,082	5,517	3,325
Mean	464	502	920	753	800	1,634	908	291	193	132	178	111
Max	1,850	941	3,740	2,480	4,270	4,700	4,090	515	519	458	1,430	765
Min	142	304	419	331	341	758	364	150	101	74	64	55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	343	486	596	620	616	987	962	602	423	250	249	247
Max	2,480	1,890	1,688	2,307	1,524	2,227	2,467	2,098	1,973	957	2,920	1,301
(WY)	(1956)	(1956)	(1997)	(1979)	(2008)	(1983)	(1983)	(1989)	(1982)	(1938)	(1955)	(1938)
Min	55.3	63.9	113	118	204	357	273	225	122	72.6	72.0	68.2
(WY)	(1931)	(1932)	(1936)	(1981)	(1934)	(2006)	(1985)	(1941)	(1957)	(1966)	(1966)	(1931)

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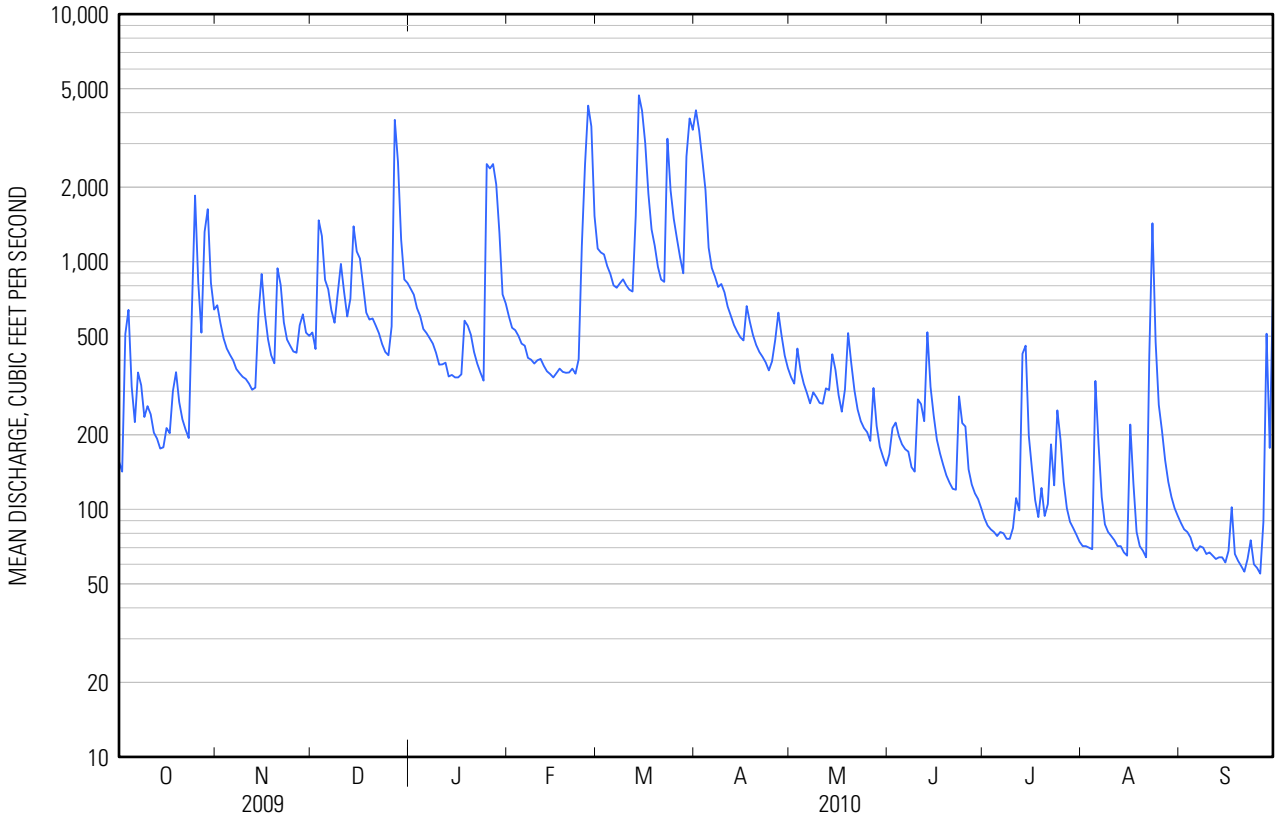
SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1928 - 2010	
Annual total	214,950		209,385			
Annual mean	589		574		531	
Highest annual mean					866	2006
Lowest annual mean					237	1965
Highest daily mean	3,740	Dec 27	4,700	Mar 14	56,400	Aug 19, 1955
Lowest daily mean	109	Sep 26	55	Sep 26	40	Oct 5, 1930 [a]
Annual seven-day minimum	120	Sep 20	61	Sep 20	47	Jul 11, 1971
Maximum peak flow			6,780	Jan 25	[b]106,000	Aug 19, 1955
Maximum peak stage			9.05	Jan 25	[c]25.70	Aug 19, 1955
Instantaneous low flow			47	Sep 26	24	Oct 21, 1935
10 percent exceeds	1,060		1,190		1,140	
50 percent exceeds	487		364		334	
90 percent exceeds	217		77		106	

[a] Also occurred Oct. 12, 1930 and Sep. 7, 1936.
[b] From rating curve extended above 9,000 ft³/s, on basis of peak flow at gage heights 12.4 and 25.7 ft., site and datum then in use.
[c] From floodmarks.