THAMES RIVER BASIN

01122500 SHETUCKET RIVER NEAR WILLIMANTIC, CT

LOCATION.--Lat 41°42'01", long 72°10'57", Windham County, Hydrologic Unit 01100002, on right bank at downstream side of Bingham Bridge on Plains Road, 500 ft upstream from Penn. Central Co. railroad bridge, 500 ft downstream from Potash Brook, 1.3 mi downstream from confluence of Willimantic and Natchaug Rivers, 1.5 mi southeast of Willimantic, and 17 mi upstream from mouth.

DRAINAGE AREA.--404 mi^2.

PERIOD OF RECORD.--Discharge: April 1904 to December 1905, October 1919 to September 1921, September 1928 to current year. Published as "at South Windham" October 1919 to September 1921, September 1928 to September 1933.

Monthly discharge only for some periods, published in WSP 1301.

Water-quality records: Water years 1957, 1968-74.

Daily water temperature: Water year 1957.

Daily specific conductance: Water year 1957.

Daily pH: Water year 1957.

Daily iron: Water year 1957.

REVISED RECORDS.--WSP 781: l934(M). WSP 801: 1935. WSP 1201: 1905(M), 1920-2l. WDR CT-83-1: Drainage area.

GAGE.--Water-stage recorder since Dec. 5, 1933. Datum of gage is 131.40 ft above sea level (levels by Corps of Engineers). Apr. 4, 1904 to Dec. 31, 1905, nonrecording gage at present site and about the same datum. October 1919 to Sept.30, 1921, and Sept. 1, 1928 to Sept. 30, 1933, water-stage recorder at site 1.5 mi downstream at different datum. Telephone telemetry at station. Satellite telemetry at station.

REMARKS.--Records good except those for periods with ice effect, which are fair. Flow regulated by mills and flood detention reservoirs on Willimantic River, by pumping for municipal water supply of city of Willimantic on the Natchaug River, and by Mansfield Hollow Lake flood-control reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	218	427	e170	e800	3210	1070	332	276	95	57	39
2	134	221	394	e160	e1190	3400	935	297	222	105	52	38
3	112	207	377	661	4360	2400	895	246	210	138	49	37
4	100	199	349	1860	3910	4230	849	283	198	124	41	38
5	93	195	198	e1000	3250	4780	720	358	186	160	42	37
6	86	188	203	e750	1960	3200	690	449	177	116	45	41
7	83	186	200	e600	1280	e2100	673	476	160	102	46	54
8	71	180	202	e550	1350	e1520	649	471	111	95	51	74
9	679	178	234	1000	1180	e1300	614	503	104	79	48	74
10	640	199	244	1590	1100	e1200	628	458	103	74	46	131
11	782	255	236	1040	1040	1120	570	420	98	71	45	209
12	557	337	233	e800	1010	1080	562	381	94	65	47	129
13	433	273	233	e700	1220	1080	555	351	93	64	46	92
14	388	244	228	605	1140	1140	514	316	94	60	61	77
15	693	238	221	936	996	1240	487	258	104	58	66	93
16	750	220	217	2250	874	1290	481	255	97	56	62	654
17	641	221	225	1730	702	1510	580	243	94	55	58	2830
18	502	234	265	1830	1010	1550	581	240	91	62	54	1740
19	423	224	254	3940	1960	1450	513	312	91	135	49	859
20	426	212	241	3140	e1400	1280	527	947	306	139	46	495
21	399	218	233	2620	e1000	1170	576	947	84	107	68	342
22	233	218	236	2340	e650	2950	558	718	79	84	53	271
23	225	208	239	1580	e500	4360	612	617	76	77	51	242
24	226	202	e215	2240	e450	3170	702	810	73	70	48	208
25	222	191	e195	3900	488	2000	618	1130	72	78	46	186
26	218	229	e185	3310	543	1450	574	825	69	87	51	175
27	214	530	e175	2240	739	1420	532	687	67	73	52	165
28	217	411	e170	1560	960	1570	516	596	66	65	51	162
29	231	395	215	e1150	---	1600	471	433	65	60	48	156
30	244	444	e195	e950	---	1430	368	393	67	59	43	218
31	229	---	e180	e850	---	1290	---	362	---	58	43	---
TOTAL	10374	7475	7419	48052	37062	62490	18620	15114	3627	2671	1565	9866
MEAN	335	249	239	1550	1324	2016	621	488	121	86.2	50.5	329
MAX	782	530	427	3940	4360	4780	1070	1130	306	160	68	2830
MIN	71	178	170	160	450	1080	368	240	65	55	41	37

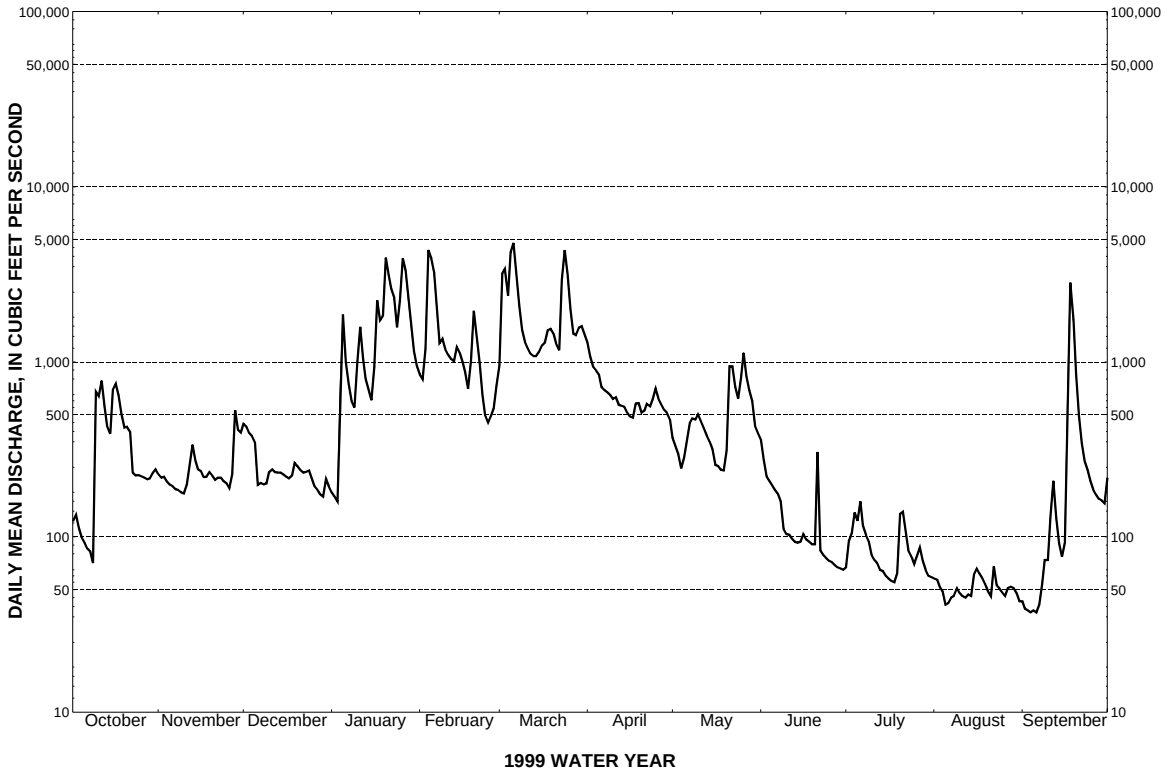
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1999, BY WATER YEAR (WY)

MEAN	383	634	825	915	923	1428	1339	848	545	269	243	294
MAX	2246	2156	2667	2945	2246	3949	2943	1814	2911	1755	2114	3571
(WY)	1956	1956	1997	1979	1970	1936	1987	1989	1982	1938	1955	1938
MIN	49.4	85.0	170	132	236	628	454	319	110	48.6	44.5	45.0
(WY)	1958	1932	1931	1981	1980	1989	1985	1957	1957	1957	1957	1957

e Estimated.

THAMES RIVER BASIN

01122500 SHETUCKET RIVER NEAR WILLIMANTIC, CT—Continued

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1929 - 1999	
ANNUAL TOTAL	315146		224335			
ANNUAL MEAN	863		615		719	
HIGHEST ANNUAL MEAN					1243	1938
LOWEST ANNUAL MEAN					337	1965
HIGHEST DAILY MEAN	8120	Mar 10	4780	Mar 5	35500	Sep 21 1938
LOWEST DAILY MEAN	65	Sep 16	37	Sep 3	19	Aug 22 1949
ANNUAL SEVEN-DAY MINIMUM	79	Sep 13	39	Aug 31	31	Sep 7 1995
INSTANTANEOUS PEAK FLOW			5990	Mar 4	**a**52200	Sep 21 1938
INSTANTANEOUS PEAK STAGE			9.17	Mar 4	**b**27.60	Sep 21 1938
INSTANTANEOUS LOW FLOW			33	Sep 3	15	Aug 29 1949
10 PERCENT EXCEEDS	2080		1530		1590	
50 PERCENT EXCEEDS	524		244		467	
90 PERCENT EXCEEDS	114		58		102	

a From rating curve extended above 11,000 ft^3/s on basis of computation of peak flow over Scotland and Baltic Dams, 5 and 9 mi downstream, respectively, adjusted for flow from intervening area.
b From floodmarks.