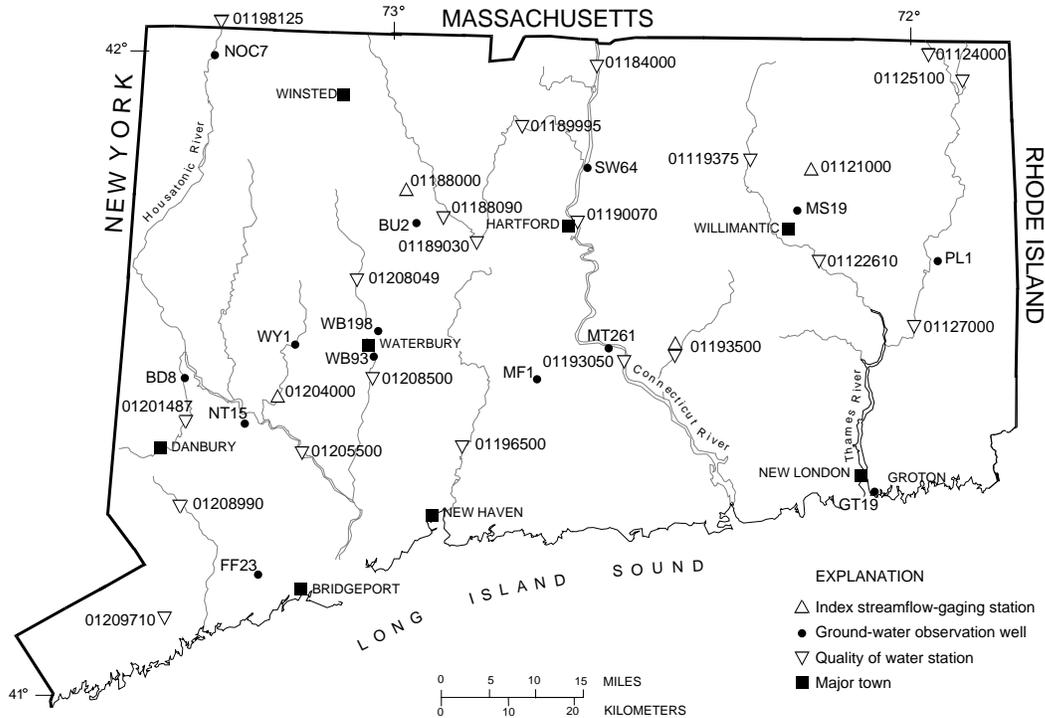


**U.S. Department of the Interior
U.S. Geological Survey**



**WATER-RESOURCES CONDITIONS
IN CONNECTICUT, JULY 2002**

The USGS provides maps, reports, and information to help others manage, develop, and protect America's water, energy, mineral, land, and biological resources.



DATA-COLLECTION SITES USED IN THIS REPORT

This report contains a small part of the ground-water, surface-water, and water-quality data collected by the USGS at sites in Connecticut. More complete information may be found in the annual Water-Data Report. Data for this report were collected by the USGS in cooperation with the Connecticut Dept. of Environmental Protection.

For more information on USGS programs in Connecticut, please contact Virginia de Lima (District Chief); 101 Pitkin St., East Hartford, CT 06108; **phone (860) 291-6740**; fax (860) 291-6799; dc_ct@usgs.gov

Additional earth science information, including this document, is on the USGS Home Page on the World Wide Web at <http://www.usgs.gov> or the Connecticut District home page at <http://ct.water.usgs.gov> For more information on all USGS reports and products (including maps, images, and computerized data), call **1-888-ASK-USGS**

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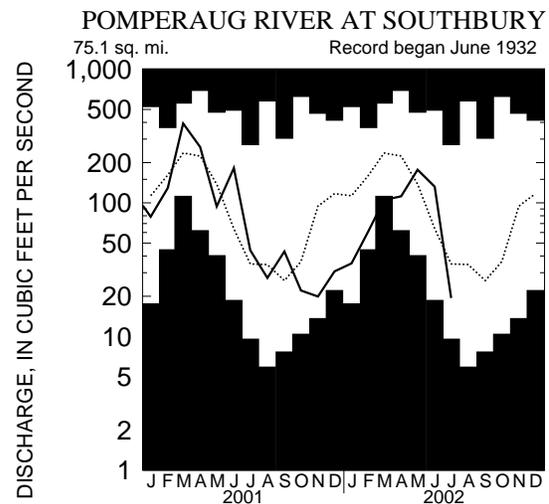
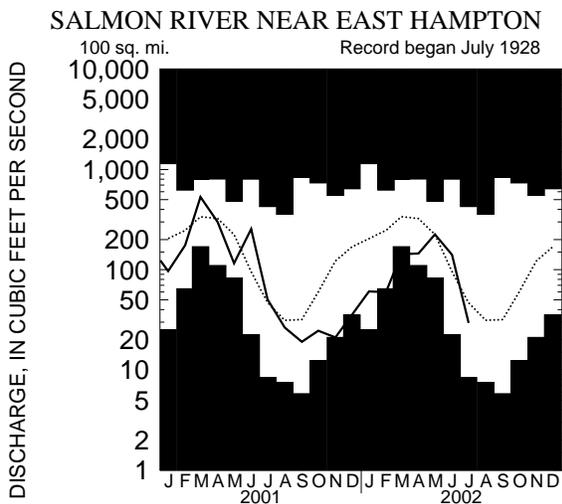
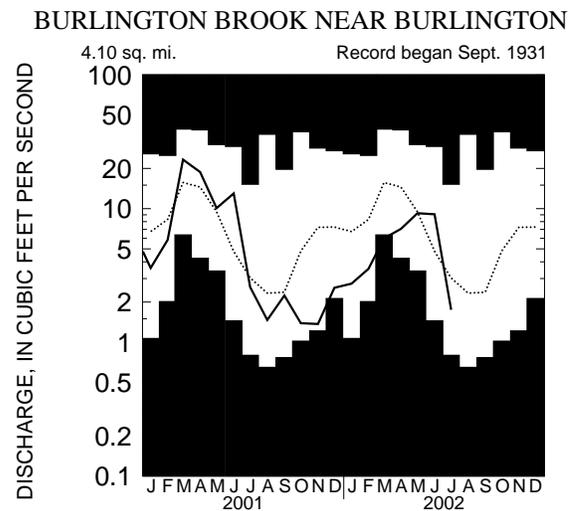
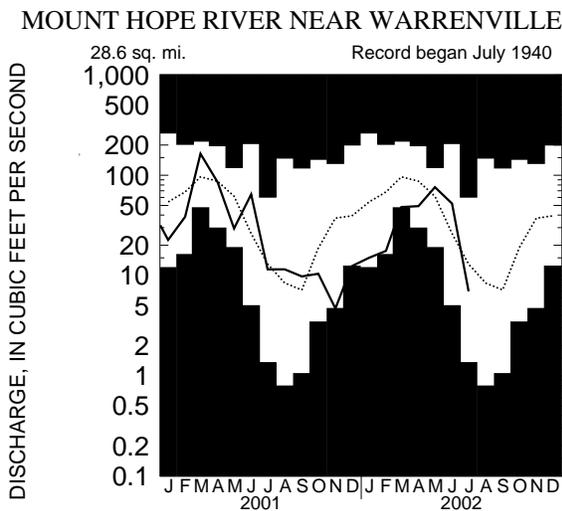
STREAMFLOW (measured in cubic feet per second) ➔ PROVISIONAL DATA ←

Streamflow across the State was in the normal to below-normal range. Flow at Mount Hope River (NE Connecticut) dropped to the normal range from being in the above-normal range. Flows at Burlington Brook (NW Connecticut), the Salmon River (SE Connecticut), and the Pomperaug River (SW Connecticut) dropped to the below-normal range from being in the normal range. Across the State, mean streamflow for July averaged 39.2 percent of the July long-term median values.

USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	JULY 2002 MEAN	JUNE 2002 MEAN	JULY 2001 MEAN	JULY MAXIMUM VALUE (year recorded)		JULY MINIMUM VALUE (year recorded)		JULY MEDIAN (1971-2000)
				Value	Year	Value	Year	
MT HOPE RIVER (01121000)	6.95	52.1	17.4	60.4	1972	1.35	1957	13.4
BURLINGTON (01188000)	1.75	9.07	4.59	15.2	1938	0.80	1966	3.16
SALMON RIVER (01193500)	29.4	141	50.4	426	1938	8.41	1957	46.8
POMPERAUG (01204000)	19.4	132	44.2	272	1938	9.56	1957	39.7

MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

Shaded areas on graphs show highest and lowest monthly mean discharge of record.
 Current record Median (1961-1990)



CHEMICAL, PHYSICAL, AND BACTERIOLOGICAL QUALITY OF SELECTED STREAMS IN CONNECTICUT

← PROVISIONAL DATA →

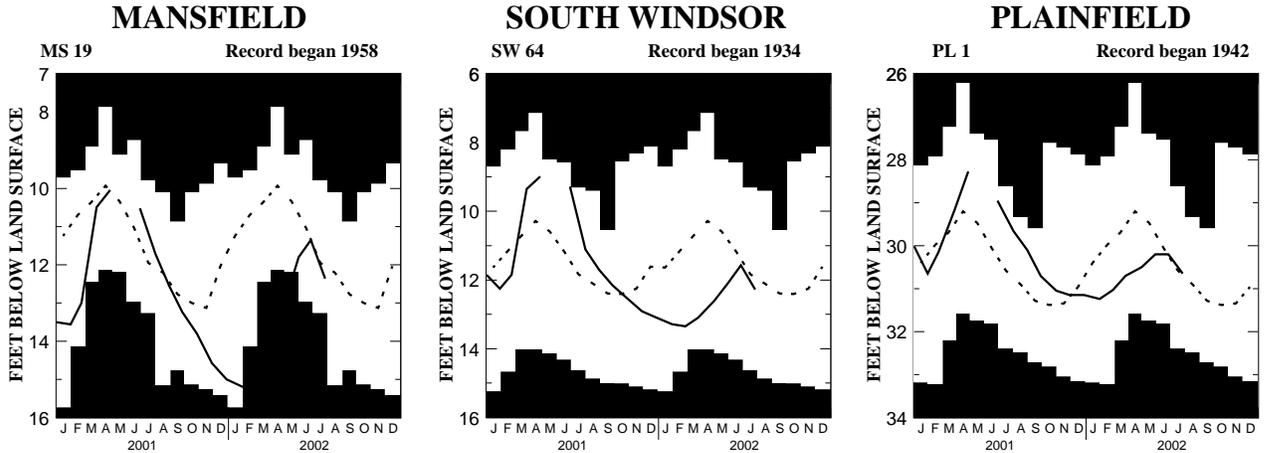
[Station locations shown on front page; - -, not applicable; —, not available; **streamflow** measured in instantaneous cubic feet per second; **% flow duration** is that flow that was equaled or exceeded more than "X" percent of the time from 1961-90; **bacteriological analysis** reconnaissance data enumerated using membrane filter method with immediate incubation; **col/100 mL**, colonies per 100 milliliters; **K**, results based on colony count outside the acceptable range (non-ideal colony count)]

USGS WATER-QUALITY STATION NAME AND NUMBER	SAMPLE DATE IN 2002	STREAMFLOW/ % FLOW DURATION	SPECIFIC CONDUCTANCE (in $\mu\text{S}/\text{cm}$ at 25°C)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN CONCENTRATION (mg/L)/PERCENT SATURATION	FIELD PH	FECAL COLIFORM (COL/100 mL)	ENTEROCOCCI (COL/100 mL)
01119375 Willimantic R. at Merrow	7/30	32.6 / - -	146	26.5	7.6 / 97	7.4	56	76
01122610 Shetucket R. at South Windham	7/22	117 / - -	139	24.5	8.5 / 102	7.0	53	14
01124000 Quinebaug R. at Quinebaug	7/24	66.2 / 81	272	24.0	8.0 / 95	7.2	148	84
01125100 French R. at North Grosvenordale	7/24	27.7 / - -	328	26.0	8.5 / 105	7.7	87 K	52
01127000 Quinebaug R. at Jewett City	7/22	107 / 97	193	24.0	6.9 / 82	7.1	58	108
01184000 Connecticut R. at Thompsonville	7/18	8880 / 63	154	26.5	8.8 / 110	7.6	31 K	25 K
01188090 Farmington R. at Unionville	7/08	263 / 86	117	20.0	10.1 / 111	7.3	36	140
01189030 Pequabuck R. at Farmington	7/09	27.6 / - -	371	22.5	7.9 / 92	7.4	261 K	92
01189995 Farmington R. at Tariffville	7/09	342 / 94	163	23.5	8.3 / 99	7.2	44	73 K
01190070 Connecticut R. at Hartford	SITE NOT SAMPLED THIS MONTH							
01193050 Connecticut R. at Middle Haddam	SITE NOT SAMPLED THIS MONTH							
01193500 Salmon R. near East Hampton	7/29	55.5/70	109	21.0	8.9 / 101	7.3	- -	- -
01196500 Quinnipiac R. at Wallingford	7/16	53.4 / 91	434	22.5	7.2 / 84	7.5	390	74
01198125 Housatonic R. near Ashley Falls, MA	7/18	137 / - -	428	24.0	9.2 / 112	8.3	37	51
01201487 Still R. at Rt. 7 at Brookfield Center	7/17	5.00 / - -	731	21.5	8.8 / 99	7.4	92	144
01205500 Housatonic R. at Stevenson	7/17	103 / 95	240	26.5	9.8 / 122	8.0	5 K	7 K
01208049 Naugatuck R. near Waterville	7/01	76 / - -	207	26.5	9.1 / 114	7.3	31	24
01208500 Naugatuck R. at Beacon Falls	7/02	135 / 83	332	25.0	9.7 / 118	7.7	300 K	20
01208990 Saugatuck R. near Redding	7/30	5.40 / 90	248	25.0	8.7 / 104	8.0	32	116
01209710 Norwalk R. near Winnipauk	7/30	14.5 / - -	341	24.0	9.8 / 117	8.2	364 K	104

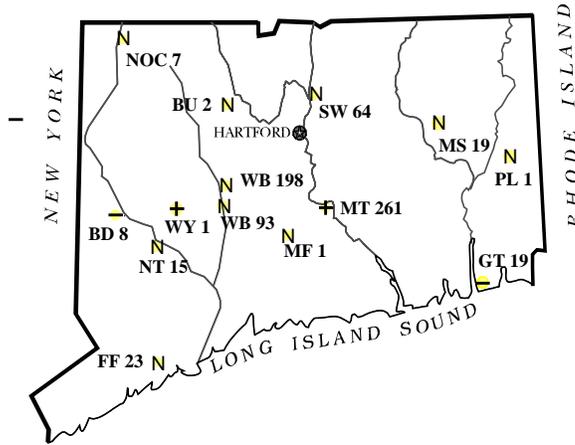
GROUND-WATER LEVELS

(Status of ground-water storage as indicated by water level changes in observation wells, as shown on hydrographs)

-  Shaded area on graphs show highest and lowest water levels of record through calendar year 2001.
-  Solid line shows current water levels.
-  Dashed line is monthly median for period of record through calendar year 2000.



MASSACHUSETTS



ABOVE NORMAL

Within the highest 25% of record for this month.



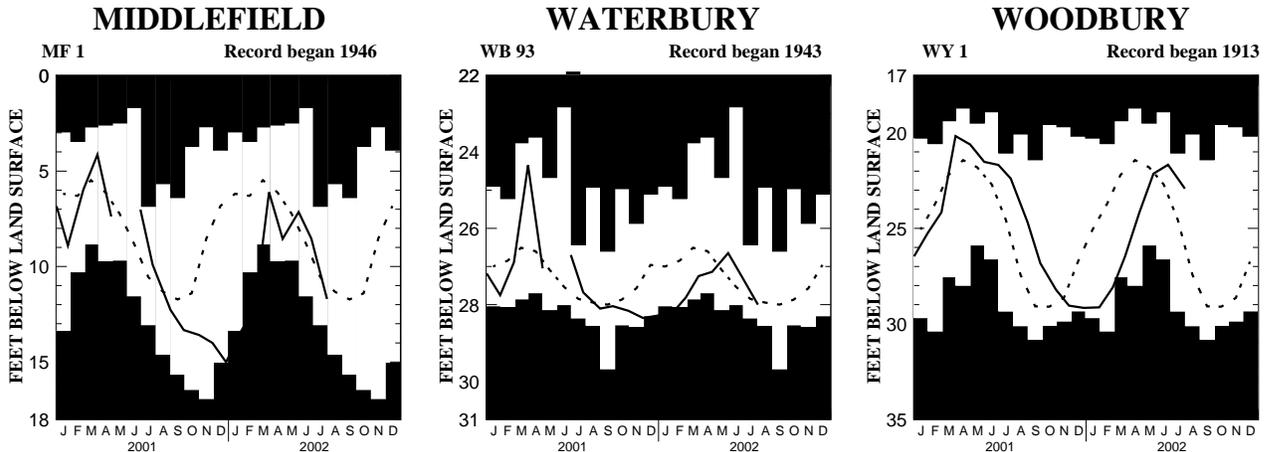
NORMAL RANGE

Between the highest and lowest 25% of record for this month.



BELOW NORMAL

Within the lowest 25% of record for this month.



GROUND-WATER LEVELS

There were 3 record low ground-water levels recorded for the month of July. One record low for the period of record also was recorded.

Ground-water levels are in feet below land surface. Maximum and minimum values are from end-of-the month readings and may not be the highest or lowest recorded during the month. Statistics are based on period of record (through calendar year 2001). Ground-water level data are collected by USGS personnel and individual observers.

Because of current conditions, measurements are being made in selected wells on a weekly or twice-a-month basis. In some wells, this causes the column labeled JULY MIN to have a value in July 2002 that is not the same value as reported in the column labeled JULY 2002, which is the last measurement for the month.

--, not measured

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE									NEW RE-CORD	YR RECORD BEGAN
	JULY 2002 (DATE)	JUNE 2002	JULY 2001	JULY MAX (YR RECORDED)	JULY MIN (YR RECORDED)	JULY MEDIAN					
BD 8 (Brookfield)	31.45	30	30.36	30.17	27.55	1972	32.36	1985	30.70		1966
BU 2 (Burlington)	20.94	30	19.24	21.18	16.01	1948	25.60	1964	20.82		1946
BU 143 (Burlington)	7.58	30	4.66	8.06	6.73	2000	9.98	1999	7.18		1996
BU 144 (Burlington)	1.70	30	1.75	1.78	1.67	1998	1.78	1997/01	1.75		1996
CL 223 (Clinton)	8.24	29	5.27	7.38	6.71	1992	9.00	1993	7.88		1991
CL 224 (Clinton)	21.33	29	20.45	20.51	20.08	1993	22.23	1999	20.70		1991
CL 225 (Clinton)	7.84	29	6.34	7.25	4.80	1998	8.07	1993	7.14		1991
CO 335 (Colchester)	8.20	29	7.70	8.09	7.47	1988	9.35	1995	8.12		1986
CV 51 (Coventry)	5.14	25	4.32	5.44	4.83	1996	6.65	1999	6.24		1992
D 116 (Durham)	6.88	29	2.91	5.21	1.83	1989	7.87	1999	5.29		1986
D 117 (Durham)	12.85	29	11.15	12.00	10.84	1996	13.74	1987	12.78		1986
D 119 (Durham)	2.28	29	1.43	2.10	0.80	1989	3.37	1987	2.59		1986
D 120 (Durham)	3.33	29	2.72	2.99	2.47	1989	3.94	1987/88	3.32		1986
EL 82 (Ellington)	6.17	25	5.94	6.25	5.14	1994	6.57	1999	6.20		1987
EL 139 (Ellington)	27.96	25	20.72	26.58	24.36	1998	28.87	1994	28.20		1993
EL 140 (Ellington)	18.76	25	14.16	17.66	14.31	1998	19.84	1999	17.51		1993
EW 133 (East Windsor)	5.58	25	5.15	5.48	4.86	1988	5.78	1999	5.50		1986
EW 134 (East Windsor)	51.75	25	51.69	50.61	49.05	1989	51.75	2002	50.42	<,<<	1986
FF 23 (Fairfield)	8.42	31	8.18	8.42	7.36	1983	9.70	1999	8.38		1966
FF 30 (Fairfield)	7.40	31	3.78	6.07	3.50	1996	8.77	1995	7.04		1993
FF 31 (Fairfield)	11.15	31	7.21	10.96	7.04	1996	12.26	1995	9.93		1993
FF 32 (Fairfield)	9.40	31	6.18	8.31	6.97	1996	11.45	1995	9.51		1993
FF 33 (Fairfield)	6.15	31	5.18	6.07	3.10	1998	7.24	1999	6.01		1993
GR 328 (Granby)	--		10.21	13.20	10.73	2000	14.51	1999	13.46		1981
GR 329 (Granby)	--		4.04	7.71	4.59	2000	10.90	1999	8.30		1982
GR 330 (Granby)	3.12	30	2.68	3.12	2.66	2000	5.83	1999	3.75		1982
GR 331 (Granby)	10.59	30	9.00	11.00	9.44	1984	12.63	1999	10.79		1983
GT 19 (Groton)	16.77	28	15.38	15.85	13.30	1984	17.20	1991	16.20		1958
HM 445 (Hamden)	26.50	31	22.10	24.51	23.10	1998	30.93	1993	27.41		1988
HM 446 (Hamden)	4.10	31	3.70	3.87	3.71	1998	4.23	1995	4.10		1993
HM 447 (Hamden)	3.65	31	3.11	2.93	2.88	2000	4.02	1995	3.63		1993
HM 448 (Hamden)	14.30	31	13.62	13.72	12.32	1993	14.95	1995	14.01		1993
HM 449 (Hamden)	19.01	31	16.43	18.25	16.83	2000	21.31	1993	19.74		1993
HM 450 (Hamden)	13.55	31	13.86	13.52	13.20	1988	13.64	1999	13.34		1993

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE									NEW RE- CORD	YR RECORD BEGAN
	JULY 2002 (DATE)		JUNE 2002	JULY 2001	JULY MAX (YR RECORDED)		JULY MIN (YR RECORDED)		JULY MEDIAN		
MB 32 (Marlborough)	6.75	29	4.32	6.06	4.18	1989	8.87	1993	7.11		1986
MB 35 (Marlborough)	13.75	29	9.92	12.81	11.44	1998	15.05	1999	13.70		1993
MB 36 (Marlborough)	7.78	29	4.64	6.77	4.95	1996	8.00	1999	7.50		1993
MF 1 (Middlefield)	11.70	29	8.54	9.91	6.85	1948	13.05	1965	10.60		1946
MS 19 (Mansfield)	12.36	25	11.35	11.71	9.77	1972	13.25	1965	11.82		1958
MS 44 (Mansfield)	4.69	25	2.91	6.92	2.82	1984	8.60	1993	6.15		1982
MS 45 (Mansfield)	14.05	25	13.10	12.81	11.76	1996	14.05	2002	13.25	<	1987
MS 46 (Mansfield)	15.93	25	14.55	13.75	13.00	1987	15.93	2002	14.06	<	1987
MS 74 (Mansfield)	6.78	25	3.18	7.31	4.70	1996	8.42	1999	7.38		1992
MS 75 (Mansfield)	10.47	25	8.44	9.33	8.92	2000	12.87	1995/99	11.72		1992
MS 76 (Mansfield)	33.60	25	32.75	OBS	29.37	2000	34.80	1995	34.02		1992
MS 77 (Mansfield)	6.98	25	3.44	7.29	3.65	1996	8.41	1999	7.35		1993
MT 261 (Middletown)	21.43	29	19.83	21.15	20.24	1972	23.11	1994	21.66		1956
NHV 201 (North Haven)	17.21	31	16.44	15.41	14.05	1984	17.83	1999	16.29		1975
NOC 7 (North Canaan)	10.04	25	9.49	9.96	9.04	1975	10.50	1995	9.80		1958
NSN 77 (N. Stonington)	13.95	29	11.58	13.51	12.11	1998	15.69	1993	14.73		1991
NSN 78 (N. Stonington)	6.42	29	5.20	5.29	4.24	1992	6.62	1994	5.85		1991
NT 15 (Newtown)	6.28	31	4.80	7.92	3.17	1972	9.50	1995	7.46		1966
PL 1 (Plainfield)	30.65	25	30.20	29.66	28.60	1989	32.03	1966	30.60		1942
SB 30 (Southbury)	19.65	30	18.03	19.22	18.45	2000	21.43	1999	19.68		1979
SB 39 (Southbury)	7.82	30	6.94	7.53	6.95	1992	8.17	1999	7.64		1991
SB 41 (Southbury)	51.55	30	47.19	50.82	47.63	1996	54.15	1999	50.30		1991
SB 42 (Southbury)	19.15	30	14.62	17.34	13.60	2000	20.15	1999	16.21		1993
SC 19 (Scotland)	7.41	25	4.00	8.47	4.66	1984	9.94	1997	7.44		1983
SC 20 (Scotland)	7.79	25	4.23	7.88	5.86	1984	9.33	1997	6.95		1983
SC 21 (Scotland)	0.90	25	0.56	0.81	+0.81	1998	1.34	1995/97	0.72		1983
SC 22 (Scotland)	12.59	25	11.00	12.18	11.26	1998	13.34	1999	12.74		1984
SC 23 (Scotland)	2.71	25	2.55	2.70	1.90	1988	2.96	1998	2.62		1983
SM 7 (Salem)	11.75	29	9.20	11.05	9.60	1984	13.00	1999	12.24		1979
SW 64 (S. Windsor)	12.28	25	11.57	11.11	9.29	1972	14.61	1966	11.77		1934
SY 15 (Salisbury)	13.26	30	13.26	13.34	12.00	2000	14.98	1991	13.99		1966
SY 23 (Salisbury)	9.70	30	6.50	9.66	5.55	1996	14.49	1993	9.10		1987
SY 24 (Salisbury)	14.30	30	10.65	13.36	10.28	1996	16.43	1995	13.44		1986
WB 93 (Waterbury)	28.00	31	27.27	27.68	26.43	1973	28.35	1957	27.87		1943
WB 198 (Waterbury)	17.95	31	16.00	14.28	11.60	1972	18.95	1985	15.01		1943
WY 1 (Woodbury)	22.92	30	21.67	22.39	21.23	1972	31.55	1915	25.70		1913

New records: >, new record high for month; >>, new record high for period of record; <, new record low for month;
 <<, new record low for period of record; *, median not calculated--number shown is mean; NA, not available; OBS, obstructed;
 +, water level above ground surface