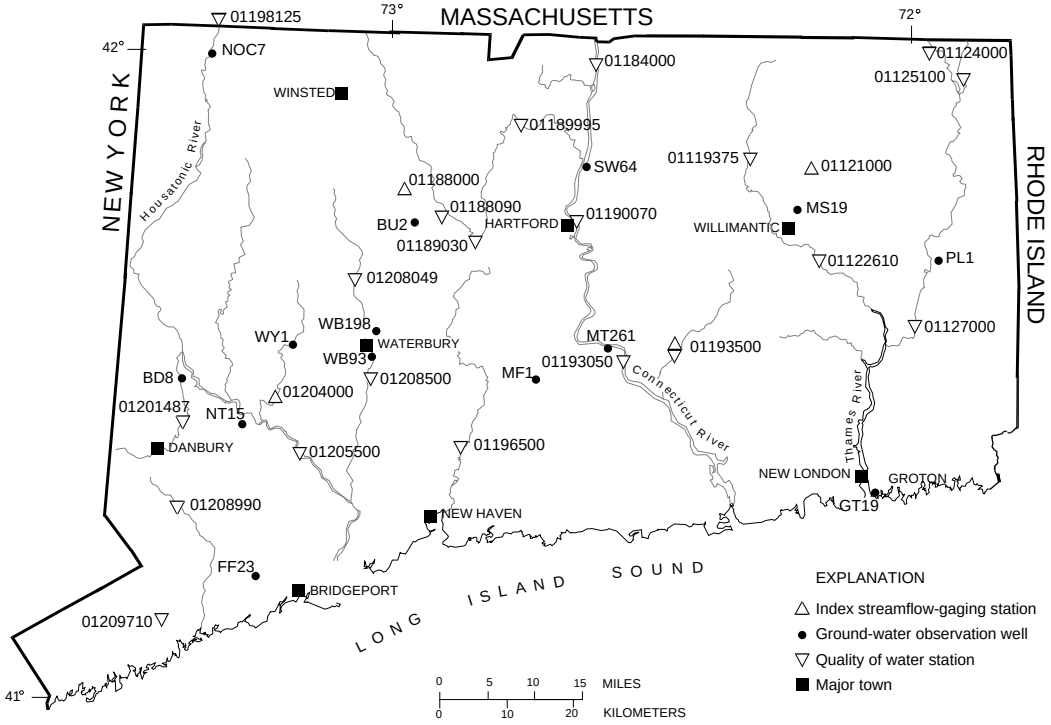
U.S. Department of the Interior
U.S. Geological Survey

WATER-RESOURCES CONDITIONS IN CONNECTICUT, AUGUST 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**

INDEX TO INFORMATION

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

Streamflow across the State was in the below-normal range. Flow at Mount Hope River (NE Connecticut) fell to the below-normal range after 1 month in the normal range. Flow at Burlington Brook (NW Connecticut), Salmon River (SE Connecticut) and Pomperaug River (SW Connecticut) remained in the below-normal range for the second consecutive month. Across the State, mean streamflow for August averaged 30 percent of the August long-term median values.

USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	AUGUST 2002 MEAN	JULY 2002 MEAN	AUGUST 2001 MEAN	AUGUST MAXIMUM VALUE (year recorded)		AUGUST MINIMUM VALUE (year recorded)		AUGUS MEDIAN (1971-2000)
MT HOPE RIVER (01121000)	3.17	6.95	11.5	148	1955	0.79	1957	10.8
BURLINGTON (01188000)	1.28	1.75	1.47	36.0	1955	0.65	1999	3.42
SALMON RIVER (01193500)	18.9	29.4	26.5	357	1955	7.50	1957	46.2
POMPERAUG (01204000)	21.5	19.4	27.4	578	1955	5.90	1999	39.0

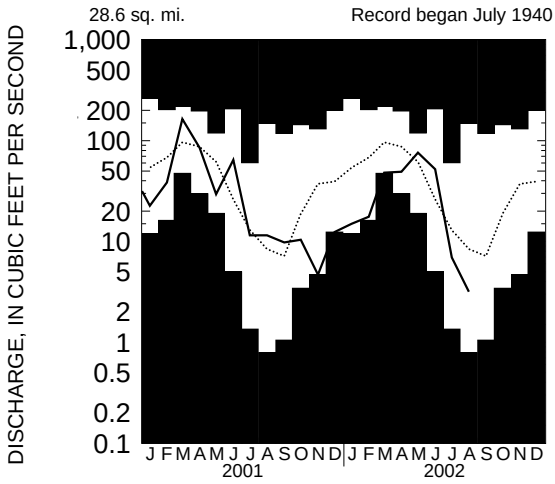
MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

Shaded areas on graphs show highest and lowest monthly mean discharge of record.

Current record ····· Median (1961-1990)

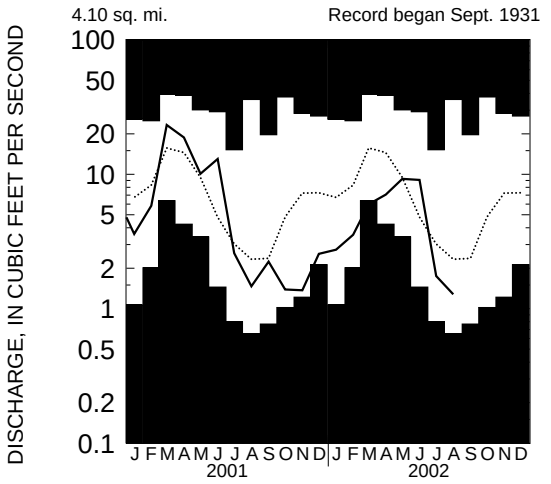
MOUNT HOPE RIVER NEAR WARRENVILLE

28.6 sq. mi. Record began July 1940



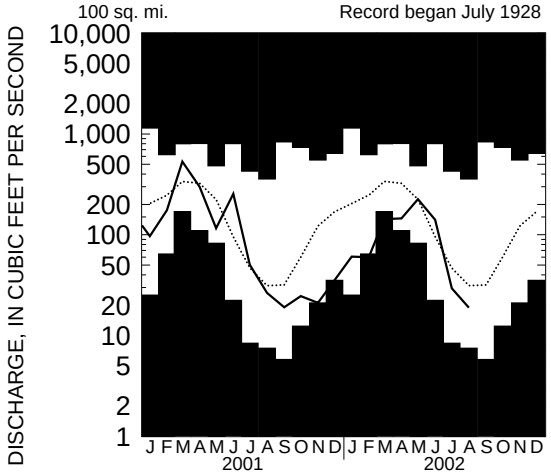
BURLINGTON BROOK NEAR BURLINGTON

4.10 sq. mi. Record began Sept. 1931



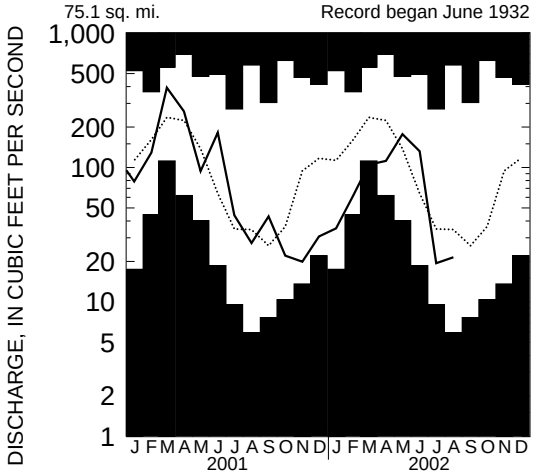
SALMON RIVER NEAR EAST HAMPTON

100 sq. mi. Record began July 1928



POMPERAUG RIVER AT SOUTHBURY

75.1 sq. mi. Record began June 1932



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 µS/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	8/22	17.0 / - -	175	21.0	9.8 / 111	7.0	120	47
01122610 Shetucket R. at South Windham	8/19	42.2 / - -	163	27.0	8.7 / 110	7.1	41	14 K
01124000 Quinebaug R. at Quinebaug	8/20	18.6 / 98	280	22.5	7.7 / 90	7.3	1000	3900
01125100 French R. at North Grosvenordale	8/20	26.3 / - -	322	25.5	9.5 / 119	9.8	680	800
01127000 Quinebaug R. at Jewett City	8/19	103 / 97	243	26.0	5.9 / 73	7.5	212	400
01184000 Connecticut R. at Thompsonville	8/08	3400 /94	146	25.5	8.2 / 100	7.8	128	40 K
01188090 Farmington R. at Unionville	SITE NOT SAMPLED THIS MONTH							
01189030 Pequabuck R. at Farmington	8/26	19.6 / - -	413	19.5	7.0 / 78	7.4	121	84
01189995 Farmington R. at Tariffville	8/26	181 / 99	205	22.5	8.4 / 96	7.3	40	10 K
01190070 Connecticut R. at Hartford	8/27	- - / - -	176	25.5	7.0 / 85	7.5	20 K	2 K
01193050 Connecticut R. at Middle Haddam	8/27	- - / - -	185	25.5	5.6 / 68	6.9	2 K	2 K
01193500 Salmon R. near East Hampton	SITE NOT SAMPLED THIS MONTH							
01196500 Quinnipiac R. at Wallingford	8/14	42.5 / 97	436	25.0	7.4 / 89	7.5	156	39
01198125 Housatonic R. near Ashley Falls, MA	8/15	106 / - -	454	26.0	6.5 / 82	7.9	65	21
01201487 Still R. at Rt. 7 at Brookfield Center	8/28	17.0 / 99	756	21.0	7.6 / 85	7.8	160	140
01205500 Housatonic R. at Stevenson	SITE NOT SAMPLED THIS MONTH							
01208049 Naugatuck R. near Waterville	8/12	25.5 / - -	320	28.0	10.1 / 131	8.2	224	28
01208500 Naugatuck R. at Beacon Falls	8/13	62.2 / 99	444	24.5	8.5 / 100	7.8	96	3 K
01208990 Saugatuck R. near Redding	SITE NOT SAMPLED THIS MONTH							
01209710 Norwalk R. near Winnipauk	8/06	10.8 / - -	346	23.0	10.5 / 124	8.3	206	31

GROUND-WATER LEVELS

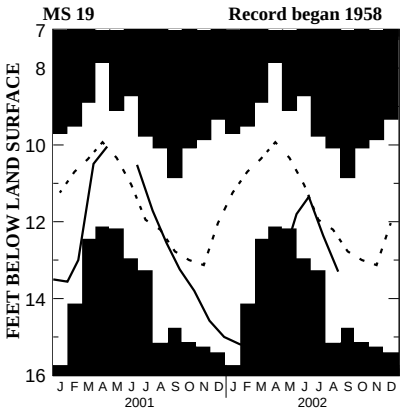
(Status of ground-water storage as indicated by water level changes in observation wells, as shown on hydrographs)

Shaded area on graphs show highest and lowest water levels of record through calendar year 2001.

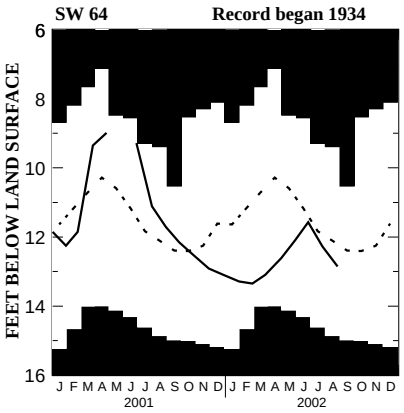
Solid line shows current water levels.

Dashed line is monthly median for period of record through calendar year 2000.

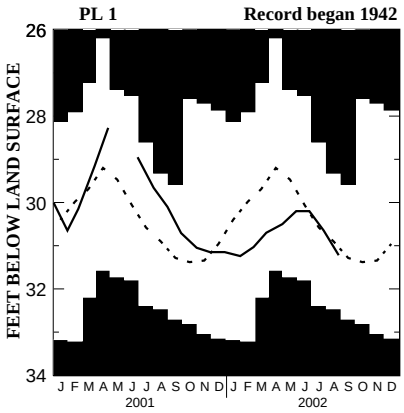
MANSFIELD

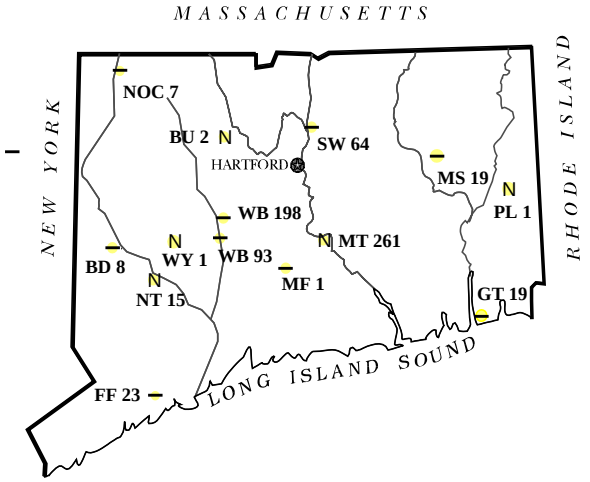


SOUTH WINDSOR



PLAINFIELD





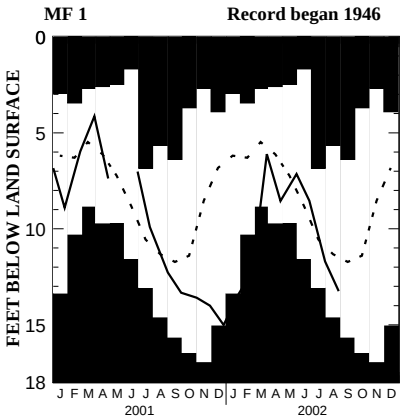
ABOVE NORMAL
Within the highest 25% of record for this month.

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

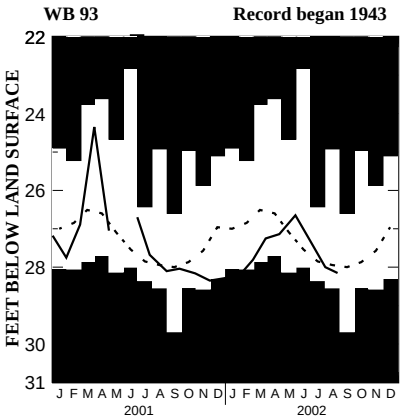
N

BELOW NORMAL
Within the lowest 25% of record for this month.

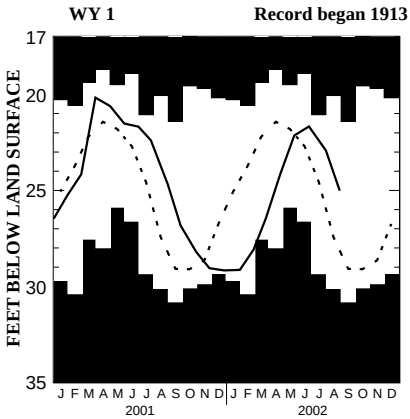
MIDDLEFIELD



WATERBURY



WOODBURY



GROUND-WATER LEVELS

Ten low ground-water levels were recorded during August 2002. Six lows for the period of record also were established during August 2002.

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 2000). 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 AUGUST MIN to have a value in August 2002 that is not the same value as reported in the column labeled AUGUST 2002, which is the last measurement for the month.

	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE										
WELL NUMBER AND TOWN	AUGUST 2002 (DATE)		JULY 2002	AUG 2001	AUGUST MAX (YR RECORDED)		AUGUST MIN (YR RECORDED)		AUG MEDIAN	NEW RE-CORD	YR RECORD BEGAN
BD 8 (Brookfield)	32.10	28	31.45	31.38	29.49	1969	32.69	1995	31.13		1966
BU 2 (Burlington)	24.94	28	20.94	31.46	19.08	1972/73	29.94	1995	23.28		1946
BU 143 (Burlington)	9.67	28	7.58	9.95	7.17	2000	10.70	1999	9.33		1996
BU 144 (Burlington)	1.90	28	1.70	1.83	1.43	1998	1.90	2002	1.68	<	1996
CL 223 (Clinton)	10.37	27	8.24	8.14	3.96	1992	10.62	1993	8.69		1991
CL 224 (Clinton)	22.28	27	21.33	21.14	20.47	1992	22.34	1999	21.35		1991
CL 225 (Clinton)	10.33	27	7.84	6.62	3.80	1998	10.33	2002	7.38	<	1991
CO 335 (Colchester)	8.77	27	8.20	8.90	7.02	1989	9.02	1995	8.16		1986
CV 51 (Coventry)	6.46	26	5.14	6.19	4.90	1994	7.29	1999	6.57		1992
D 116 (Durham)	9.62	27	6.88	7.64	1.80	1991	10.12	1999	5.81		1986
D 117 (Durham)	13.85	27	12.85	12.27	9.26	1991	14.48	1987	12.58		1986
D 119 (Durham)	2.88	27	2.28	1.16	0.48	1991	3.56	1987	2.24		1986
D 120 (Durham)	3.88	27	3.33	2.80	2.08	1991	4.06	1995	3.29		1986
EL 82 (Ellington)	6.47	26	6.17	6.29	5.92	1994	6.56	1995	6.30		1987
EL 139 (Ellington)	DRY	26	27.96	31.35	25.64	1994	DRY	2002	29.33	<,<<	1993
EL 140 (Ellington)	21.07	26	18.76	19.44	15.39	1994	21.07	2002	19.12	<	1993
EW 133 (East Windsor)	5.83	26	5.58	5.55	4.97	1990	5.93	1995	5.59		1986
EW 134 (East Windsor)	51.95	26	51.75	50.93	49.36	1989	51.95	2002	50.75	<,<<	1986
FF 23 (Fairfield)	8.55	27	8.42	8.28	7.21	1992	9.80	1999	8.33		1966
FF 30 (Fairfield)	9.12	27	7.40	8.37	3.25	2000	10.80	1995	8.37		1993
FF 31 (Fairfield)	13.78	27	11.15	11.16	7.58	1997	13.80	1995	9.56		1993
FF 32 (Fairfield)	11.29	27	9.40	9.19	6.15	2000	12.90	1995	11.06		1993
FF 33 (Fairfield)	6.93	27	6.15	5.93	5.32	2000	7.40	1995	6.31		1993
GR 328 (Granby)	15.41	28	--	14.39	12.18	1994	16.51	1999	14.09		1981
GR 329 (Granby)	10.48	28	--	10.21	6.33	2000	12.06	1999	9.86		1982
GR 330 (Granby)	3.38	28	3.12	3.24	2.75	2000	4.31	1983	3.94		1982
GR 331 (Granby)	12.49	28	10.59	12.14	10.28	2000	13.09	1999	11.11		1983
GT 19 (Groton)	DRY	25	16.77	16.17	14.19	1989	DRY	2002/99	16.40	<,<<	1958
HM 445 (Hamden)	29.61	27	26.50	27.61	20.68	2000	32.66	1993	27.88		1988
HM 446 (Hamden)	4.28	27	4.10	3.95	3.56	1997	4.44	1995	4.09		1993
HM 447 (Hamden)	3.94	27	3.65	3.45	2.92	2000	4.11	1995	3.82		1993
HM 448 (Hamden)	14.66	27	14.30	13.96	13.31	2000	14.94	1995	14.02		1993
HM 449 (Hamden)	19.82	27	19.01	19.76	15.03	1997	21.47	1993	20.72		1993
HM 450 (Hamden)	DRY	27	13.55	13.65	12.70	1997	DRY	2002	13.38	<,<<	1993

	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE										
WELL NUMBER AND TOWN	AUGUST 2002 (DATE)		JULY 2002	AUG 2001	AUGUST MAX (YR RECORDED)		AUGUST MIN (YR RECORDED)		AUG MEDIAN	NEW RE-CORD	YR RECORD BEGAN
MB 32 (Marlborough)	8.32	27	6.75	8.38	2.95	1989	10.19	1993	7.75		1986
MB 35 (Marlborough)	15.52	27	13.75	15.42	12.23	2000	16.30	1999	15.59		1993
MB 36 (Marlborough)	8.88	27	7.78	8.21	4.87	2000	9.28	1995	8.48		1993
MF 1 (Middlefield)	13.25	27	11.70	12.28	5.66	1992	14.59	1965	11.32		1946
MS 19 (Mansfield)	13.30	26	12.36	12.55	10.40	1989	15.14	1966	12.31		1958
MS 44 (Mansfield)	7.01	26	4.69	7.51	3.09	1994	9.55	1993	6.28		1982
MS 45 (Mansfield)	14.64	26	14.05	13.64	11.80	1994	14.64	2002	13.38	<,<<	1987
MS 46 (Mansfield)	15.45	26	15.93	14.50	13.70	1994	15.45	2002	14.41	<	1987
MS 74 (Mansfield)	8.60	26	6.78	8.81	4.94	1994	9.80	1999	8.32		1992
MS 75 (Mansfield)	12.77	26	10.47	12.73	11.22	2000	16.26	1995	14.20		1992
MS 76 (Mansfield)	34.05	26	33.60	OBS	30.30	2000	35.82	1995	34.28		1992
MS 77 (Mansfield)	8.70	26	6.98	8.75	4.41	1994	9.82	1993	8.28		1993
MT 261 (Middletown)	23.26	27	21.43	22.71	20.53	1989/98	25.07	1957	22.51		1956
NHV 201 (North Haven)	17.43	27	17.21	16.35	14.64	1977	17.85	1999	16.22		1975
NOC 7 (North Canaan)	10.44	30	9.90	10.36	9.02	1990	11.16	1995	9.95		1958
NSN 77 (N. Stonington)	15.45	27	13.95	14.37	13.79	2000	16.55	1993	15.02		1991
NSN 78 (N. Stonington)	7.20	27	6.42	5.18	3.93	1992	7.20	2002	5.52	<,<<	1991
NT 15 (Newtown)	7.54	26	6.28	8.81	4.97	1994	10.20	1981	7.36		1966
PL 1 (Plainfield)	31.22	26	30.65	30.10	29.32	1989	32.46	1966	30.97		1942
SB 30 (Southbury)	20.67	28	19.65	20.50	18.44	2000	22.18	1999	19.90		1979
SB 39 (Southbury)	7.99	28	7.82	7.73	5.67	1994	8.36	1995	7.39		1991
SB 41 (Southbury)	53.20	28	51.55	52.81	46.35	1992	55.40	1999	49.55		1991
SB 42 (Southbury)	21.72	28	19.15	19.76	13.47	1994	22.87	1999	16.26		1993
SC 19 (Scotland)	9.95	26	7.41	9.81	6.67	1994	11.05	1993	7.68		1983
SC 20 (Scotland)	9.50	26	7.79	9.18	7.79	1984	10.40	1993	8.93		1983
SC 21 (Scotland)	1.45	26	0.90	0.86	+1.22	1998	1.78	1995	1.23		1983
SC 22 (Scotland)	13.37	26	12.59	13.09	12.80	1998	13.90	1993	13.30		1984
SC 23 (Scotland)	2.74	26	2.71	2.44	1.33	1993	3.28	1998	2.68		1983
SM 7 (Salem)	12.85	27	11.75	12.40	9.60	1989	13.41	1999	12.72		1979
SW 64 (S. Windsor)	12.85	26	12.28	11.71	9.39	1989	14.85	1966	12.18		1934
SY 15 (Salisbury)	14.35	28	13.26	13.91	12.28	2000	15.53	1991	14.43		1966
SY 23 (Salisbury)	12.90	28	9.70	11.15	5.25	1994	16.43	1993	9.36		1987
SY 24 (Salisbury)	16.70	28	14.30	14.53	10.41	1994	17.61	1993	13.51		1986
WB 93 (Waterbury)	28.15	26	28.00	28.10	24.92	1955	28.54	1966	27.90		1943
WB 198 (Waterbury)	19.53	26	17.95	17.00	11.08	1955	20.68	1999	15.88		1943
WY 1 (Woodbury)	25.02	28	22.92	24.69	20.06	1955	32.90	1914	28.06		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; --, not measured