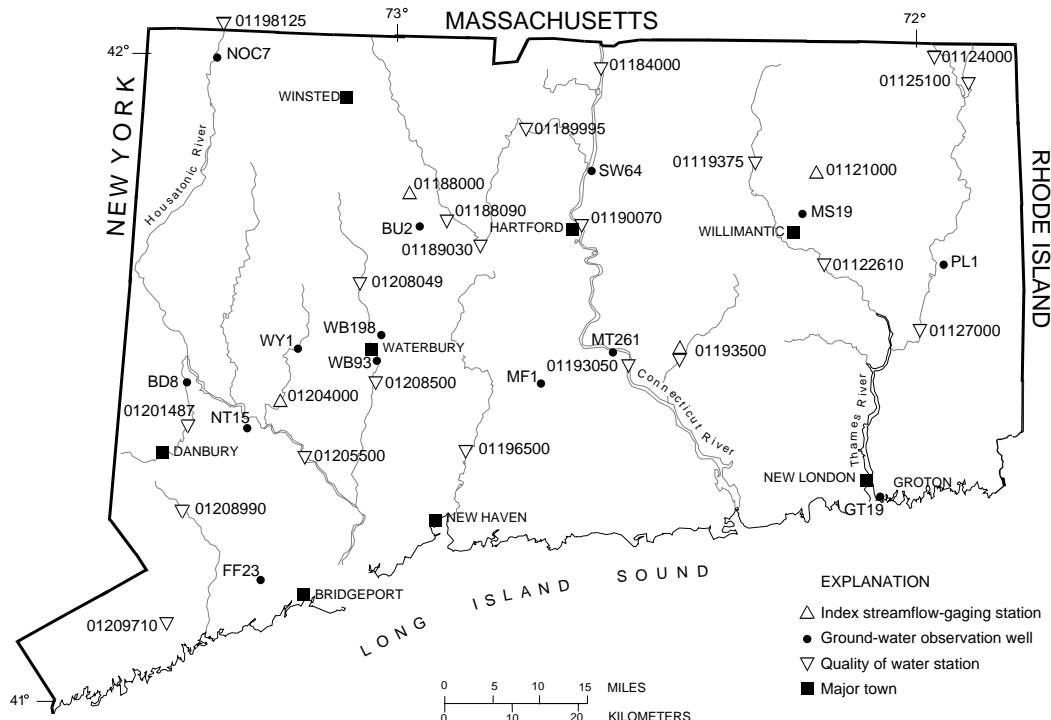


# U.S. Department of the Interior U.S. Geological Survey



## WATER-RESOURCES CONDITIONS IN CONNECTICUT, JULY 2003

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

Data Sites	1	Water Quality	3
Streamflow	2	Ground Water	4

**STREAMFLOW** (measured in cubic feet per second)

PROVISIONAL DATA

Streamflow across the State was in the normal to above-normal range. Flow at Burlington Brook (NW Connecticut), Salmon River (SE Connecticut), and Pomperaug River (SW Connecticut) fell to the normal range after being in the above-normal range for 1 month. Flows at Mount Hope River (NE Connecticut), remained in the above-normal range for the second consecutive month. Across the State, mean streamflow for July averaged 144 percent of the July long-term median values.

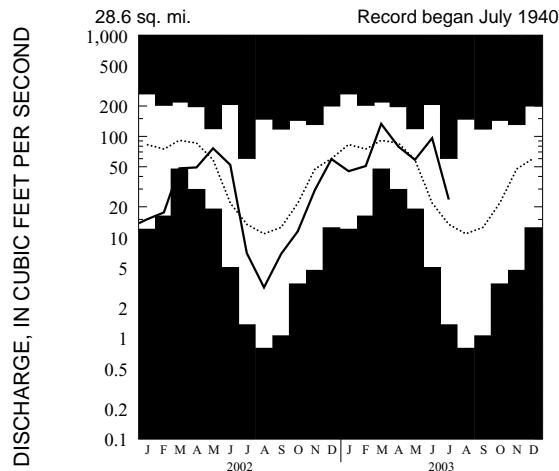
USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	JULY 2003 MEAN	JUNE 2003 MEAN	JULY 2002 MEAN	JULY MAXIMUM VALUE (year recorded)	JULY MINIMUM VALUE (year recorded)	JULY MEDIAN (1971-2000)
MT HOPE RIVER (01121000)	23.6	96.2	6.35	60.4	1972	13.4
BURLINGTON (01188000)	3.94	16.3	1.75	15.2	1938	3.16
SALMON RIVER (01193500)	56.9	361	29.4	426	1938	46.8
POMPERAUG (01204000)	60.1	281	19.4	272	1938	39.7

**MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS**

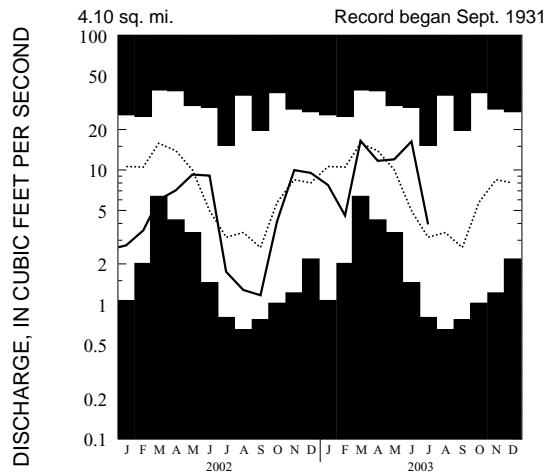
Shaded areas on graphs show highest and lowest monthly mean discharge of record.

— Current record      ..... Median (1971-2000)

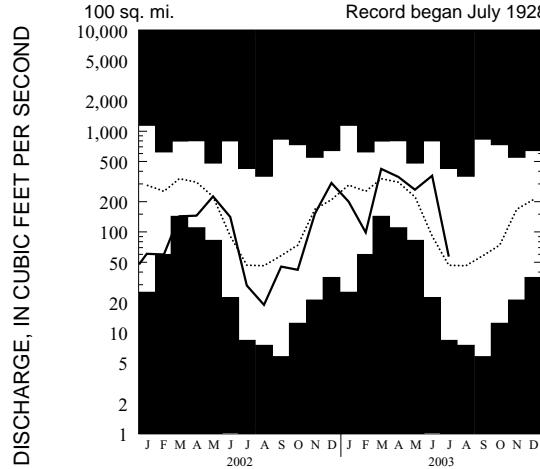
MOUNT HOPE RIVER NEAR WARRENVILLE



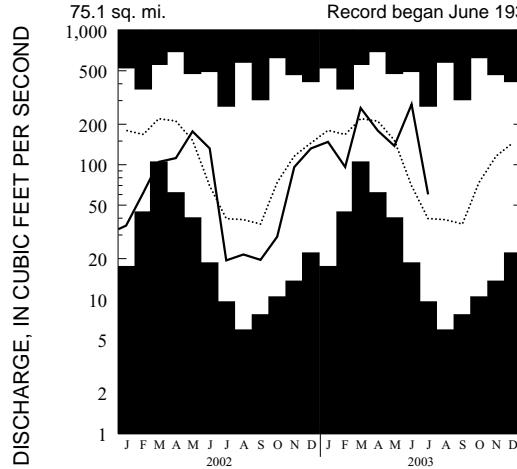
BURLINGTON BROOK NEAR BURLINGTON



SALMON RIVER NEAR EAST HAMPTON



POMPERAUG RIVER AT SOUTHURY



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

→ PROVISIONAL DATA ←

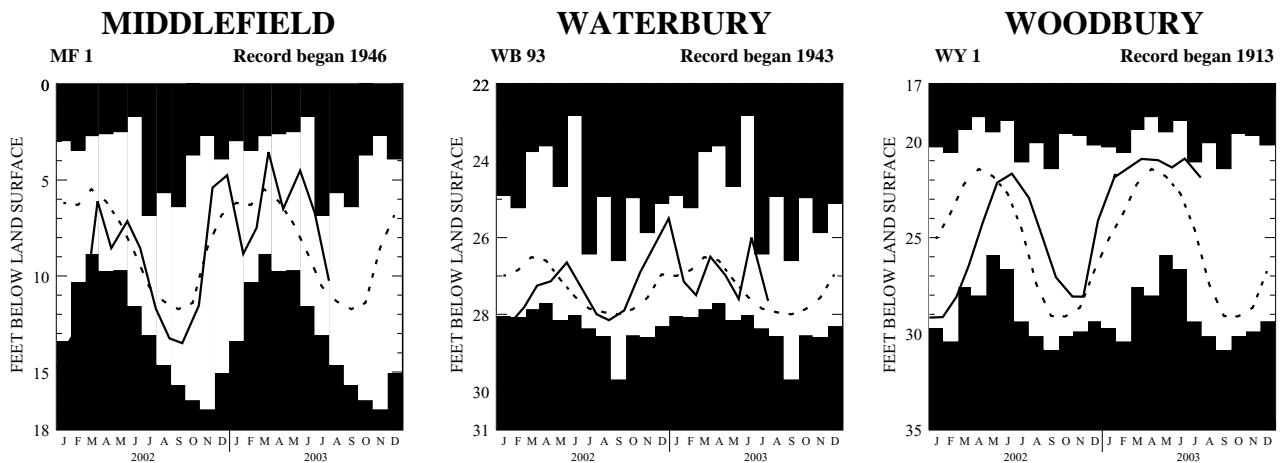
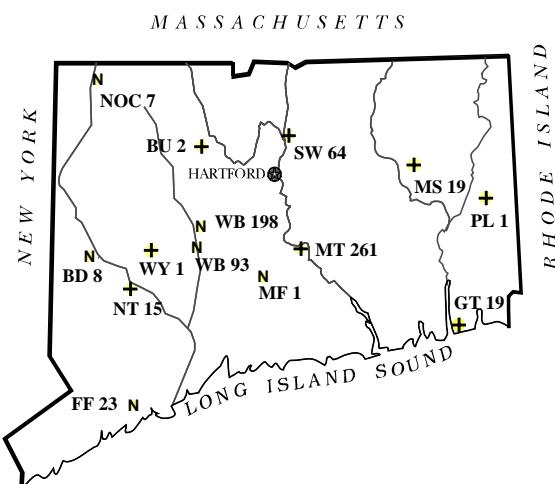
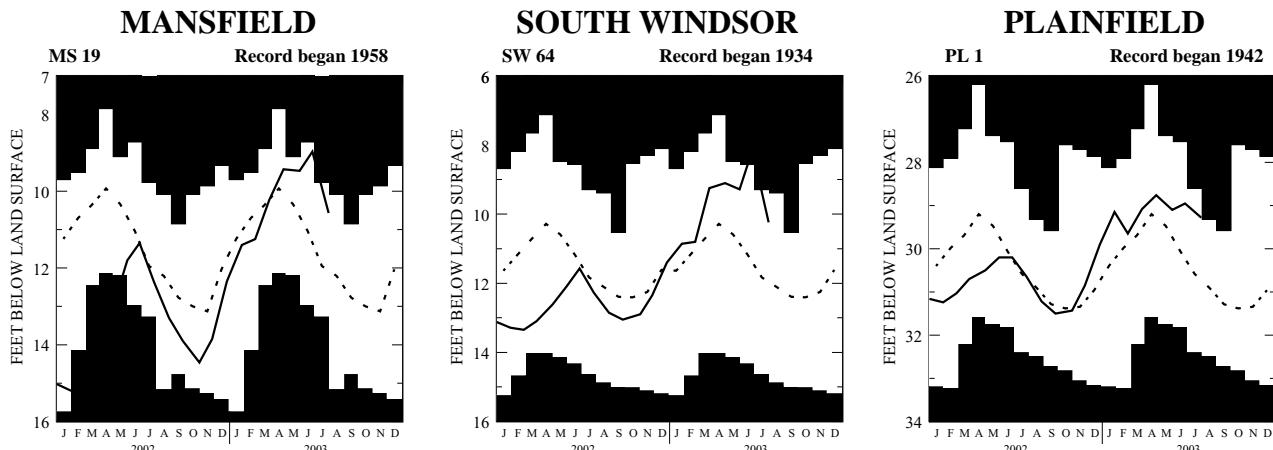
[Station locations shown on front page; --, not applicable; —, not available; streamflow measured in instantaneous cubic feet per second; % flow duration is that flow that was equaled or exceeded more than "X" percent of the time from 1961-90; bacteriological analysis reconnaissance data enumerated using 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 2003	STREAMFLOW/ % FLOW DURATION	SPECIFIC CONDUCTANCE (in $\mu\text{Si cm}$ at $25^\circ\text{C}$ )	WATER TEMPERATURE ( $^\circ\text{C}$ )	DISSOLVED OXYGEN CONCENTRATION	FIELD PH	FECAL COLIFORM (COL/100 mL)	E. COLI (COL/100 mL)
01119375 Willimantic R. at Merrow	7/21	NA/- -	121	20.5	9.1/102	7.4	80	74
01122610 Shetucket R. at South Windham	7/23	965/- -	99	21.5	8.3/95	7.0	11,100	5200
01124000 Quinebaug R. at Quinebaug	7/24	149/59	221	23.0	7.6/89	6.9	480	164
01125100 French R. at North Grosvenordale	7/24	119/- -	221	23.0	7.9/94	7.2	660	313
01127000 Quinebaug R. at Jewett City	7/23	670/63	139	23.5	7.4/88	7.0	3700	1900
01184000 Connecticut R. at Thompsonville	7/29	7130/71	185	25.5	7.8/95	7.2	24	24
01188090 Farmington R. at Unionville	7/02	605/37	114	18.0	10.0/106	6.8	22	21
01189030 Pequabuck R. at Farmington	7/01	91/- -	280	18.0	7.5/79	7.2	192	220
01189995 Farmington R. at Tariffville	7/01	1100/36	141	19.0	9.4/101	6.9	79 K	47
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	7/17	57/69	126	19.0	9.5/102	7.2	80 K	52
01196500 Quinnipiac R. at Wallingford	7/07	132/55	366	22.5	8.1/98	7.4	176	100
01198125 Housatonic R. near Ashley Falls, MA	7/10	277 - -	429	21.5	7.6/88	8.1	57	53
01201487 Still R. at Rt. 7 at Brookfield Center	7/08	122/- -	353	22.5	8.8/102	7.4	40,600 K	17,700 K
01205500 Housatonic R. at Stevenson	7/08	4700/19	253	22.5	8.8/102	7.6	8	8
01208049 Naugatuck R. near Waterville	7/15	66/- -	214	22.5	8.6/100	7.1	33	34
01208500 Naugatuck R. at Beacon Falls	7/16	172/71	320	21.0	8.4/94	7.4	204	164
01208990 Saugatuck R. near Redding	7/28	9.23/73	223	24.0	8.7/104	8.0	25	23
01209710 Norwalk R. near Winnipauk	7/28	10.0/- -	398	23.0	10.0/118	8.0	3800	860

## 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 2002.
- Solid line shows current water levels.
- Dashed line is monthly median for period of record through calendar year 2000.



### 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**

Seven record high and three record low ground-water levels were recorded during July 2003.

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. In some wells, measurements are made more frequently than monthly—this could cause the column labeled JULY MIN or JULY MAX to have a value in 2003 that is not the same as the one reported in the column labeled JULY 2003, which is the last measurement for the month. Statistics (median) are based on period of record (through calendar year 2000). Ground-water-level data are collected by USGS personnel and individual observers.

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE								NEW RE-CORD	YEAR RECORD BEGAN
	JULY 2003 (DATE)	JUNE 2003	JULY 2002	JULY MAX (YR RECORDED)		JULY MIN (YR RECORDED)		JULY MEDIAN		
BD 8 (Brookfield)	30.25	28	29.26	31.45	27.55	1972	32.36	1985	30.70	
BU 2 (Burlington)	18.94	28	16.64	20.94	16.01	1948	25.60	1964	20.82	
BU 143 (Burlington)	6.82	28	3.60	7.58	6.73	2000	9.98	1999	7.18	1996
BU 144 (Burlington)	1.76	28	1.29	1.70	1.67	1998	1.78	1997/2001	1.75	1996
CL 223 (Clinton)	6.71	30	4.12	8.24	6.71	1992/2003	9.00	1993	7.88	> 1991
CL 224 (Clinton)	20.41	30	18.95	21.33	20.08	1993	22.23	1999	20.70	1991
CL 225 (Clinton)	6.56	30	5.82	7.84	4.80	1998	8.07	1993	7.14	1991
CO 335 (Colchester)	7.63	30	6.90	8.20	7.47	1988	9.35	1995	8.12	
CV 51 (Coventry)	4.45	29	3.49	5.14	4.45	2003	6.65	1999	6.24	> 1992
D 116 (Durham)	4.85	30	1.60	6.88	1.83	1989	7.87	1999	5.29	1986
D 117 (Durham)	12.03	30	10.00	12.85	10.84	1996	13.74	1987	12.78	1986
D 119 (Durham)	1.48	30	0.47	2.28	0.80	1989	3.37	1987	2.59	1986
D 120 (Durham)	2.98	30	2.09	3.33	2.47	1989	3.94	1987	3.32	1986
EL 82 (Ellington)	5.98	29	5.08	6.17	5.14	1994	6.57	1999	6.20	1987
EL 139 (Ellington)	25.07	29	17.90	27.96	24.36	1998	30.05	1997	28.20	1993
EL 140 (Ellington)	14.94	29	11.20	18.76	14.31	1998	19.84	1999	17.51	1993
EW 133 (E. Windsor)	6.22	29	4.01	5.58	4.86	1988	6.22	2003	5.50	< 1986
EW 134 (E. Windsor)	50.32	29	50.15	51.75	49.05	1989	51.75	2002	50.42	1986
FF 23 (Fairfield)	8.37	31	6.91	8.42	7.36	1983	9.70	1999	8.38	1966
FF 30 (Fairfield)	5.94	31	0.56	7.40	3.50	1996	8.77	1995	7.04	1993
FF 31 (Fairfield)	10.38	31	4.35	11.15	7.04	1996	12.26	1995	9.93	1993
FF 32 (Fairfield)	7.46	31	4.94	9.40	6.97	1996	11.45	1995	9.51	1993
FF 33 (Fairfield)	5.70	31	3.76	6.15	3.10	1998	7.24	1999	6.01	1993
GR 328 (Granby)	9.70	28	8.47	10.21	9.70	2003	14.51	1999	13.46	> 1981
GR 329 (Granby)	4.55	28	3.03	4.04	4.55	2003	10.90	1999	8.30	> 1982
GR 330 (Granby)	2.98	28	2.15	3.12	2.66	2000	5.83	1999	3.52	1982
GR 331 (Granby)	10.31	28	7.98	10.59	9.44	1984	12.63	1999	10.79	1983
GT 19 (Groton)	15.10	27	14.16	16.12	13.30	1984	DRY	1999	16.20	1958
GW 21 (Greenwich)	24.96	30	19.37	26.50	NA	NA	NA	NA	NA	2002
GW-22 (Greenwich)	5.65	30	3.91	4.10	NA	NA	NA	NA	NA	2002
GW-23 (Greenwich)	34.24	30	21.19	3.65	NA	NA	NA	NA	NA	2002
HM 445 (Hamden)	24.41	31	15.88	14.30	23.10	1998	30.93	1993	27.41	1988
HM 446 (Hamden)	3.70	31	2.15	4.10	3.70	2003	4.23	1995	4.10	> 1993
HM 447 (Hamden)	3.06	31	1.35	3.65	2.88	2000	4.02	1995	3.63	1993
HM 448 (Hamden)	13.57	31	11.91	14.30	12.32	1993	14.95	1995	14.01	1993
HM 449 (Hamden)	18.96	31	13.07	19.01	16.83	2000	21.31	1993	19.74	1993
HM 450 (Hamden)	13.76	31	10.50	13.55	13.20	1998	13.76	2003	13.34	< 1993

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE							NEW RE-CORD	YEAR RECORD BEGAN
	JULY 2003 (DATE)	JUNE 2003	JULY 2002	JULY MAX (YR RECORDED)		JULY MIN (YR RECORDED)	JULY MEDIAN		
MB 32 (Marlborough)	5.67	24	3.39	6.75	4.18	1989	8.87	1993	7.11
MB 35 (Marlborough)	11.77	24	8.00	13.75	11.44	1998	15.05	1999	13.70
MB 36 (Marlborough)	6.45	24	3.89	7.78	4.95	1996	8.00	1999	7.50
MF 1 (Middlefield)	10.25	30	6.72	11.70	6.85	1948	13.05	1965	10.60
MS 19 (Mansfield)	10.57	29	8.97	12.36	9.77	1972	13.25	1965	11.82
MS 44 (Mansfield)	4.48	29	0.67	4.69	2.82	1984	8.60	1993	6.15
MS 45 (Mansfield)	12.14	29	10.50	14.05	11.76	1996	14.05	2002	13.25
MS 46 (Mansfield)	13.26	29	12.24	15.93	13.00	1987	15.93	2002	14.06
MS 74 (Mansfield)	3.98	29	0.86	6.78	3.98	2003	8.42	1999	7.38
MS 75 (Mansfield)	7.36	29	5.09	10.47	7.36	2003	12.87	1995/99	11.72
MS 76 (Mansfield)	29.75	29	29.70	33.60	29.37	2000	35.60	1999	34.02
MS 77 (Mansfield)	4.12	29	1.14	6.98	3.65	1996	8.41	1999	7.35
MS 80 (Mansfield)	15.90	29	11.89	21.43	NA	NA	NA	NA	2003
MT 261 (Middletown)	20.78	30	19.28	21.43	20.24	1972	23.11	1994	21.66
NHV 201 (North Haven)	15.58	31	13.96	17.21	14.05	1984	17.83	1999	16.29
NOC 7 (North Canaan)	9.80	23	9.35	9.90	9.04	1975	10.50	1995	9.67
NSN 77 (N. Stonington)	12.17	30	10.31	13.95	12.11	1998	15.69	1993	14.73
NSN 78 (N. Stonington)	4.88	30	4.71	6.42	4.76	1996	6.62	1994	5.85
NT 15 (Newtown)	5.71	28	1.69	6.28	3.17	1972	9.50	1995	7.46
PL 1 (Plainfield)	29.28	29	28.95	30.65	28.60	1989	32.03	1966	30.06
SB 30 (Southbury)	18.66	28	17.10	19.65	18.45	2000	21.43	1999	19.68
SB 39 (Southbury)	7.32	28	5.59	7.82	6.97	1996	9.21	2003	7.64
SB 41 (Southbury)	49.33	28	45.76	51.55	47.63	1996	54.15	1999	50.30
SB 42 (Southbury)	16.50	28	12.87	19.15	13.60	2000	20.15	1999	16.21
SC 19 (Scotland)	7.00	29	1.99	7.41	4.66	1984	9.94	1997	7.44
SC 20 (Scotland)	7.80	29	2.24	7.79	5.86	1984	9.33	1997	8.04
SC 21 (Scotland)	0.52	29	+0.46	0.90	+0.81	1998	1.34	1995/97	0.72
SC 22 (Scotland)	12.49	29	10.39	12.59	11.26	1998	13.34	1999	12.74
SC 23 (Scotland)	2.39	29	1.65	2.71	1.90	1988	2.96	1998	2.62
SM 7 (Salem)	10.30	30	8.02	11.75	9.60	1984	13.00	1999	12.24
SW 64 (S. Windsor)	10.24	29	8.15	12.28	9.29	1972	14.61	1966	11.77
SY 15 (Salisbury)	12.67	28	12.40	13.26	12.00	2000	14.98	1991	13.99
SY 23 (Salisbury)	8.22	28	5.15	9.70	5.55	1996	14.49	1993	9.10
SY 24 (Salisbury)	11.98	28	8.67	14.30	10.28	1996	16.43	1995	13.44
WB 93 (Waterbury)	27.65	28	26.00	28.00	26.43	1973	28.35	1957	27.87
WB 198 (Waterbury)	13.95	28	12.02	17.95	11.60	1972	18.95	1985	15.01
WY 1 (Woodbury)	21.88	28	20.89	22.92	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; --, not measured.