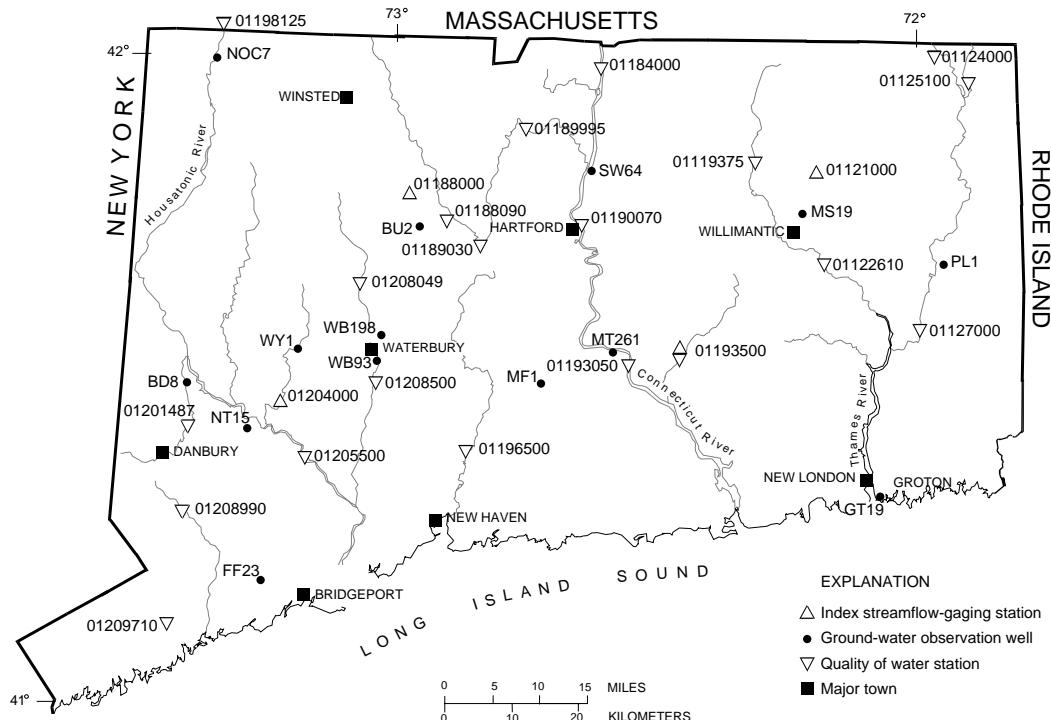


U.S. Department of the Interior U.S. Geological Survey



WATER-RESOURCES CONDITIONS IN CONNECTICUT, SEPTEMBER 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

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STREAMFLOW (measured in cubic feet per second)

→ PROVISIONAL DATA ←

Streamflow across the State was in the below-normal to normal range. Flow at Mount Hope River (NE Connecticut) rose to the normal range after 1 month in the below-normal range. Flow at Burlington Brook (NW Connecticut) remained in the below-normal range for the third consecutive month. Flows at Salmon River (SE Connecticut) and Pomperaug River (SW Connecticut) rose to the normal range from the below-normal range. Across the State, mean streamflow for September averaged 58 percent of the September long-term median values.

USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	SEPT. 2002 MEAN	AUGUST 2002 MEAN	SEPT. 2001 MEAN	SEPT. MAXIMUM VALUE (year recorded)	SEPT. MINIMUM VALUE (year recorded)	SEPT. MEDIAN (1971-2000)
MT HOPE RIVER (01121000)	6.83	3.17	9.79	118	1954	12.5
BURLINGTON (01188000)	1.17	1.28	2.24	19.7	1999	2.65
SALMON RIVER (01193500)	45.3	18.9	19.1	834	1938	58.3
POMPERAUG (01204000)	19.6	21.5	43.3	304	1938	36.2

MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

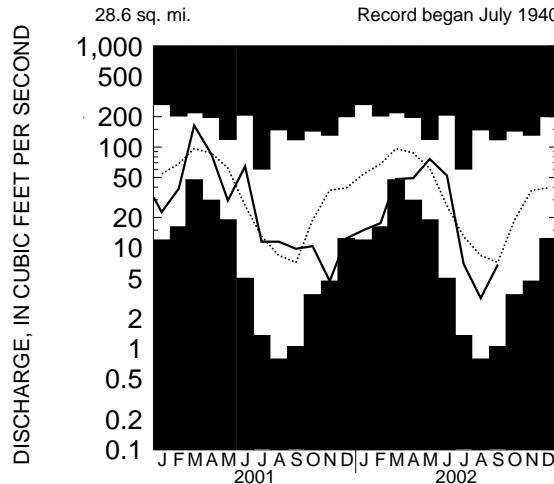
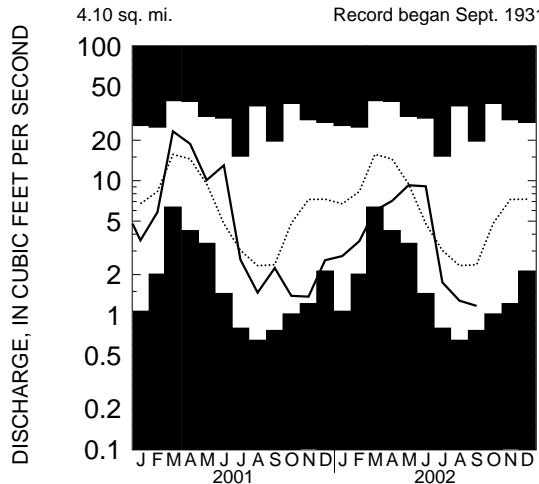
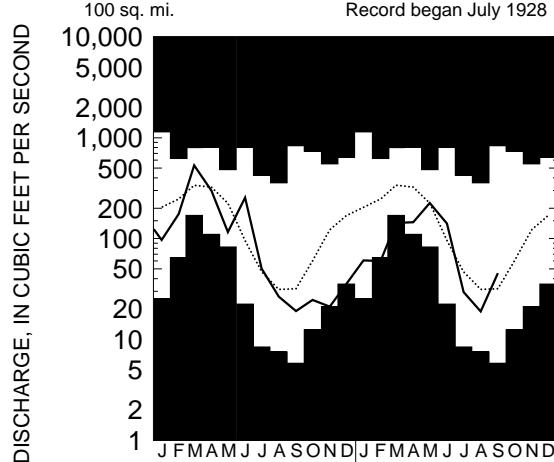
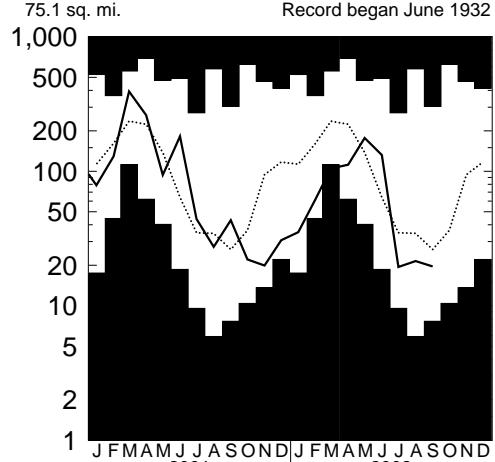
Shaded areas on graphs show highest and lowest monthly mean discharge of record.



Current record



Median (1961-1990)

MOUNT HOPE RIVER NEAR WARRENVILLE**BURLINGTON BROOK NEAR BURLINGTON****SALMON RIVER NEAR EAST HAMPTON****POMPERAUG RIVER AT SOUTHBURY**

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

→ PROVISIONAL DATA ←

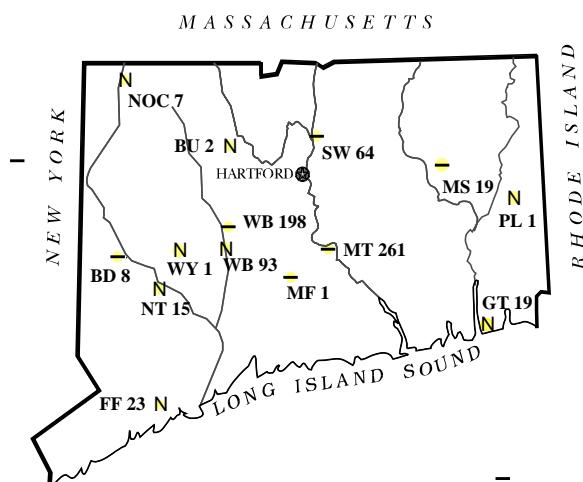
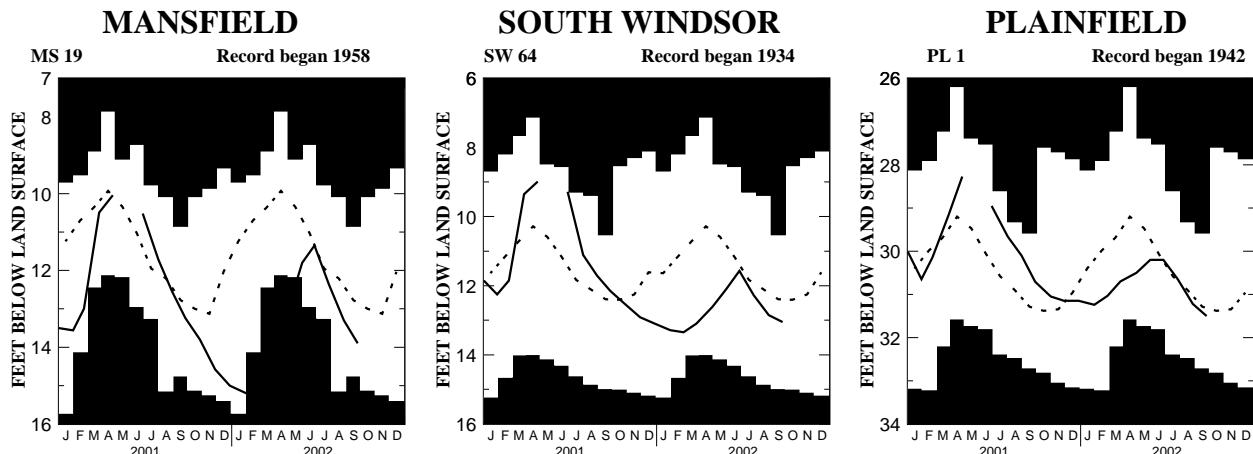
[Station locations shown on front page; --, not applicable; —, not available; streamflow measured in instantaneous cubic feet per second; % flow duration is that flow that was equaled or exceeded more than "X" percent of the time from 1961-90; bacteriological analysis reconnaissance data enumerated using 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	9/6	263 / --	196	16.0	9.1 / 94	7.1	84	66 K
01122610 Shetucket R. at South Windham	9/3	128 / --	156	19.0	8.7 / 94	6.8	136	93 K
01124000 Quinebaug R. at Quinebaug	9/5	32.6 / 94	327	19.0	8.6 / 95	7.2	67 K	32
01125100 French R. at North Grosvenordale	9/5	7.38 / --	429	21.0	9.1 / 103	9.5	100	84
01127000 Quinebaug R. at Jewett City	9/3	189 / 93	149	20.0	8.0 / 88	6.8	216	120
01184000 Connecticut R. at Thompsonville	9/26	7000 / 78	173	21.0	8.6 / 97	7.1	48	39
01188090 Farmington R. at Unionville					SITE NOT SAMPLED THIS MONTH			
01189030 Pequabuck R. at Farmington	9/16	59.6 / --	272	21.0	8.7 / 100	7.2	9600 K	9600 K
01189995 Farmington R. at Tariffville	9/16	372 / 91	200	21.0	8.1 / 92	7.1	94 K	86 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					SITE NOT SAMPLED THIS MONTH			
01196500 Quinnipiac R. at Wallingford	9/12	49.8 / 95	393	18.0	8.2 / 87	7.7	140	112
01198125 Housatonic R. near Ashley Falls, MA	9/18	219 / --	448	20.0	8.1 / 89	8.0	580	440
01201487 Still R. at Rt. 7 at Brookfield Center	9/11	17.0 / --	718	21.5	7.8 / 91	7.8	740	96
01205500 Housatonic R. at Stevenson	9/4	350 / 93	268	20.0	9.3 / 103	7.7	2700	4100
01208049 Naugatuck R. near Waterville	9/9	35.0 / --	296	25.0	9.5 / 116	7.7	100	5 K
01208500 Naugatuck R. at Beacon Falls	9/10	48.2 / 99	418	22.0	9.4 / 108	7.6	116	35
01208990 Saugatuck R. near Redding					SITE NOT SAMPLED THIS MONTH			
01209710 Norwalk R. near Winnipauk	9/24	6.0 / --	378	18.0	12.5 / 132	8.0	115	49

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.



ABOVE NORMAL

Within the highest 25%
of record for this month.



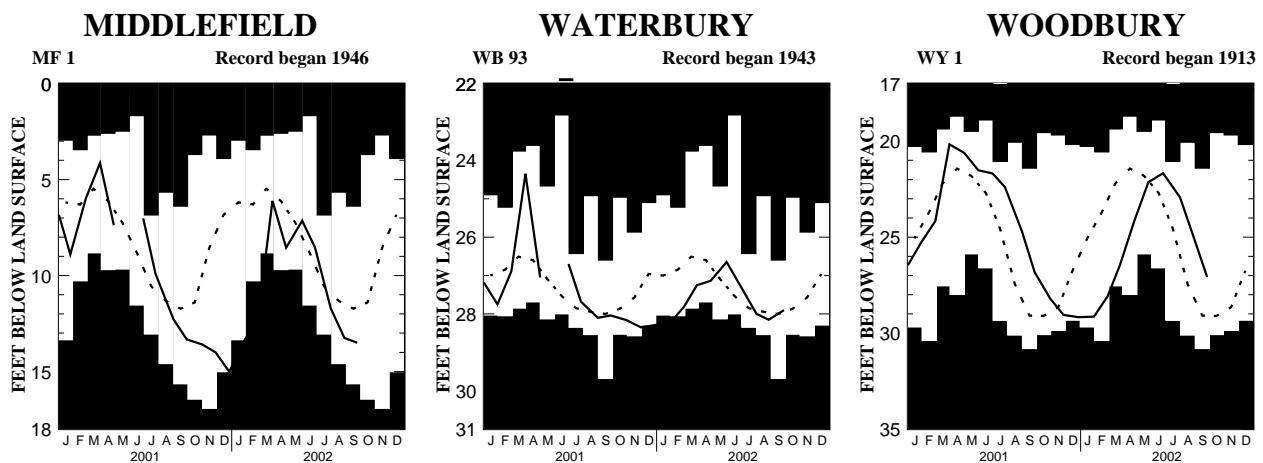
NORMAL RANGE

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

Nine low and one high ground-water levels were recorded during September 2002. Five lows for the period of record also were established during September 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.

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE							NEW RE-CORD	YR RECORD BEGAN
	SEPT. 2002 (DATE)	AUG. 2002	SEPT. 2001	SEPT. MAX (YR RECORDED)	SEPT. MIN (YR RECORDED)	SEPT. MEDIAN			
BD 8 (Brookfield)	32.44	25	32.10	31.81	29.80	1971	33.25	1995	31.69
BU 2 (Burlington)	28.24	25	24.94	36.59	20.37	1969	33.72	1964	26.98
BU 143 (Burlington)	10.19	25	9.67	9.88	6.30	1999	10.40	1998	9.34
BU 144 (Burlington)	2.87	25	1.90	2.13	2.13	2001	2.87	2002	2.66 < 1996
CL 223 (Clinton)	9.07	23	10.37	9.39	7.00	2000	11.06	1997	9.22
CL 224 (Clinton)	22.38	23	22.28	21.64	21.31	2000	22.47	1995	21.75
CL 225 (Clinton)	7.12	23	10.33	7.34	4.23	1998	9.59	1995	7.26
CO 335 (Colchester)	8.25	23	8.77	8.28	6.87	1998	8.52	1986	8.03
CV 51 (Coventry)	6.85	24	6.46	6.65	5.02	1996	7.00	1995	5.62
D 116 (Durham)	8.33	23	9.62	8.96	1.80	1989	10.04	1995	6.62
D 117 (Durham)	11.95	23	13.85	12.18	10.64	2000	14.12	1995	12.35
D 119 (Durham)	0.88	23	2.88	1.01	0.41	2000	3.07	1986	2.16
D 120 (Durham)	2.83	23	3.88	3.22	2.32	2000	3.76	1986	3.27
EL 82 (Ellington)	6.47	24	6.47	6.26	5.72	1999	6.52	1995	6.26
EL 139 (Ellington)	DRY	24	DRY	DRY	26.93	1999	DRY	2002	30.32 <,<< 1993
EL 140 (Ellington)	20.91	24	21.07	20.06	14.57	1999	20.91	2002	19.44 < 1993
EW 133 (East Windsor)	5.76	24	5.83	5.43	4.71	1991	6.66	1986	5.54
EW 134 (East Windsor)	52.20	24	51.95	51.21	49.60	1987	52.20	2002	51.04 <,<< 1986
FF 23 (Fairfield)	8.28	27	8.55	8.26	6.73	1989	8.79	1967	8.27
FF 30 (Fairfield)	8.45	27	9.12	9.46	2.20	2000	12.70	1995	10.12
FF 31 (Fairfield)	10.64	27	13.78	10.70	6.80	1996	12.95	1995	9.95
FF 32 (Fairfield)	7.56	27	11.29	8.84	5.57	1996	14.01	1995	11.50
FF 33 (Fairfield)	5.35	27	6.93	5.57	4.91	2000	8.13	1996	6.73
GR 328 (Granby)	16.62	25	15.41	14.28	12.21	1999	16.62	2002	14.69 < 1981
GR 329 (Granby)	11.48	25	10.48	9.97	2.49	1999	12.71	1995	10.60
GR 330 (Granby)	3.38	25	3.38	3.02	2.15	1999	4.76	1995	4.06
GR 331 (Granby)	12.86	25	12.49	11.73	8.40	1999	13.30	1983	11.29
GT 19 (Groton)	16.33	29	DRY	16.30	11.59	1961	17.66	1963	16.54
HM 445 (Hamden)	31.90	27	29.61	30.39	24.67	2000	32.74	1993	29.03
HM 446 (Hamden)	3.60	27	4.28	3.80	3.51	2000	4.11	1995	3.95
HM 447 (Hamden)	3.47	27	3.94	3.39	2.97	2000	3.65	1997	3.64
HM 448 (Hamden)	14.35	27	14.66	13.98	13.41	1999	14.48	1995	14.18
HM 449 (Hamden)	19.66	27	19.82	20.08	14.70	1999	21.02	1994	18.46
HM 450 (Hamden)	DRY	27	DRY	DRY	11.90	1999	DRY	2002	13.30 <,<< 1993

		GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE									
WELL NUMBER AND TOWN		SEPT. 2002 (DATE)		AUG. 2002	SEPT. 2001	SEPT. MAX (YR RECORDED)	SEPT. MIN (YR RECORDED)		SEPT. MEDIAN	NEW RE-CORD	YR RECORD BEGAN
MB 32 (Marlborough)		8.50	23	8.32	9.77	3.97	1989	10.46	1995	8.35	
MB 35 (Marlborough)		17.59	23	15.52	16.61	13.90	2000	17.59	2002	16.55	<
MB 36 (Marlborough)		8.40	23	8.88	9.09	4.86	1996	9.09	2001	6.98	
MF 1 (Middlefield)		13.50	23	13.25	13.33	6.80	1954	15.64	1964	11.68	
MS 19 (Mansfield)		13.90	24	13.30	13.24	11.37	1989	14.75	1966	12.78	
MS 44 (Mansfield)		5.96	24	7.01	8.13	1.56	1991	10.58	1995	7.14	
MS 45 (Mansfield)		14.88	24	14.64	14.00	12.69	1996	14.88	2002	13.09	<,<<
MS 46 (Mansfield)		15.53	24	15.45	14.76	10.93	1999	16.91	1995	14.24	
MS 74 (Mansfield)		9.68	24	8.60	9.90	6.59	1996	9.96	1997	9.28	
MS 75 (Mansfield)		14.69	24	12.77	15.22	12.43	2000	20.25	1995	15.42	
MS 76 (Mansfield)		34.30	24	34.05	OBS	30.63	2000	35.29	1993	33.84	
MS 77 (Mansfield)		9.75	24	8.70	9.74	6.36	1996	10.10	1993	9.32	
MT 261 (Middletown)		23.88	23	23.26	24.13	20.65	1971	26.10	1995	23.67	
NHV 201 (North Haven)		17.24	27	17.43	16.72	15.65	1978	17.95	1986	16.62	
NOC 7 (North Canaan)		10.07	29	10.44	9.99	8.69	1977	DRY	1995	9.97	
NSN 77 (N. Stonington)		16.15	23	15.45	15.07	12.98	2000	17.15	1993	15.54	
NSN 78 (N. Stonington)		5.00	23	7.20	4.81	4.27	1996	5.54	1997	4.68	
NT 15 (Newtown)		6.98	27	7.54	7.45	4.52	1971	10.75	1995	8.26	
PL 1 (Plainfield)		31.50	24	31.22	30.71	29.58	1954	32.70	1966	31.24	
SB 30 (Southbury)		21.30	25	20.67	21.10	19.06	1994	22.55	1995	20.52	
SB 39 (Southbury)		7.98	25	7.99	7.08	4.33	1999	8.23	1995	7.30	
SB 41 (Southbury)		53.60	25	53.20	53.30	47.13	1994	56.06	1999	50.68	
SB 42 (Southbury)		22.60	25	21.72	20.72	13.67	1994	24.09	1995	17.51	
SC 19 (Scotland)		9.37	24	9.95	10.55	3.66	1999	11.60	1995	8.84	
SC 20 (Scotland)		10.35	24	9.50	10.10	7.99	1985	11.15	1993	9.38	
SC 21 (Scotland)		1.06	24	1.45	1.13	0.75	1985	2.11	1995	1.17	
SC 22 (Scotland)		13.87	24	13.37	13.62	12.43	1985	14.86	1995	13.66	
SC 23 (Scotland)		2.14	24	2.74	2.52	2.14	2002	2.99	1995	2.56	>
SM 7 (Salem)		13.25	23	12.85	13.07	10.55	1985	13.55	1993	13.10	
SW 64 (S. Windsor)		13.05	24	12.85	12.15	10.53	1973	14.98	1966	12.36	
SY 15 (Salisbury)		15.00	25	14.35	14.99	13.19	2000	16.34	1993/95	14.98	
SY 23 (Salisbury)		13.91	25	12.90	13.12	6.02	1996	17.37	1993	9.35	
SY 24 (Salisbury)		17.30	25	16.70	16.32	12.02	1994	19.20	1995	14.24	
WB 93 (Waterbury)		27.90	27	28.15	28.04	26.60	1971	29.68	1962	28.00	
WB 198 (Waterbury)		23.20	27	19.53	18.96	12.30	1954	23.20	2002	17.22	<,<<
WY 1 (Woodbury)		27.07	25	25.02	26.83	21.41	1955	32.30	1914	29.16	
		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