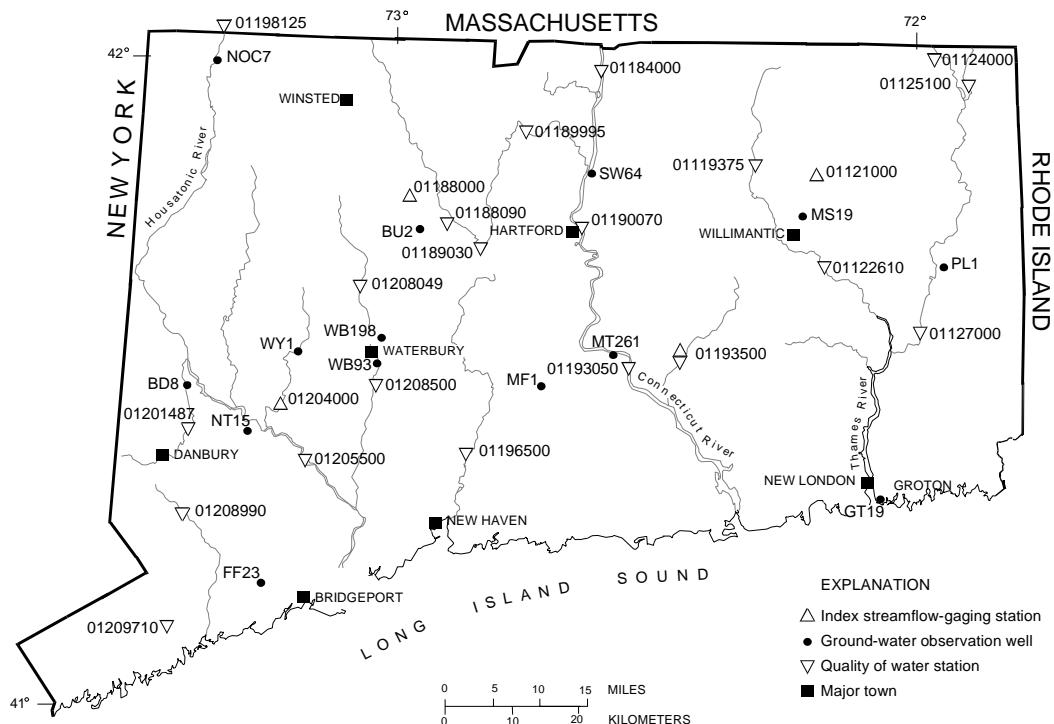


**WATER-RESOURCES CONDITIONS
IN CONNECTICUT, NOVEMBER 1999**

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	Reservoirs	4
Streamflow	2	Water Quality	5
Ground Water	3	Ground Water	6

STREAMFLOW (measured in cubic feet per second)

→ PROVISIONAL DATA ←

Streamflows in November were in the normal range for the entire State. Flow in Mount Hope River (NE Connecticut) remained in the normal range for the 3rd consecutive month. Flow in Burlington Brook (NW Connecticut) returned to the normal range after being above normal for 2 consecutive months. Flow in the Salmon River (SE Connecticut) returned to the normal range after being above normal for 2 consecutive months. Flow in the Pomperaug River (SW Connecticut) returned to the normal range after being above normal for 2 consecutive months. Across the State, mean streamflow for November averaged 122 percent of the November long-term median value.

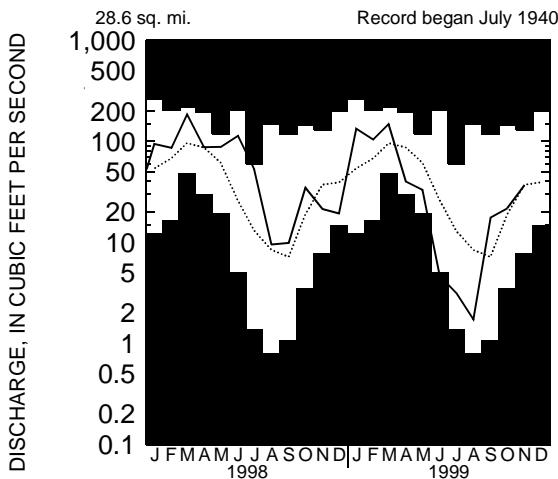
USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	NOV. 1999 MEAN	OCT. 1999 MEAN	NOV. 1998 MEAN	NOV. MAXIMUM VALUE (year recorded)	NOV. MINIMUM VALUE (year recorded)	NOV. MEDIAN (1961-90)
MT HOPE RIVER (01121000)	36.8	21.8	22.0	131	1956	37.3
BURLINGTON (01188000)	7.42	7.24	3.68	28.4	1956	7.24
SALMON RIVER (01193500)	171	125	68.2	551	1956	25.2
POMPERAUG (01204000)	138	108	76.8	486	1956	94.4

MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

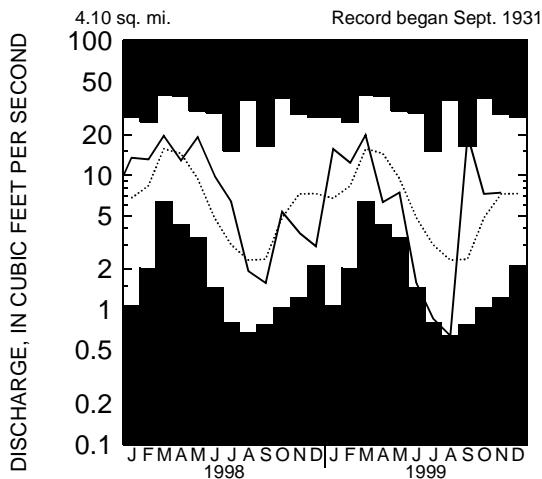
█ Shaded areas on graphs show highest and lowest monthly mean discharge of record.

— Current record Median (1961-1990)

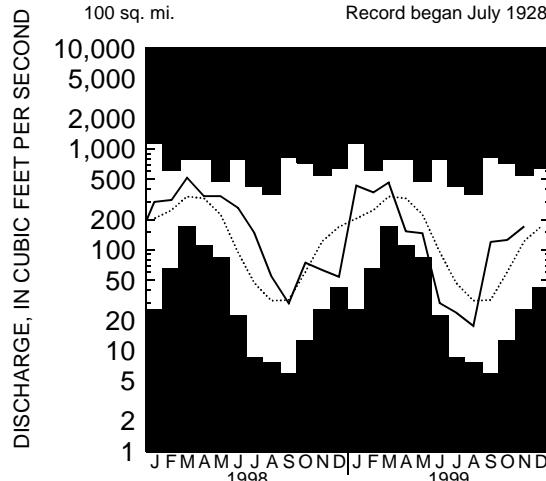
MOUNT HOPE RIVER NEAR WARRENVILLE



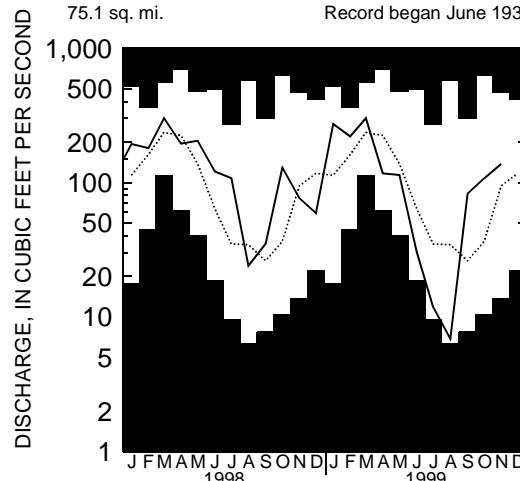
BURLINGTON BROOK NEAR BURLINGTON



SALMON RIVER NEAR EAST HAMPTON



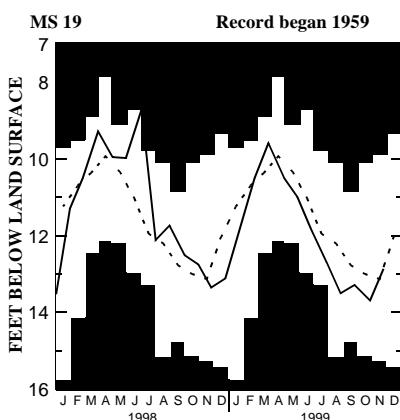
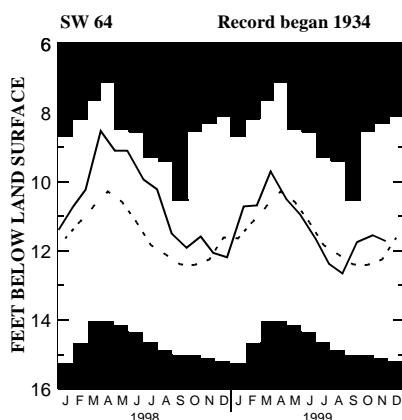
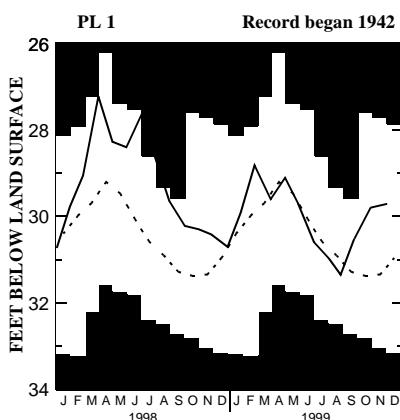
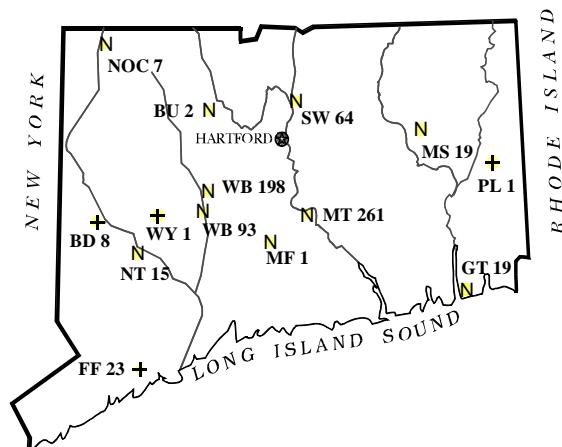
POMPERAUG RIVER AT SOUTHBURY



GROUND-WATER LEVELS (see table at end of report)

(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 1998.
- Solid line shows current water levels.
- Dashed line is monthly median for period of record through calendar year 1998.

MANSFIELD**SOUTH WINDSOR****PLAINFIELD****MASSACHUSETTS****ABOVE NORMAL**

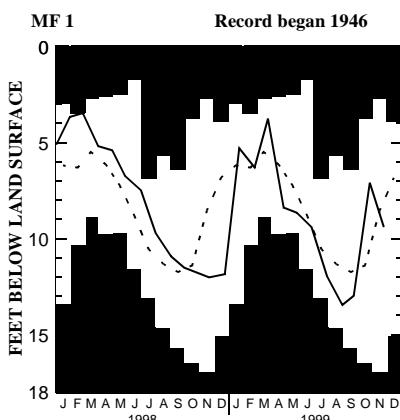
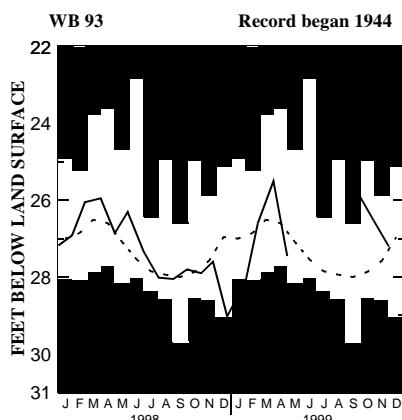
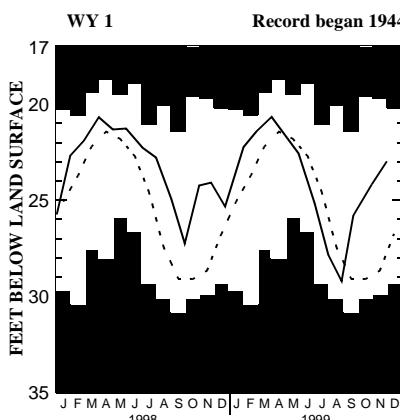
Within the highest 25%
of record for this month.

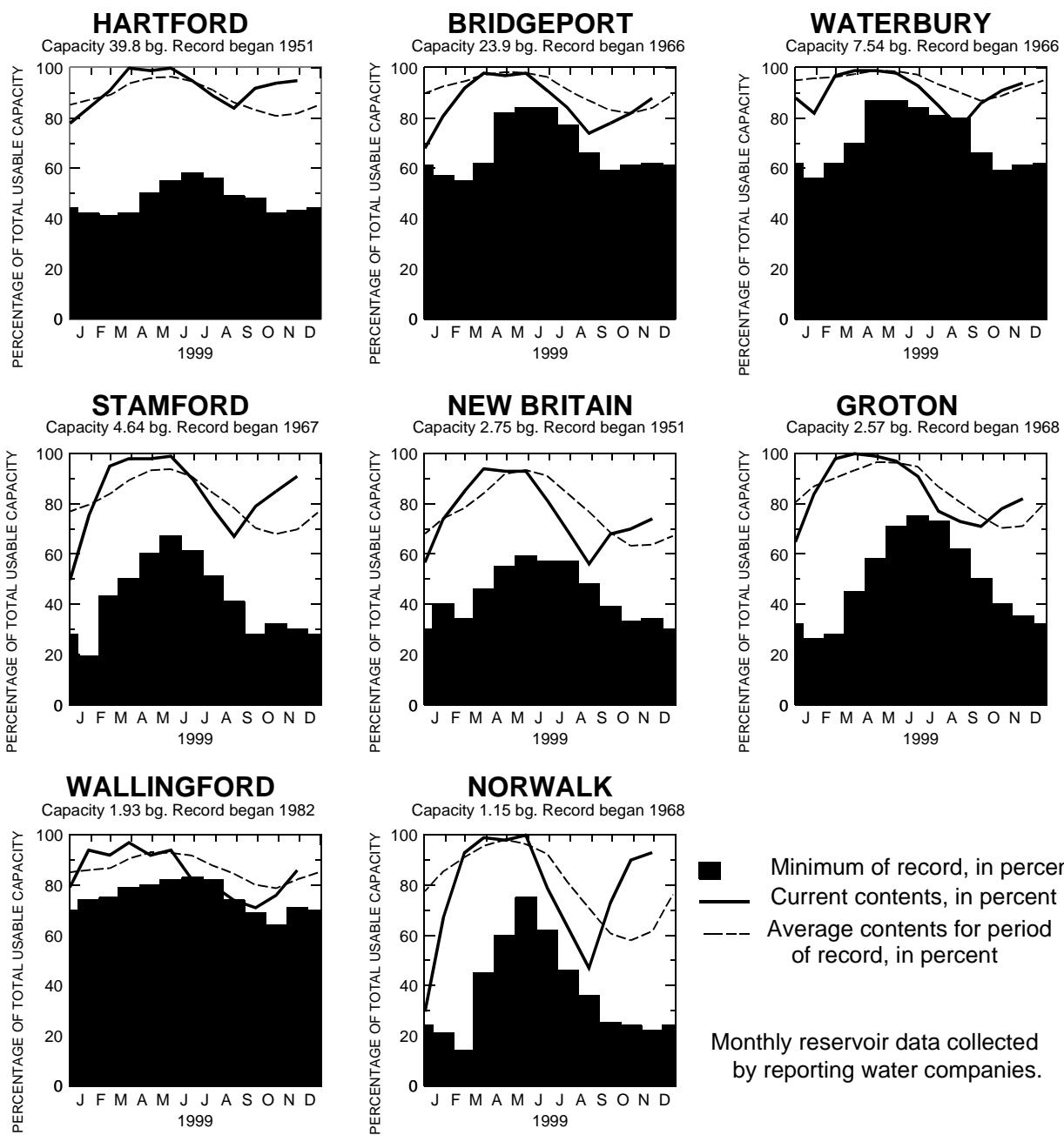
**NORMAL RANGE**

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

**BELOW NORMAL**

Within the lowest 25%
of record for this month.

**MIDDLEFIELD****WATERBURY****WOODBURY**

RESERVOIRS (Contents in billion gallons)

RESERVOIR SYSTEM (usable capacity, in billion gallons)	OCT. CAPACITY (PERCENT)	NOV. CAPACITY (PERCENT)	LONG-TERM AVERAGE CAPACITY FOR NOV. (PERCENT)
Hartford (39.8 bg)	94	95	82
Bridgeport (23.9 bg)	82	88	84
Waterbury (7.54bg)	91	94	92
Stamford (4.64 bg)	85	91	70
New Britain (2.75 bg)	70	74	64
Groton (2.57 bg)	78	82	71
Wallingford (1.93 bg)	76	86	82
Norwalk (1.15 bg)	90	93	62

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

[Station locations shown on front page; --, not applicable; 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 1999	STREAMFLOW/ % FLOW DURATION	SPECIFIC CONDUCTANCE (in $\mu\text{S}/\text{cm}$ at 25°C)	WATER TEMPERATURE (°C)	DISSOLVED OXYGEN CONCENTRATION (mg/L)	FIELD PH	FECAL COLIFORM (COL/100 mL)	ENTEROCOCCI (COL/100 mL)
01119375 Willimantic R. at Merrow	11/22	98/--	102	7.0	12.9/107	7.14	116	13K
01122610 Shetucket R. at South Windham	11/4	1490/--	93	11.5	11.3/103	7.10	2100	780
01124000 Quinebaug R. at Quinebaug	11/2	214/43	152	11.5	11.1/104	7.28	900	92
01125100 French R. at North Grosvenordale	11/2	63.0/--	156	12.0	10.6/100	7.07	310	800
01127000 Quinebaug R. at Jewett City	11/29	1250/37	131	7.5	11.5/95	7.76	144	96
01184000 Connecticut R. at Thompsonville	11/9	13900/41	104	8.0	11.7/99	7.22	--	--
01188090 Farmington R. at Unionville					SITE NOT SAMPLED THIS MONTH			
01189030 Pequabuck R. at Farmington					SITE NOT SAMPLED THIS MONTH			
01189995 Farmington R. at Tariffville					SITE NOT SAMPLED THIS MONTH			
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					SITE NOT SAMPLED THIS MONTH			
01198125 Housatonic R. near Ashley Falls, MA	11/8	768/--	284	6.5	11.4/94	8.04	116	8K
01201487 Still R. at Rt. 7 at Brookfield Center	11/17	62.0/--	438	6.5	11.5/97	7.90	2000	140
01205500 Housatonic R. at Stevenson					SITE NOT SAMPLED THIS MONTH			
01208049 Naugatuck R. near Waterville	11/15	135/--	166	7.0	11.9/101	7.43	136	25
01208500 Naugatuck R. at Beacon Falls	11/15	320/53	729	7.5	12.7/108	7.51	3400	1240
01208990 Saugatuck R. near Redding					SITE NOT SAMPLED THIS MONTH			
01209710 Norwalk R. near Winnipauk	11/10	35.0/--	287	11.5	13.1/120	8.48	--	--

PROVISIONAL DATA

GROUND-WATER LEVELS

We are now including data from all 71 wells in our ground-water network.

EW 134 (E. Windsor) recorded a low for the period of record and D 119 and NSN 78 (N. Stonington) recorded lows for November; whereas levels at HM 446, HM 447, HM 449, and HM 450 (Hamden) reached record highs for November.

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 ever recorded during the month. Statistics are based on period of record (through calendar year 1998). Ground-water level data 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
	NOV. 1999 (DATE)	OCT. 1999	NOV. 1998	NOV. MAX (YR RECORDED)	NOV. MIN (YR RECORDED)	NOV. MEDIAN				
BD 8 (Brookfield)	29.80	29	30.09	32.15	27.90	1975	33.16	1980	31.39	
BU 2 (Burlington)	26.39	22	30.04	32.73	15.48	1955	36.23	1964	25.82	
BU 143 (Burlington)	4.35	22	3.97	10.17	3.61	1996	10.17	1998	NA	1996
BU 144 (Burlington)	2.64	22	2.40	2.66	2.40	1996	2.66	1998	NA	1966
CL 223 (Clinton)	5.94	30	5.37	10.39	3.01	1996	10.39	1998	5.19	1991
CL 224 (Clinton)	21.83	30	21.69	22.67	20.70	1996	23.05	1997	21.50	1991
CL 225 (Clinton)	6.19	30	5.89	6.44	5.23	1992	7.15	1997	5.81	1991
CO 335 (Colchester)	7.50	24	7.05	7.62	4.05	1995	7.62	1987/98	6.88	1986
CV 51 (Coventry)	5.38	23	5.54	5.89	3.67	1996	5.89	1998	4.62	1992
D 116 (Durham)	2.98	24	1.61	6.45	0.15	1991	6.45	1998	0.81	1986
D 117 (Durham)	11.39	24	11.24	12.06	7.98	1996	12.06	1998	9.95	1986
D 119 (Durham)	0.92	24	0.25	0.62	0.18	1989	0.92	1999	0.38	< 1986
D 120 (Durham)	2.51	24	2.28	2.82	1.56	1992	2.77	1987	2.06	1986
EL 82 (Ellington)	6.03	23	5.89	6.34	5.10	1996	6.34	1998	5.70*	1987
EL 139 (Ellington)	25.24	23	24.75	dry	20.70	1995	31.18	1994	23.92*	1993
EL 140 (Ellington)	17.54	23	16.35	20.23	12.99	1996	20.23	1998	13.05	1993
EW 133 (East Windsor)	5.37	23	5.18	5.43	4.45	1996	5.48	1987	5.04	1986
EW 134 (East Windsor)	51.69	23	51.63	51.15	49.28	1989	51.69	1999	51.21	<< 1986
FF 23 (Fairfield)	7.35	29	7.85	8.35	7.05	1996	8.38	1973	7.94	1966
FF 30 (Fairfield)	4.82	29	8.85	13.13	1.00	1996	13.13	1998	7.02	1993
FF 31 (Fairfield)	7.30	29	8.50	14.20	3.99	1996	14.20	1998	6.67	1993
FF 32 (Fairfield)	6.48	29	7.68	13.67	5.62	1996	13.67	1998	7.13	1993
FF 33 (Fairfield)	4.82	29	5.32	6.00	4.22	1996	6.00	1998	5.16	1993
GR 328 (Granby)	11.78	22	11.99	16.27	9.31	1995	16.27	1998	13.63	1981
GR 329 (Granby)	5.58	22	4.63	9.72	3.60	1996	11.01	1984	4.61	1982
GR 330 (Granby)	2.54	22	2.41	3.33	2.32	1996	3.87	1982	3.24	1982
GR 331 (Granby)	9.65	22	5.74	9.95	7.98	1985	10.54	1994	8.89	1983
GT 19 (Groton)	15.88	28	15.00	16.68	12.25	1983	17.67	1965	15.81	1958
HM 445 (Hamden)	24.21	29	23.49	28.91	22.75	1997	28.91	1998	27.63*	1988
HM 446 (Hamden)	3.03	29	3.32	3.90	3.03	1999	3.90	1998	3.71*	> 1993
HM 447 (Hamden)	2.41	29	2.74	3.46	2.41	1999	3.46	1998	3.10*	> 1993
HM 448 (Hamden)	12.77	29	13.10	14.21	12.43	1993	14.38	1994/95	13.74*	1993
HM 449 (Hamden)	14.46	29	14.90	18.80	14.46	1999	18.89	1994	16.15*	> 1993
HM 450 (Hamden)	11.41	29	12.57	13.40	11.41	1999	13.40	1998	12.98*	> 1993

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE								NEW RE-CORD	YR RECOR D BEGAN
	NOV. 1999 (DATE)	OCT. 1999	NOV. 1998	NOV. MAX (YR RECORDED)	NOV. MIN (YR RECORDED)	NOV. MEDIAN				
MB 32 (Marlborough)	4.53	24	4.25	7.32	1.39	1989	9.26	1987	4.37	
MB 35 (Marlborough)	11.60	24	15.00	14.70	7.80	1996	16.82	1997	12.35	
MB 36 (Marlborough)	3.58	24	3.10	4.47	0.98	1996	4.47	1998	3.19	
MF 1 (Middlefield)	9.40	24	7.09	12.02	2.68	1988	16.92	1964	9.63	
MS 19 (Mansfield)	12.87	23	13.69	13.35	9.86	1989	15.24	1963	12.93	
MS 44 (Mansfield)	3.61	23	2.49	5.59	0.49	1988	5.59	1998	1.83	
MS 45 (Mansfield)	13.31	23	12.79	13.35	11.75	1993	13.35	1998	12.35	
MS 46 (Mansfield)	14.06	23	14.35	14.35	12.87	1996	14.35	1998	13.77	
MS 74 (Mansfield)	6.91	23	8.10	8.41	1.00	1996	9.35	1997	5.49	
MS 75 (Mansfield)	16.24	23	17.62	16.67	9.69	1996	20.90	1997	16.03	
MS 76 (Mansfield)	33.25	23	34.00	obstructed	13.83	1997	33.92	1993	33.23	
MS 77 (Mansfield)	6.36	23	7.73	7.96	0.65	1996	8.83	1997	4.67	
MT 261 (Middletown)	20.43	23	22.61	22.98	19.24	1989	27.46	1980	22.28	
NHV 201 (North Haven)	16.60	29	16.64	16.84	14.99	1976	17.57	1987	16.81	
NHV 202 (North Haven)	48.16	29	47.91	52.11	42.11	1975	57.96	1995	52.05	
NOC 7 (North Canaan)	9.30	30	9.38	9.70	5.40	1984	10.30	1964	9.35	
NSN 77 (N. Stonington)	12.51	30	13.75	15.35	10.39	1995	16.22	1993	12.38	
NSN 78 (N. Stonington)	4.33	30	4.18	4.12	3.65	1992	4.33	1999	3.75	<
NT 15 (Newtown)	4.20	29	4.46	7.30	2.08	1975	10.95	1980	7.00	
PL 1 (Plainfield)	29.71	30	29.80	30.42	27.70	1955	33.03	1965	31.09	
SB 30 (Southbury)	19.29	29	19.70	19.68	16.93	1996	22.19	1991	20.12	
SB 39 (Southbury)	6.17	29	6.64	7.15	4.83	1996	7.15	1998	6.19	
SB 41 (Southbury)	48.86	29	50.72	49.66	45.44	1992	49.66	1998	47.63	
SB 42 (Southbury)	12.96	29	13.96	15.07	12.30	1996	15.16	1994	14.15	
SC 19 (Scotland)	4.00	30	2.85	8.71	1.89	1996	8.71	1998	4.74	
SC 20 (Scotland)	6.64	30	7.72	obstructed	5.63	1988	11.31	1997	9.33	
SC 21 (Scotland)	0.79	30	0.89	1.28	0.18	1988	1.65	1994	0.76	
SC 22 (Scotland)	12.13	30	12.60	13.77	10.21	1996	14.43	1997	12.56	
SC 23 (Scotland)	2.17	30	2.21	2.60	1.56	1996	2.70	1994	2.09	
SM 7 (Salem)	10.90	30	12.41	12.77	8.07	1989	13.75	1997	10.98	
SW 64 (S. Windsor)	11.72	23	11.55	12.05	8.29	1989	15.08	1965	12.16	
SY 15 (Salisbury)	15.06	26	15.13	15.86	12.50	1995	16.94	1997	14.76	
SY 23 (Salisbury)	6.48	26	6.30	9.28	4.65	1995	11.86	1993	5.87	
SY 24 (Salisbury)	13.51	26	13.76	15.14	10.14	1995	16.53	1997	11.67	
WB 93 (Waterbury)	27.29	29	26.52	24.08	24.08	1998	28.57	1964	27.28	
WB 198 (Waterbury)	13.80	29	14.45	19.21	9.53	1955	21.35	1980	16.39	
WY 1 (Woodbury)	22.97	29	24.17	24.08	19.68	1955	31.95	1916	28.88	
										1913

New records: >, new record high for November; >>, new record high for period of record; <, new record low for November; <<, new record low for period of record. *, median not calculated--number shown is mean; NA, not available