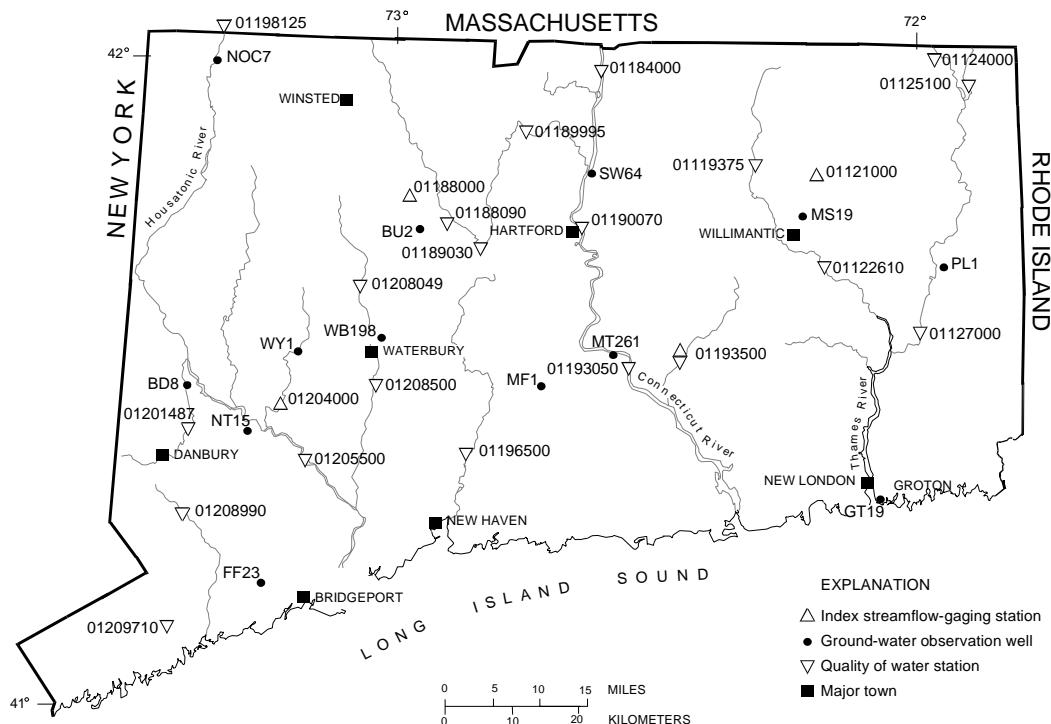


**U.S. Department of the Interior
U.S. Geological Survey**

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

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



!!!! CHECK OUT THE NEW EXPANDED GROUNDWATER SECTION !!!

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://conn.er.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 ←

Streamflows in August were in the below-normal range for the entire State. Mount Hope River (NE Connecticut) remained in the below-normal range for the fifth consecutive month. Burlington Brook (NW Connecticut) remained in the below-normal range for the third consecutive month and recorded the lowest August mean on record. Salmon River (SE Connecticut) remained in the below-normal range for the fifth consecutive month. Pomperaug River (SW Connecticut) remained in the below-normal range for the third consecutive month. Across the State, mean streamflow for August averaged 31 percent of the August long-term median value.

USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	AUG. 1999 MEAN	JULY 1999 MEAN	AUG. 1998 MEAN	AUG. MAXIMUM VALUE (year recorded)		AUG. MINIMUM VALUE (year recorded)		AUG. MEDIAN (1961-90)
MT HOPE RIVER (01121000)	1.72	3.12	9.55	148	1955	0.79	1957	8.41
BURLINGTON (01188000)	0.64	0.86	1.93	36.0	1955	0.64	1999	2.33
SALMON RIVER (01193500)	17.6	23.8	54.4	357	1955	7.50	1957	31.4
POMPERAUG (01204000)	6.87	11.9	24.1	578	1955	6.29	1966	34.5

MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

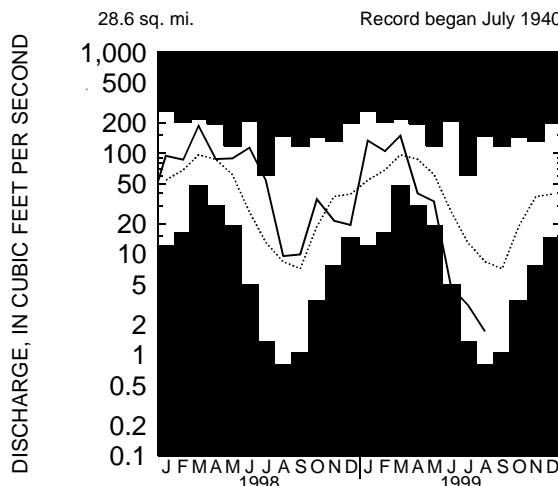
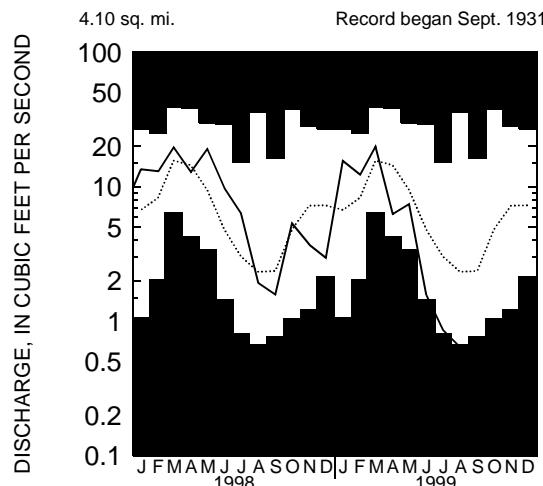
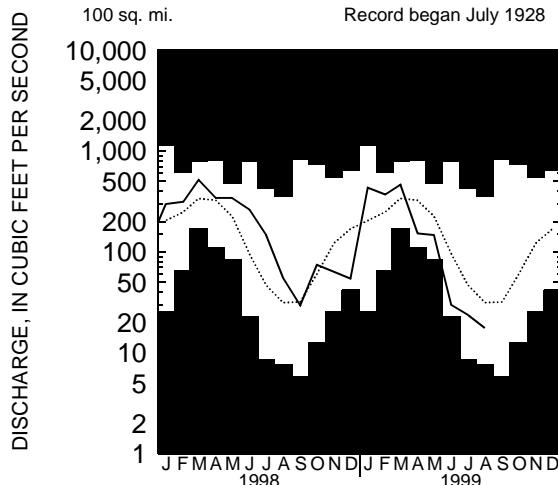
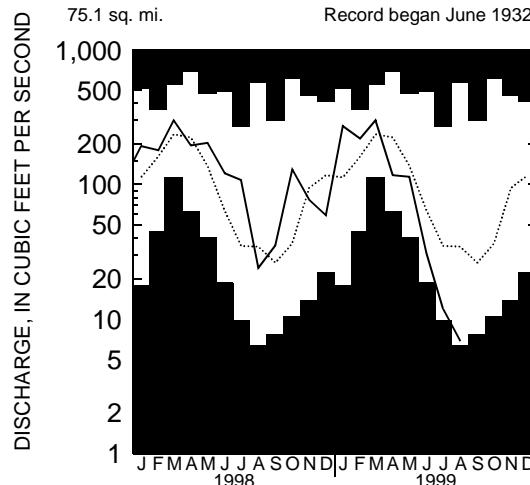
Shaded areas on graphs show highest and lowest monthly mean discharge of record.



Current record



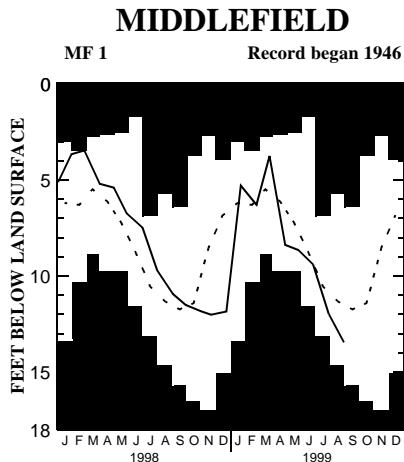
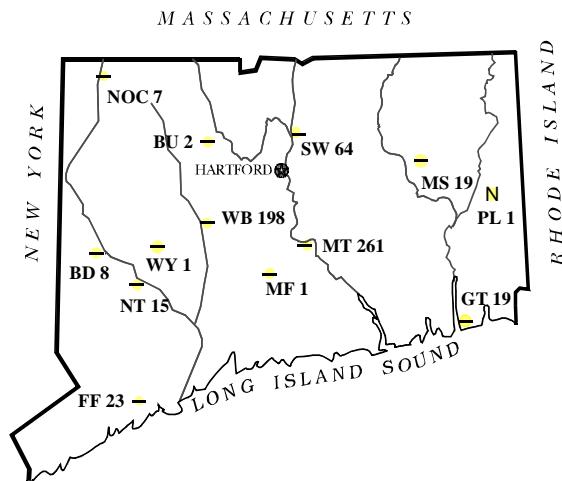
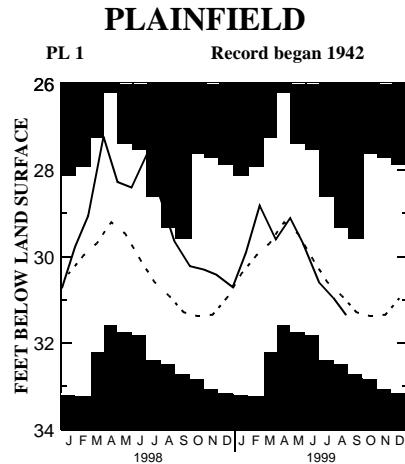
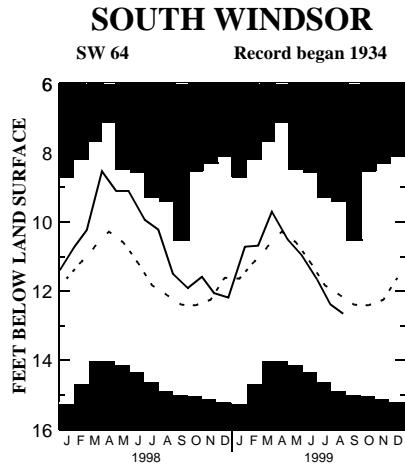
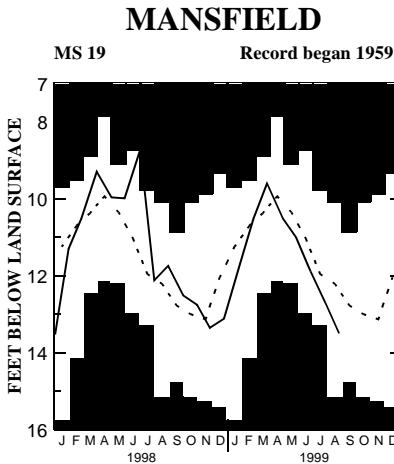
Median (1961-1990)

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)

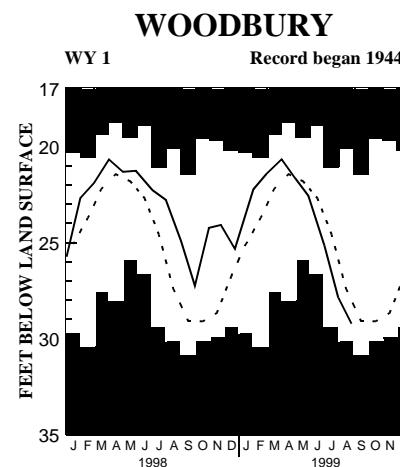
- Shaded area on graphs show highest and lowest water levels of record through calendar year 1998.
- Solid line shows current water levels.
- Dashed line is monthly median for period of record through calendar year 1998.

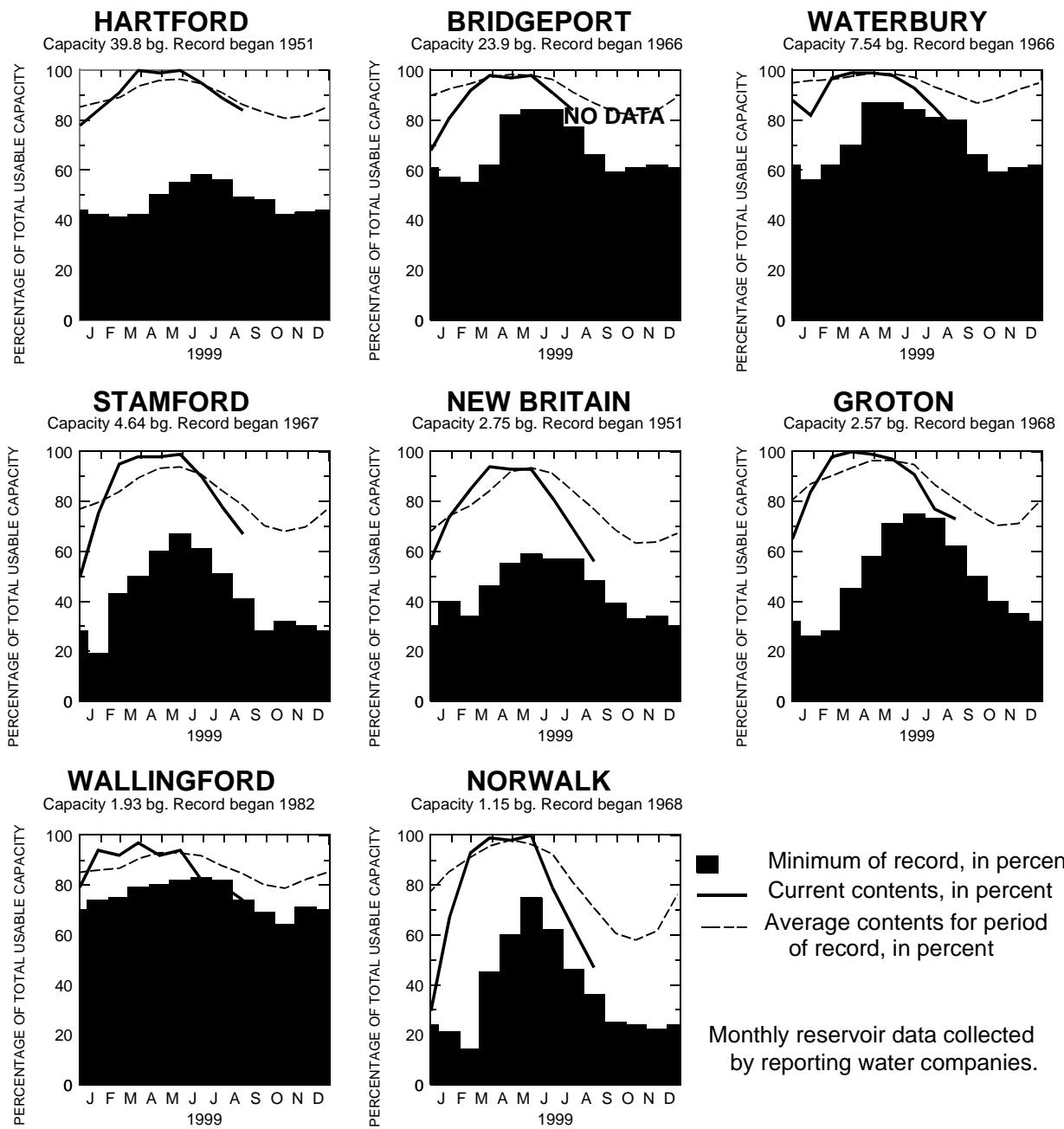


ABOVE NORMAL
Within the highest 25%
of record for this month.

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

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



RESERVOIRS (Contents in billion gallons)

RESERVOIR SYSTEM (usable capacity, in billion gallons)	JULY CAPACITY (PERCENT)	AUG. CAPACITY (PERCENT)	LONG-TERM AVERAGE CAPACITY FOR AUG. (PERCENT)
Hartford (39.8 bg)	89	84	86
Bridgeport (23.9 bg)	84	NO DATA	87
Waterbury (7.54bg)	85	76	90
Stamford (4.64 bg)	78	67	78
New Britain (2.75 bg)	69	56	77
Groton (2.57 bg)	77	73	81
Wallingford (1.93 bg)	80	74	85
Norwalk (1.15 bg)	63	47	71

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	8/10	0.46/--	251	18.0	8.7/94	7.65	168	92
01122610 Shetucket R. at South Windham	8/9	48.6/--	151	24.5	8.7/106	7.52	184	28
01124000 Quinebaug R. at Quinebaug	8/3	19.6/97	252	23.5	7.8/93	7.57	144	46
01125100 French R. at North Grosvenordale	8/3	8.0/--	359	25.0	11.8/146	9.39	52	180
01127000 Quinebaug R. at Jewett City	8/9	25.0/98	184	22.5	5.4/63	7.32	236	168
01184000 Connecticut R. at Thompsonville	8/11	1950/99	153	24.0	5.4/65	7.25	8K	<1K
01188090 Farmington R. at Unionville								
								SITE NOT SAMPLED THIS MONTH
01189030 Pequabuck R. at Farmington	8/23	30.0/--	405	21.5	9.1/104	7.50	700	88
01189995 Farmington R. at Tariffville	8/23	426/88	133	19.5	8.5/93	7.20	800	144
01190070 Connecticut R. at Hartford	8/17	--/--	156	26.0	7.2/90	7.41	56	23
01193050 Connecticut R. at Middle Haddam	8/17	--/--	166	26.5	5.5/69	6.78	2K	3K
01193500 Salmon R. near East Hampton								
								SITE NOT SAMPLED THIS MONTH
01196500 Quinnipiac R. at Wallingford	8/18	2.65/99	446	24.0	7.8/94	8.10	940	164
01198125 Housatonic R. near Ashley Falls, MA	8/2	118/--	449	25.5	6.6/84	8.09	7300	50
01201487 Still R. at Rt. 7 at Brookfield Center	8/25	17.0/--	664	21.0	7.0/80	7.56	640	180
01205500 Housatonic R. at Stevenson								
								SITE NOT SAMPLED THIS MONTH
01208049 Naugatuck R. near Waterville	8/4	13.0/--	440	24.0	7.1/86	8.29	40	28
01208500 Naugatuck R. at Beacon Falls	8/4	63.0/99	592	24.5	6.7/81	6.94	80	17K
01208990 Saugatuck R. near Redding								
								SITE NOT SAMPLED THIS MONTH
01209710 Norwalk R. near Winnipauk	8/24	5.30/--	303	23.5	13.5/159	9.00	120	46

PROVISIONAL DATA

GROUND-WATER LEVELS

We are now including data from all 69 wells in our ground-water network. Nineteen wells recorded new lows for August (10 of 53 with more than 10 years of record); 5 wells recorded new all-time lows (2 at wells with more than 10 years of record).

Ground-water levels are in feet below land surface. 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 RECORD	YR RECORD BEGAN
	AUG 1999 (DATE)	JULY 1999	AUG 1998	AUG MAX	AUG MIN (YR RECORDED)	AUG MEDIAN			
BD 8 (Brookfield)	32.21	26	31.35	31.24	29.49	32.69	1995	31.19	
BU 2 (Burlington)	28.62	23	24.62	24.27	18.30	29.94	1995	23.92	
CL 223 (Clinton)	9.57	24	8.67	5.22	5.22	10.62	1993	8.26	
CL 224 (Clinton)	22.34	24	22.23	21.16	20.47	22.34	1999	21.37	< 1991
CL 225 (Clinton)	8.10	24	9.91	3.80	3.80	9.79	1997	6.97	
CO 335 (Colchester)	8.70	25	8.15	7.75	7.02	9.02	1995	7.90	
CV 51 (Coventry)	7.29	23	6.65	6.79	4.90	7.29	1999	6.68	< 1992
D 116 (Durham)	10.12	25	7.87	6.77	1.80	10.12	1999	6.66	<< 1986
D 117 (Durham)	14.21	25	13.65	12.52	9.26	14.48	1987	12.52	
D 119 (Durham)	2.87	25	3.00	1.79	0.48	3.56	1987	1.79	
D 120 (Durham)	3.85	25	3.84	3.07	2.08	4.06	1995	3.07	
EL 82 (Ellington)	6.55	23	6.57	6.25	5.92	6.56	1995	6.25	
EL 139 (Ellington)	dry	23	dry	29.26	0.00	dry	1999	29.26	<< 1993
EL 140 (Ellington)	20.68	23	19.84	19.25	15.39	20.68	1999	19.21	<< 1993
EW 133 (East Windsor)	5.89	23	5.78	5.43	4.97	5.93	1995	5.53	
EW 134 (East Windsor)	51.70	23	51.45	50.27	49.36	51.70	1999	50.77	< 1986
FF 23 (Fairfield)	9.80	26	9.70	8.49	7.21	9.80	1999	8.35	< 1966
FF 30 (Fairfield)	10.78	26	8.60	9.28	4.95	11.85	1993	8.56	
FF 31 (Fairfield)	12.85	26	11.95	12.41	7.58	13.80	1995	8.47	
FF 32 (Fairfield)	12.80	26	10.97	11.78	7.25	13.40	1993	10.94	
FF 33 (Fairfield)	7.28	26	7.24	6.77	5.37	7.40	1995	6.36	
GR 328 (Granby)	16.51	23	14.51	13.59	12.18	16.51	1999	14.28	< 1981
GR 329 (Granby)	12.06	23	10.90	8.56	8.56	12.71	1988	10.60	
GR 330 (Granby)	3.76	23	5.83	3.33	2.94	4.31	1983	3.89	
GR 331 (Granby)	13.09	23	12.63	11.41	10.37	13.09	1999	11.29	< 1983
GT 19 (Groton)	dry	22	dry	16.42	14.86	dry	1999	16.47	<< 1958
HM 445 (Hamden)	27.83	26	27.35	27.30	24.32	32.66	1993	27.32	
HM 446 (Hamden)	4.28	26	4.21	4.00	3.56	4.44	1995	4.00	
HM 447 (Hamden)	3.88	26	3.81	3.52	3.14	4.11	1995	3.79	
HM 448 (Hamden)	14.60	26	14.35	14.10	13.58	14.94	1995	14.09	
HM 449 (Hamden)	20.01	26	19.74	19.13	15.03	21.47	1993	20.63	
HM 450 (Hamden)	13.85	26	13.64	13.47	12.70	13.85	1999	13.37	<< 1993
MB 32 (Marlborough)	8.95	25	8.13	5.01	2.95	10.19	1993	8.27	
MB 35 (Marlborough)	16.30	25	15.05	13.73	13.32	16.30	1999	14.92	< 1993

WELL NUMBER AND TOWN	GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE							NEW RECORD	YR RECORD BEGAN
	AUG 1999 (DATE)	JULY 1999	AUG 1998	AUG MAX	AUG MIN (YR RECORDED)		AUG MEDIAN		
MB 36 (Marlborough)	8.61	25	8.00	5.81	5.55	9.28	1995	6.43	
MF 1 (Middlefield)	13.45	25	11.98	10.91	5.66	14.59	1965	11.47	
MS 19 (Mansfield)	13.50	24	12.70	11.74	10.40	15.14	1966	12.35	
MS 44 (Mansfield)	8.42	23	7.05	6.26	3.09	9.55	1993	6.49	
MS 45 (Mansfield)	14.04	23	13.69	13.01	11.80	14.18	1995	13.31	
MS 46 (Mansfield)	14.65	23	14.44	13.77	13.70	15.01	1995	14.19	
MS 74 (Mansfield)	9.80	23	8.42	8.00	4.94	9.80	1999	8.51	<
MS 75 (Mansfield)	15.27	23	12.87	13.64	13.30	16.26	1995	14.95	
MS 76 (Mansfield)	34.10	23	37.80	--	33.01	35.82	1995	34.99	
MS 77 (Mansfield)	9.80	23	8.41	8.05	4.41	9.82	1993	8.49	
MT 261 (Middletown)	24.74	25	21.94	20.53	20.53	25.59	1987	22.64	
NHV 201 (North Haven)	17.85	26	17.83	15.89	14.64	17.85	1999	16.20	<
NHV 202 (North Haven)	53.11	26	51.37	45.77	0.00	dry	1986;88	50.28	
NOC 7 (North Canaan)	10.64	30	10.30	10.35	9.02	11.16	1995	9.93	
NSN 77 (N. Stonington)	15.70	24	14.80	13.93	13.93	16.55	1993	15.01	
NSN 78 (N. Stonington)	6.35	24	6.55	4.40	3.93	7.08	1995	5.31	
NT 15 (Newtown)	9.95	26	8.97	6.92	4.97	10.20	1981	8.20	
PL 1 (Plainfield)	31.35	24	30.95	29.65	29.32	32.46	1966	30.82	
SB 30 (Southbury)	22.18	26	21.43	20.29	19.18	22.18	1999	20.29	<
SB 39 (Southbury)	8.27	26	8.17	7.67	5.67	8.36	1995	7.67	
SB 41 (Southbury)	55.40	26	54.15	52.57	46.35	55.40	1999	49.93	<
SB 42 (Southbury)	22.87	26	20.15	18.66	13.47	22.87	1999	17.64	<
SC 19 (Scotland)	10.85	24	9.72	7.13	6.67	11.05	1993	8.72	
SC 20 (Scotland)	10.22	24	9.25	8.75	8.10	10.40	1993	9.09	
SC 21 (Scotland)	1.50	24	1.14	1.22	-1.22	1.78	1995	1.26	
SC 22 (Scotland)	13.79	24	13.34	12.80	12.67	13.90	1993	13.45	
SC 23 (Scotland)	2.95	24	2.67	3.28	1.33	3.28	1998	2.71	
SM 7 (Salem)	13.41	24	13.00	11.92	9.60	13.41	1999	12.68	<
SW 64 (S. Windsor)	12.65	23	12.37	11.50	9.39	14.85	1966	12.07	
SY 15 (Salisbury)	14.32	19	13.77	14.06	13.88	15.73	1995	14.63	
SY 23 (Salisbury)	14.54	19	12.12	10.81	6.41	16.43	1993	9.81	
SY 24 (Salisbury)	17.16	19	15.25	14.71	10.59	18.04	1995	15.37	
WB 93 (Waterbury)	--	--	28.05	24.92	28.54	1966	27.94		1943
WB 198 (Waterbury)	20.68	26	17.81	16.74	11.08	20.68	1999	15.85	<
WY 1 (Woodbury)	29.22	26	27.87	24.94	20.06	30.10	1964	27.45	
	New records: <, new record low for August; <<, new record low for period of record.								