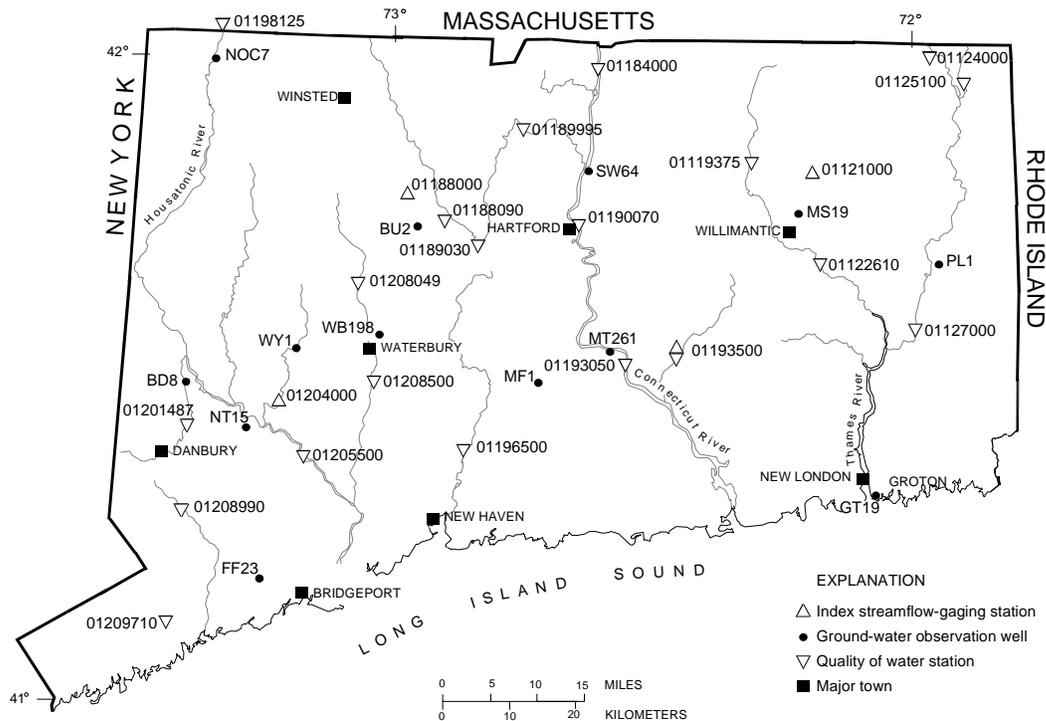


**U.S. Department of the Interior
U.S. Geological Survey**



**WATER-RESOURCES CONDITIONS
IN CONNECTICUT, MAY 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://conn.er.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	5
Ground Water	2	Water Quality	6
Streamflow	4		

GROUND-WATER LEVELS

Ground-water levels during May decreased in all wells, except for BD-8 (Brookfield) and FF-23 (Fairfield), which increased. Water levels in about half the wells were in the normal range—BU-2 (Burlington), GT-19 (Groton), MF-1 (Middlefield), MS-19 (Mansfield), MT-261 (Middletown), WB-198 (Waterbury), and WY-1 (Woodbury)—were in the below-normal range.

Ground-water levels are in feet below land surface. Statistics are based on period of record (through calendar year 1998).

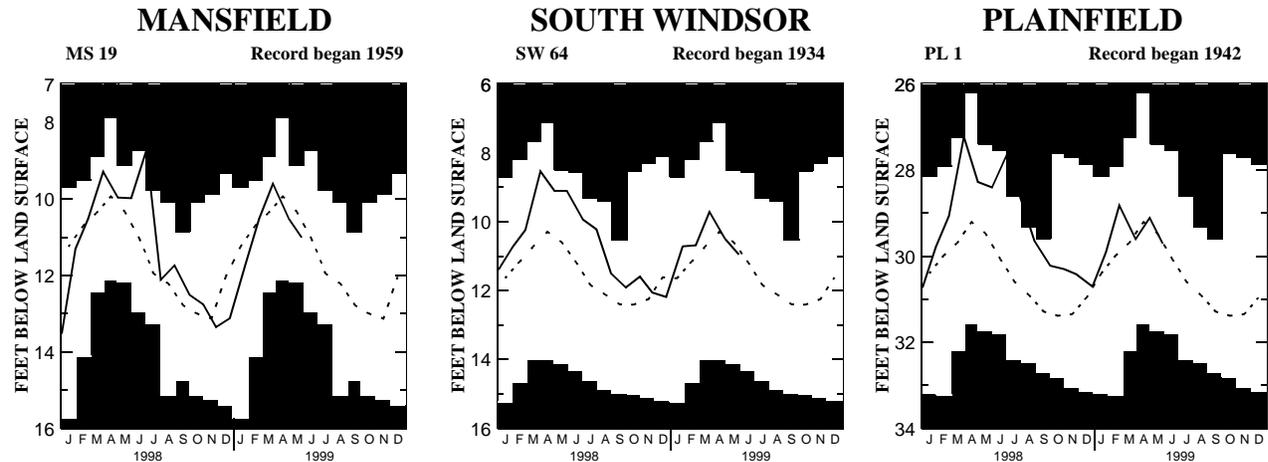
WELL NUMBER AND TOWN	MAY 1999 GROUND-WATER LEVEL (date measured)		APR. 1999 GROUND- WATER LEVEL	MAY 1998 GROUND- WATER LEVEL	MAY MAXIMUM GROUND-WATER LEVEL (year recorded)		MAY MINIMUM GROUND-WATER LEVEL (year recorded)		MAY MEDIAN GROUND- WATER LEVEL
BD-8 (Brookfield)	5/27	29.11	29.45	29.10	27.60	1989	31.84	1985	28.60
BU-2 (Burlington)	5/27	19.82	18.10	16.72	14.84	1958	21.49	1985	16.97
FF-23 (Fairfield)	5/24	8.05	8.08	8.40	5.03	1989	8.40	1998	7.86
GT-19 (Groton)	5/24	16.17	15.22	14.35	11.68	1979	16.07	1963	14.72
MF-1 (Middlefield)	5/24	8.65	8.38	6.73	2.48	1989	9.67	1966	7.26
MS-19 (Mansfield)	5/25	11.00	10.50	9.98	9.10	1964	12.16	1985	10.35
MT-261 (Middletown)	5/24	20.18	19.16	18.98	18.65	1989	20.53	1986	19.68
NOC-7 (North Canaan)	5/14	9.60	9.35	9.63	8.86	1973	9.95	1964	9.44
NT-15 (Newtown)	5/27	4.58	4.26	3.15	0.30	1989	7.69	1985	3.79
PL-1 (Plainfield)	5/26	29.70	29.10	28.40	27.38	1983	31.72	1966	29.47
SW-64 (S. Windsor)	5/26	10.95	10.50	9.10	8.48	1973	14.12	1966	10.59
WB-93 (Waterbury)	Well was sealed with concrete by owner. No further data will be available.								
WB-198 (Waterbury)	5/27	14.83	13.55	12.31	6.30	1952	18.72	1985	12.46
WY-1 (Woodbury)	5/27	22.58	21.64	21.27	19.49	1989	25.87	1985	21.82

(Ground-water level data collected by USGS personnel and individual observers.)

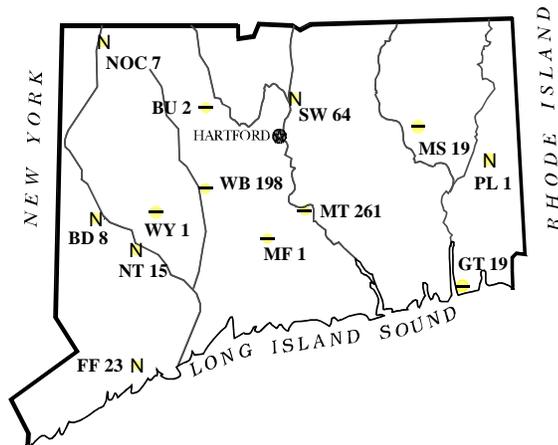
GROUND-WATER LEVELS (CONTINUED)

(Status of ground-water storage as indicated by the 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.



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.

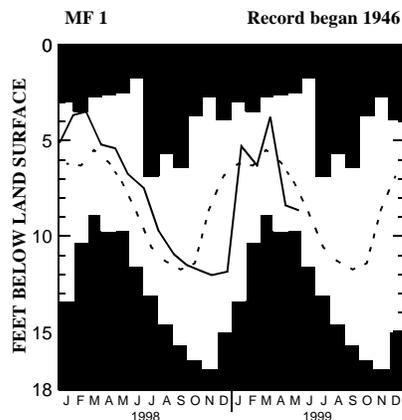


BELOW NORMAL

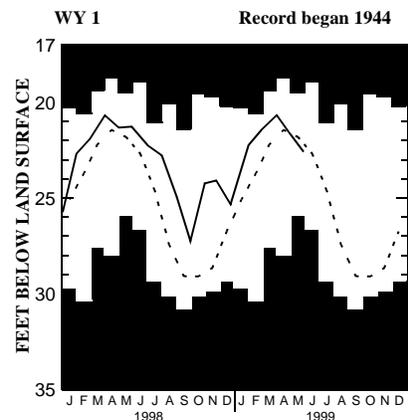
Within the lowest 25% of record for this month.



MIDDLEFIELD



WOODBURY



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

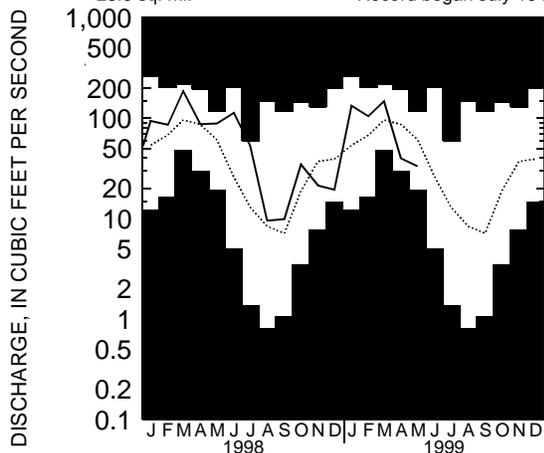
In general, streamflows in May were in the normal to below-normal range. Mount Hope River (NE Connecticut) remained in the below-normal range for the second consecutive month. Burlington Brook (NW Connecticut) returned to the normal range after being in the below-normal range for one month. Salmon River (SE Connecticut) remained in the below-normal range for the second consecutive month. Pomperaug River (SW Connecticut) returned to the normal range after being in the below-normal range for one month. Across the State, mean streamflow for May averaged 70 percent of the May long-term median value.

USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	MAY 1999 MEAN	APR. 1999 MEAN	MAY 1998 MEAN	MAY MAXIMUM VALUE (year recorded)		MAY MINIMUM VALUE (year recorded)		MAY MEDIAN (1961-90)
MT HOPE RIVER (01121000)	33.3	40.1	88.7	119	1984	19.0	1957	61.6
BURLINGTON (01188000)	7.46	6.31	19.2	30.1	1989	3.42	1965	9.45
SALMON RIVER (01193500)	146	152	341	482	1989	82.6	1986	224
POMPERAUG (01204000)	114	117	204	476	1989	40.3	1941	138

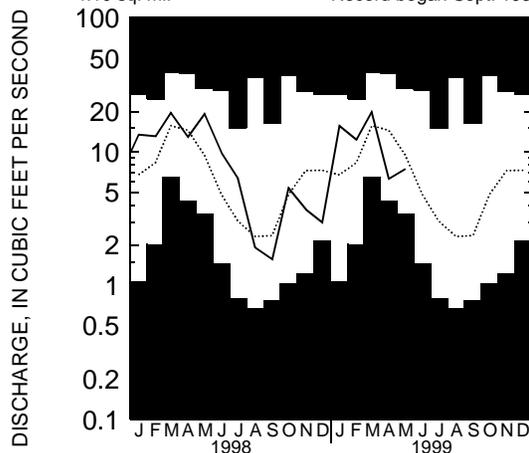
MONTHLY MEAN RUNOFF AT FOUR INDEX STATIONS

Shaded areas on graphs show highest and lowest monthly mean discharge of record.
 Current record Median (1961-1990)

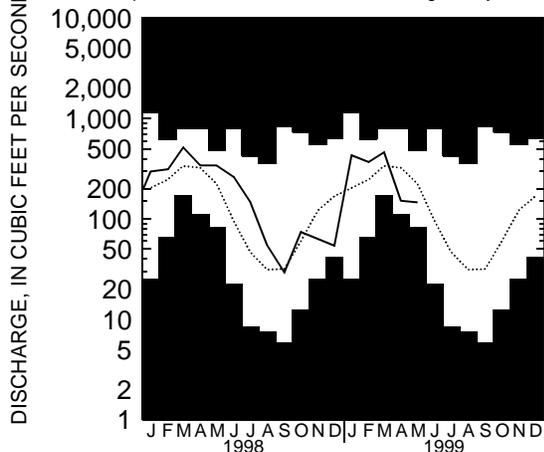
MOUNT HOPE RIVER NEAR WARRENVILLE
28.6 sq. mi. Record began July 1940



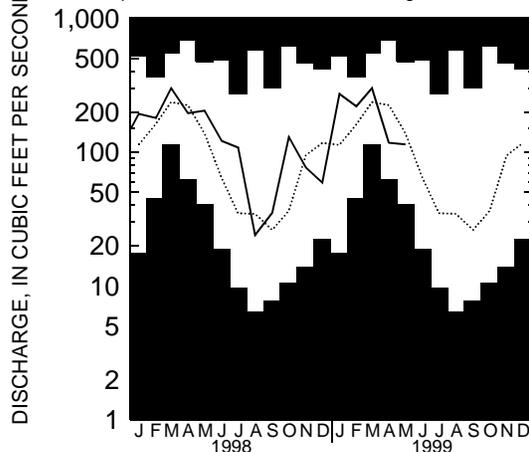
BURLINGTON BROOK NEAR BURLINGTON
4.10 sq. mi. Record began Sept. 1931



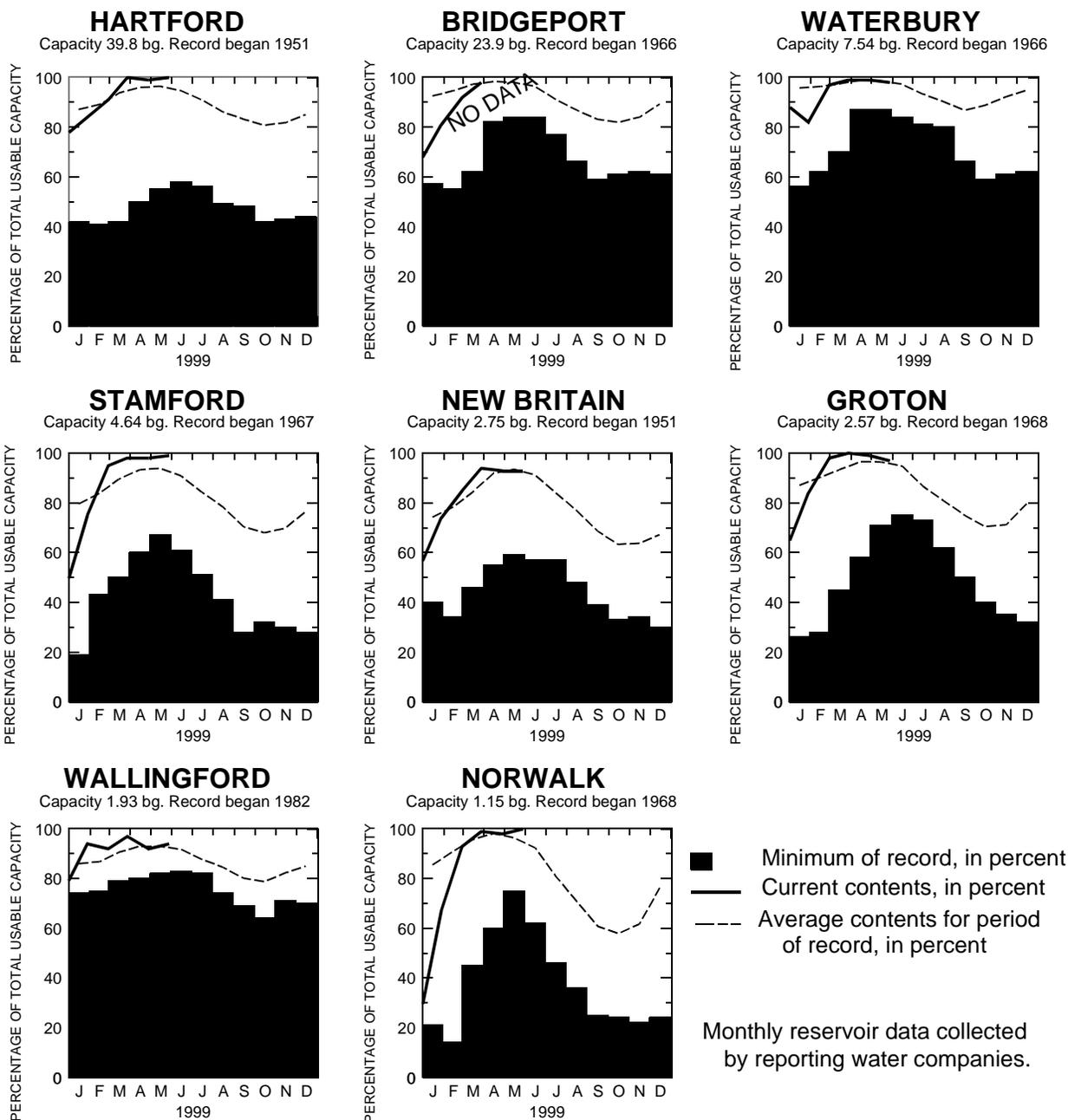
SALMON RIVER NEAR EAST HAMPTON
100 sq. mi. Record began July 1928



POMPERAUG RIVER AT SOUTHBURY
75.1 sq. mi. Record began June 1932



RESERVOIRS (Contents in billion gallons)



RESERVOIR SYSTEM (usable capacity, in billion gallons)	APR. CAPACITY (PERCENT)	MAY CAPACITY (PERCENT)	LONG-TERM AVERAGE CAPACITY FOR MAY (PERCENT)
Hartford (39.8 bg)	99	100	96
Bridgeport (23.9 bg)	97		98
Waterbury (7.54bg)	99	98	99
Stamford (4.64 bg)	98	99	94
New Britain (2.75 bg)	93	93	93
Groton (2.57 bg)	99	97	96
Wallingford (1.93 bg)	92	94	93
Norwalk (1.15 bg)	98	100	96

**U.S. Department of the Interior
 U.S. Geological Survey
 Water Resources Division
 101 Pitkin St.,
 E. Hartford, Connecticut 06108**

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)]

PROVISIONAL DATA

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) %SATURATION	FIELD PH	FECAL COLIFORM (COL/100 mL)	ENTEROCOCCI (COL/100 mL)
01119375 Willimantic R. at Merrow	5/20	311/--	86	17.5	9.3/99	7.08	3,000	660
01122610 Shetucket R. at South Windham	5/18	284/--	108	18.0	9.9/104	7.30	39	20
01124000 Quinebaug R. at Quinebaug	5/11	137/59	155	17.5	9.5/100	7.50	124	8K
01125100 French R. at North Grosvenordale	5/11	70/--	245	19.0	9.6/103	7.80	9K	64
01127000 Quinebaug R. at Jewett City	SITE NOT SAMPLED THIS MONTH							
01184000 Connecticut R. at Thompsonville	5/25	22000/23	110	17.0	8.0/84	7.43	--	--
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	5/17	373/--	342	17.5	8.4/88	8.00	58	4K
01201487 Still R. at Rt. 7 at Brookfield Center	5/12	48/--	404	16.0	7.5/81	7.70	120	20
01205500 Housatonic R. at Stevenson	SITE NOT SAMPLED THIS MONTH							
01208049 Naugatuck R. near Waterville	5/4	62/--	229	14.5	9.2/91	7.30	145	560
01208500 Naugatuck R. at Beacon Falls	5/4	260/60	302	14.5	12.6/124	8.50	104	64
01208990 Saugatuck R. near Redding	SITE NOT SAMPLED THIS MONTH							
01209710 Norwalk R. near Winnipauk	5/13	24/--	325	15.4	10.9/109	8.40	--	--