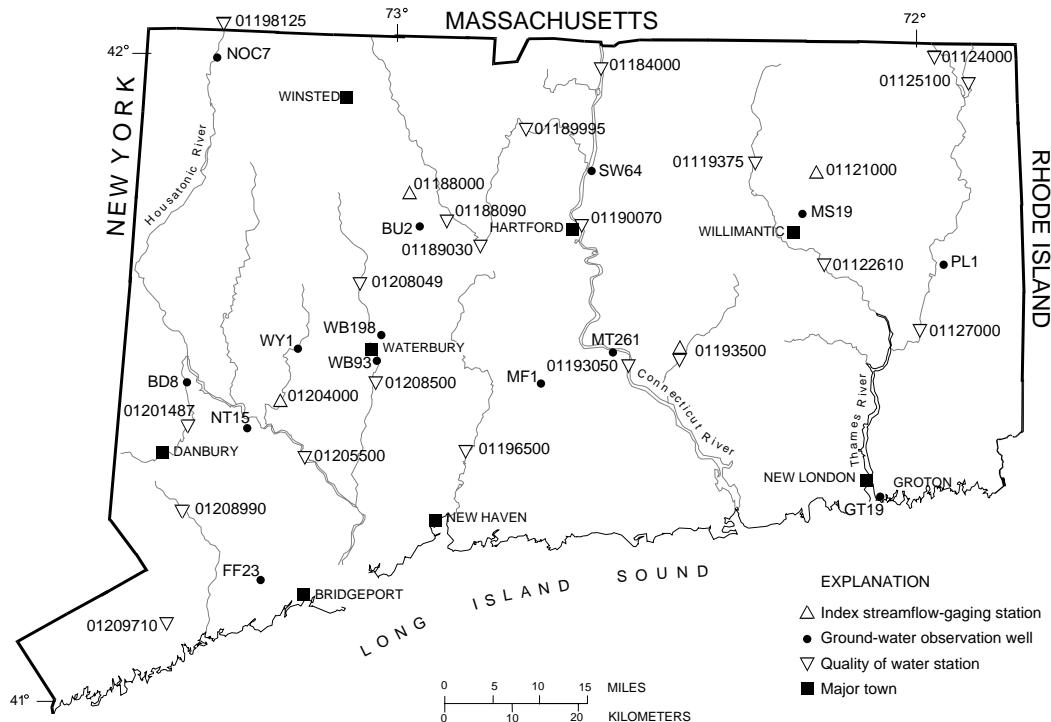


U.S. Department of the Interior U.S. Geological Survey



WATER-RESOURCES CONDITIONS IN CONNECTICUT, DECEMBER 2000

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

Streamflows in December were in the normal range for the entire State. Flow in Mount Hope River (NE Connecticut) remained in the normal range for the second consecutive month. Flows in Burlington Brook (NW Connecticut) and Pomperaug River (SW Connecticut) remained in the normal range for the fourth consecutive month. Flows in Salmon River (SE Connecticut) returned to the normal range after being in the below-normal range for two consecutive months. Across the State, mean streamflow for December averaged 76 percent of the December long-term median value.

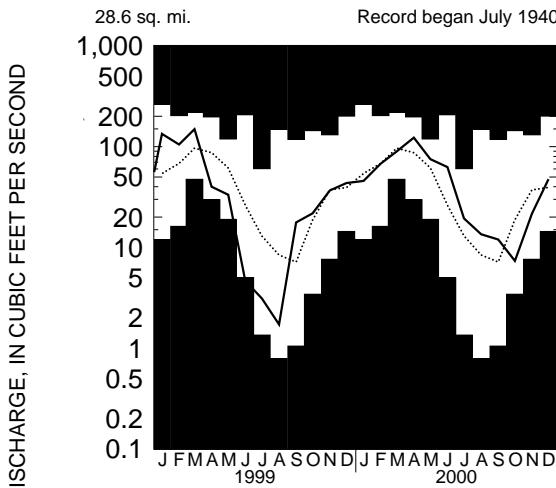
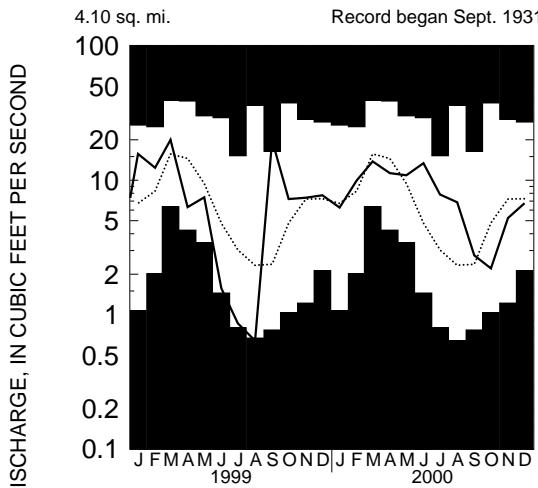
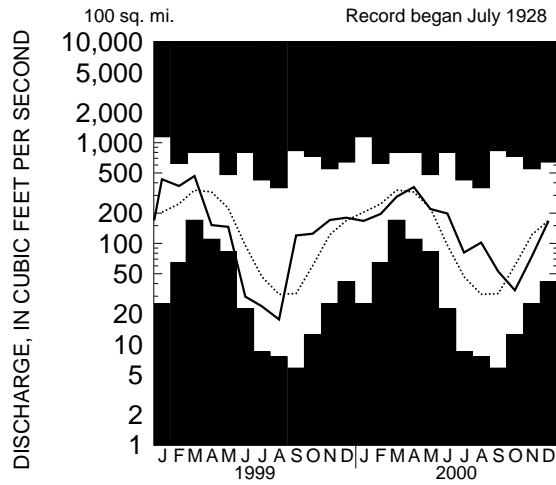
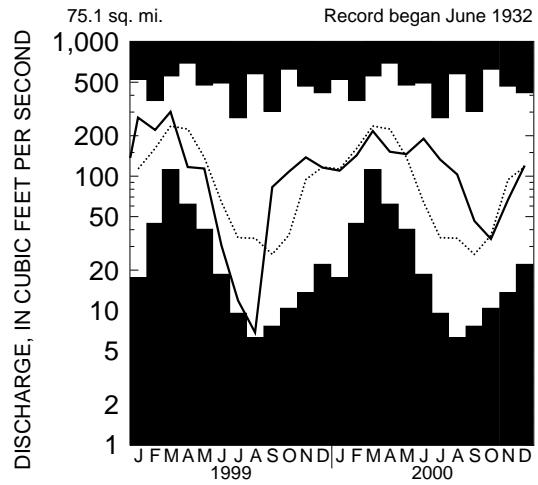
USGS STREAMFLOW-GAGING STATION NAME AND NUMBER	DEC. 2000 MEAN	NOV. 2000 MEAN	DEC. 1999 MEAN	DEC. MAXIMUM VALUE (year recorded)	DEC. MINIMUM VALUE (year recorded)	DEC. MEDIAN (1961-90)
MT HOPE RIVER (01121000)	47.5	21.7	43.5	201	1996	39.3
BURLINGTON (01188000)	6.75	5.24	7.73	27.1	1974	7.29
SALMON RIVER (01193500)	167	74.9	180	641	1973	169
POMPERAUG (01204000)	120	66.7	116	418	1996	117

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 SOUTHURY**

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

→ PROVISIONAL DATA ←

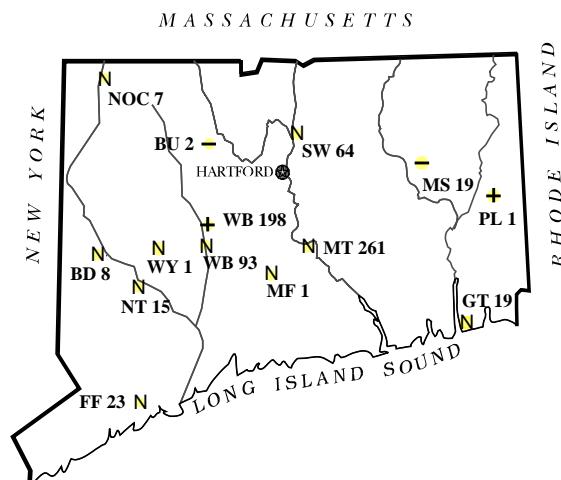
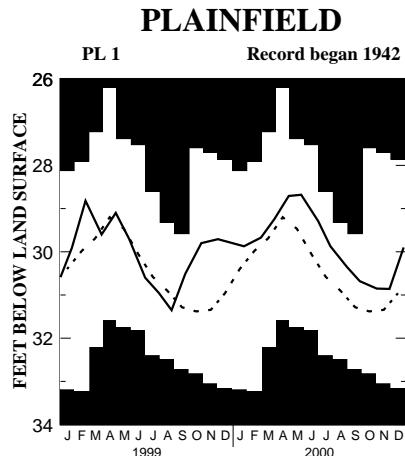
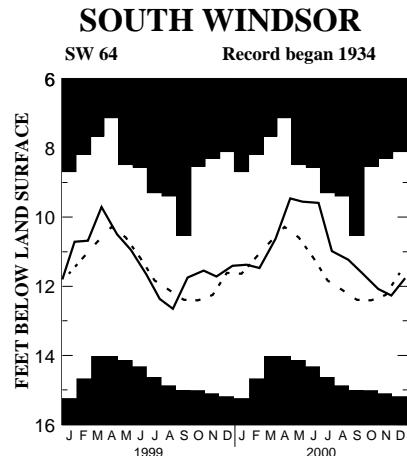
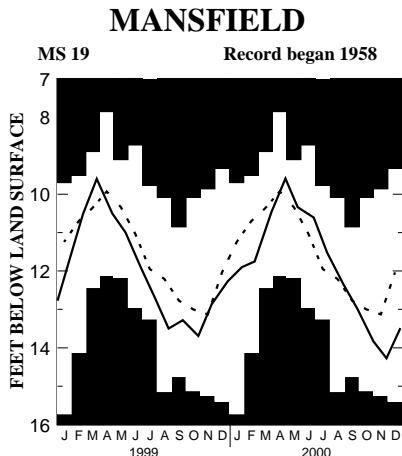
[Station locations shown on front page; --, not applicable; **streamflow** measured in instantaneous cubic feet per second; **% flow duration** is that flow that was equaled or exceeded more than "X" percent of the time from 1961-90; **bacteriological analysis** reconnaissance data enumerated using membrane 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 2000	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								
01122610 Shetucket R. at South Windham	12/19	2980/ --	84.1	2.5	13.8/101	7.3	413 K	2300
01124000 Quinebaug R. at Quinebaug								
01125100 French R. at North Grosvenordale								
01127000 Quinebaug R. at Jewett City								
01184000 Connecticut R. at Thompsonville	12/6	8920/ 68	130	1.5	13.8/ 95	7.6	180	46
01188090 Farmington R. at Unionville								
01189030 Pequabuck R. at Farmington	12/13	45.0/ --	359	1.5	11.3/ 78	7.4	3000	296 K
01189995 Farmington R. at Tariffville	12/13	373/ 90	160	1.5	13.3/ 93	7.3	290 K	32
01190070 Connecticut R. at Hartford	12/21	-- / --	86	0.5	13.4/ 92	7.5	145	1900 K
01193050 Connecticut R. at Middle Haddam	12/20	-- / --	106	0.5	13.7/ 104	7.2	800	2500
01193500 Salmon R. near East Hampton								
01196500 Quinnipiac R. at Wallingford	12/18	1210/ <1	208	5.5	11.5/ 91	7.3	4500 K	4340 K
01198125 Housatonic R. near Ashley Falls, MA								
01201487 Still R. at Rt. 7 at Brookfield Center								
01205500 Housatonic R. at Stevenson								
01208049 Naugatuck R. near Waterville								
01208500 Naugatuck R. at Beacon Falls								
01208990 Saugatuck R. near Redding								
01209710 Norwalk R. near Winnipauk	12/11	17.0/ --	346	5.0	--/ --	8.1	84	7 K

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 1999.
- Solid line shows current water levels.
- - - Dashed line is monthly median for period of record through calendar year 1999.



ABOVE NORMAL

Within the highest 25%
of record for this month.



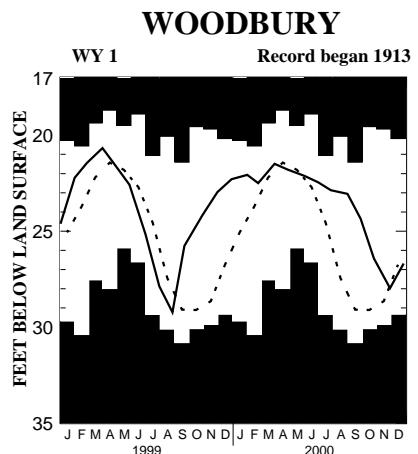
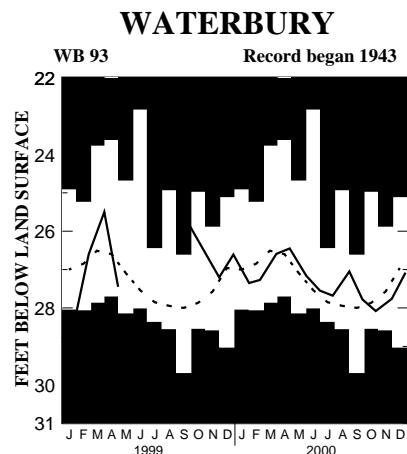
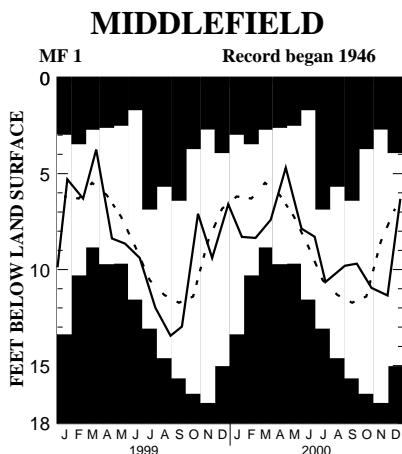
NORMAL RANGE

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

One high and two low ground-water levels were recorded for the month of December.

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 1999). 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
	DEC. 2000 (DATE)	NOV. 2000	DEC. 1999	DEC. MAX (YR RECORDED)	DEC. MIN (YR RECORDED)	DEC. MEDIAN				
BD 8 (Brookfield)	31.13	27	31.75	30.42	29.96	1996	33.17	1980	30.80	
BU 2 (Burlington)	33.72	26	27.04	25.38	16.53	1958	37.41	1948	23.25	
BU 143 (Burlington)	8.01	26	9.63	4.29	3.56	1996	9.75	1998	NA	1996
BU 144 (Burlington)	2.73	26	2.55	2.62	2.53	1996	2.73	2000	NA	< 1996
CL 223 (Clinton)	4.46	27	7.31	4.62	2.63	1996	10.26	1998	4.06	
CL 224 (Clinton)	21.68	27	22.37	21.48	17.93	1996	23.05	1998	20.84	
CL 225 (Clinton)	5.92	27	6.22	6.03	5.32	1993	6.56	1998	5.63	
CO 335 (Colchester)	7.25	27	7.69	7.25	4.73	1994	7.67	1998	6.92	
CV 51 (Coventry)	4.78	26	5.39	4.72	3.29	1996	7.28	1998	4.53	
D 116 (Durham)	0.42	26	0.56	0.26	0.12	1994	5.39	1994	0.42	
D 117 (Durham)	9.91	26	10.89	10.04	5.06	1996	11.91	1998	9.77	
D 119 (Durham)	0.29	26	0.34	0.22	+0.02	1996	1.91	1989	0.30	
D 120 (Durham)	2.09	26	2.15	2.01	1.01	1996	2.65	1998	2.01	
EL 82 (Ellington)	6.08	26	6.13	5.78	5.26	1996	6.38	1998	5.76	
EL 139 (Ellington)	27.75	26	DRY	20.07	20.11	1994	29.26	1998	20.93	
EL 140 (Ellington)	17.85	26	19.21	12.16	11.66	1996	19.92	1998	13.03	
EW 133 (East Windsor)	5.09	26	5.34	5.08	4.27	1996	5.47	1998	4.98	
EW 134 (East Windsor)	51.26	26	51.28	51.50	49.52	1989	51.50	1999	51.15	
FF 23 (Fairfield)	7.95	27	7.62	7.92	7.02	1986	8.50	1980	7.79	
FF 30 (Fairfield)	2.04	27	1.75	2.74	1.17	1996	13.22	1998	2.87	
FF 31 (Fairfield)	6.61	27	6.90	6.80	4.08	1993	13.70	1998	5.81	
FF 32 (Fairfield)	5.87	27	5.78	6.24	5.23	1996	13.46	1998	6.40	
FF 33 (Fairfield)	4.92	27	4.57	5.12	4.30	1997	5.92	1998	4.89	
GR 328 (Granby)	13.72	26	15.25	10.57	7.86	1996	16.02	1998	11.47	
GR 329 (Granby)	5.45	26	9.23	4.53	3.31	1996	10.34	1998	4.51	
GR 330 (Granby)	frozen	26	2.60	2.45	2.45	1999	3.74	1982	3.14	
GR 331 (Granby)	9.75	26	10.72	9.09	7.74	1994	10.11	1998	8.64	
GT 19 (Groton)	14.60	24	16.48	15.05	11.52	1969	17.48	1965	15.05	
HM 445 (Hamden)	17.22	27	27.05	19.37	17.22	2000	29.21	1998	21.95	> 1988
HM 446 (Hamden)	3.36	27	3.35	3.17	2.23	1993	4.02	1995	NA	
HM 447 (Hamden)	2.60	27	2.82	2.35	2.29	1995	3.67	1998	NA	
HM 448 (Hamden)	13.01	27	13.29	12.68	12.68	1999	13.84	1995	NA	
HM 449 (Hamden)	15.31	27	14.47	15.64	12.57	1997	18.56	1998	NA	
HM 450 (Hamden)	13.09	27	12.88	12.97	9.53	1997	13.39	1998	NA	1993

		GROUND-WATER LEVELS, IN FEET BELOW LAND SURFACE								
WELL NUMBER AND TOWN		DEC. 2000 (DATE)		NOV. 2000	DEC. 1999	DEC. MAX (YR RECORDED)	DEC. MIN (YR RECORDED)	DEC. MEDIAN	NEW RE-CORD	YR RECORD BEGAN
MB 32 (Marlborough)		5.57	26	7.79	3.89	1.08	1996	7.72	1998	3.47
MB 35 (Marlborough)		11.23	26	14.73	9.51	5.10	1996	14.37	1997	9.51
MB 36 (Marlborough)		2.97	26	3.69	3.18	2.35	1996	5.55	1998	3.18
MF 1 (Middlefield)		6.32	26	11.35	6.60	3.91	1973	15.00	1965	6.57
MS 19 (Mansfield)		13.49	26	14.27	12.27	9.33	1996	15.39	1965	12.04
MS 44 (Mansfield)		1.90	26	4.24	2.43	0.40	1986	5.59	1998	2.43
MS 45 (Mansfield)		12.65	26	13.49	12.74	10.21	1996	13.50	1998	11.67
MS 46 (Mansfield)		13.61	26	14.39	14.10	11.84	1996	14.50	1998	13.41
MS 74 (Mansfield)		4.87	26	7.79	4.59	0.69	1996	7.86	1998	2.24
MS 75 (Mansfield)		14.99	26	16.43	16.02	3.80	1996	20.69	1997	13.45
MS 76 (Mansfield)		29.81	26	29.85	32.08	27.60	1996	32.39	1994	31.63
MS 77 (Mansfield)		4.30	26	7.12	4.19	0.89	1996	7.22	1998	3.21
MT 261 (Middletown)		20.06	26	22.85	19.84	18.43	1983	26.75	1956	19.94
NHV 201 (North Haven)		16.11	27	16.46	16.50	13.46	1996	17.34	1987	16.42
NHV 202 (North Haven)		43.96	27	44.25	47.50	40.36	1996	59.10	1991	56.45
NOC 7 (North Canaan)		9.35	29	9.70	9.43	8.80	1972	10.80	1964	9.43
NSN 77 (N. Stonington)		9.52	27	14.04	11.03	6.99	1996	14.08	1998	10.59
NSN 78 (N. Stonington)		4.28	27	3.88	4.47	3.10	1992	4.47	1999	3.79
NT 15 (Newtown)		5.84	27	7.63	3.91	0.98	1972	10.11	1980	4.53
PL 1 (Plainfield)		29.90	27	30.86	29.79	27.86	1996	33.14	1965	30.89
SB 30 (Southbury)		20.49	27	20.85	17.91	15.72	1996	20.49	2000	18.62
SB 39 (Southbury)		6.76	27	7.22	6.41	4.64	1996	7.26	1998	6.05
SB 41 (Southbury)		48.49	27	50.80	47.59	45.32	1996	49.07	1998	46.85
SB 42 (Southbury)		13.08	27	15.59	12.14	11.46	1996	14.62	1998	12.17
SC 19 (Scotland)		4.90	27	9.39	3.65	1.82	1996	9.05	1998	3.80
SC 20 (Scotland)		7.24	27	11.16	4.80	4.08	1994	10.01	1997	5.00
SC 21 (Scotland)		0.14	27	1.02	0.72	+0.83	1996	1.26	1998	0.76
SC 22 (Scotland)		12.99	27	15.34	11.44	8.01	1996	13.97	1998	11.56
SC 23 (Scotland)		1.89	27	1.98	2.31	1.39	1996	2.31	1999	2.04
SM 7 (Salem)		10.06	27	12.87	9.60	6.62	1996	13.08	1997	9.45
SW 64 (S. Windsor)		11.77	26	12.27	11.41	8.10	1996	15.17	1965	11.62
SY 15 (Salisbury)		13.20	26	14.55	14.93	11.57	1996	17.10	1997	14.16
SY 23 (Salisbury)		5.60	26	7.22	5.33	4.65	1992	8.86	1998	5.87
SY 24 (Salisbury)		11.96	26	12.50	11.84	7.30	1996	14.44	1998	11.26
WB 93 (Waterbury)		27.08	27	27.76	26.61	25.10	1974	28.20	1965	26.94
WB 198 (Waterbury)		18.85	27	19.19	13.07	9.82	1951	20.18	1949	14.65
WY 1 (Woodbury)		26.68	27	27.97	22.29	20.18	1996	33.20	1914	26.95

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