



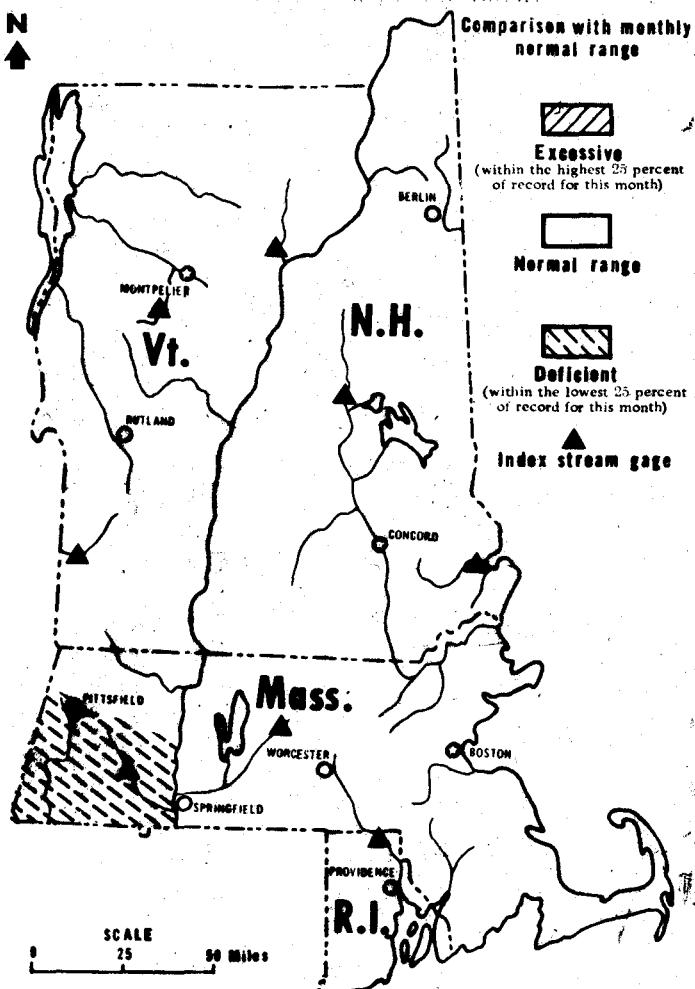
CURRENT WATER RESOURCES CONDITIONS IN CENTRAL NEW ENGLAND

WATER RESOURCES DIVISION, U.S. GEOLOGICAL SURVEY
IN COOPERATION WITH THE STATES OF
MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, AND VERMONT



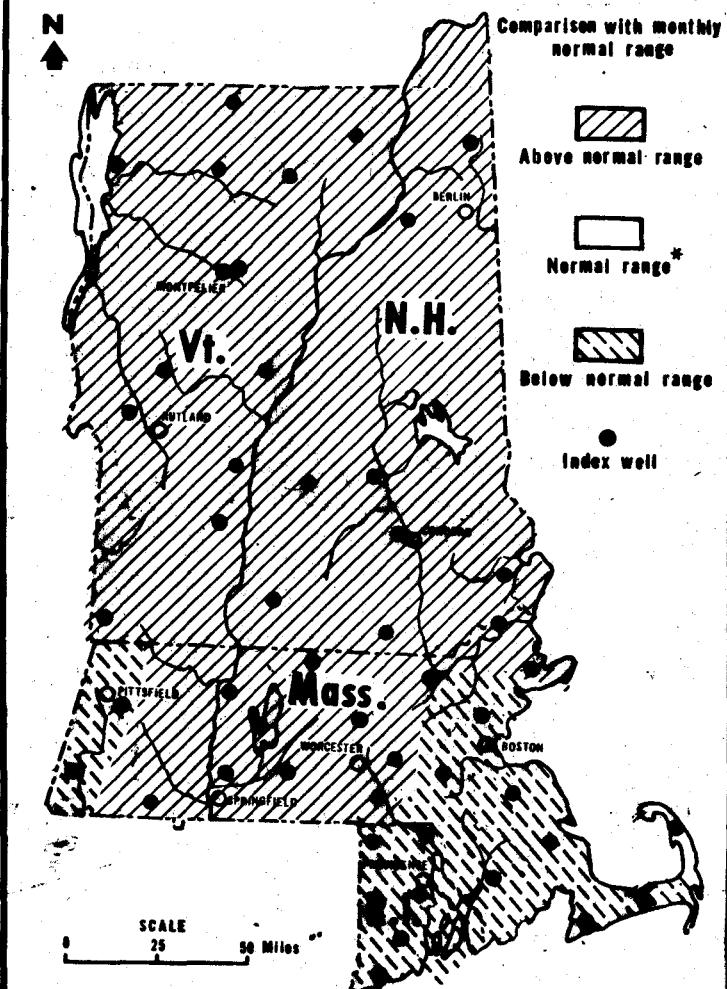
SURFACE-WATER RUNOFF

NOVEMBER 1981



GROUND-WATER LEVELS

NOVEMBER 1981



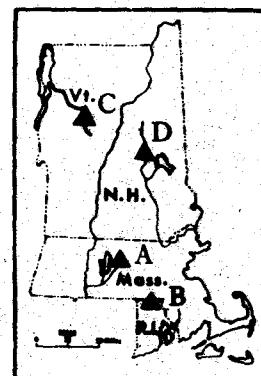
* Within 20% above or below monthly average water level

Runoff during November was in the normal range throughout central New England except in western Massachusetts, where it was deficient, as shown on the map above. A series of storms Nov. 17-21 produced moderate rises, but streamflow was declining by the end of the month. With normal precipitation during December, runoff is expected to be deficient in western Massachusetts and in the normal range elsewhere in central New England.

Ground-water levels during November were generally in the normal to above normal range except in southeastern Massachusetts and Rhode Island, where they were below normal. If present trends continue, water levels near the end of December are expected to remain in the same ranges in the same areas.

Storage in major reservoirs declined slightly in northern New Hampshire, remained about the same as last month elsewhere in the District and ranged from about 72 to 152 percent of average for the end of November. Total contents of all index reservoirs was about 102 percent of that of a year ago.

MONTHLY MEAN DISCHARGE, IN CUBIC FEET PER SECOND



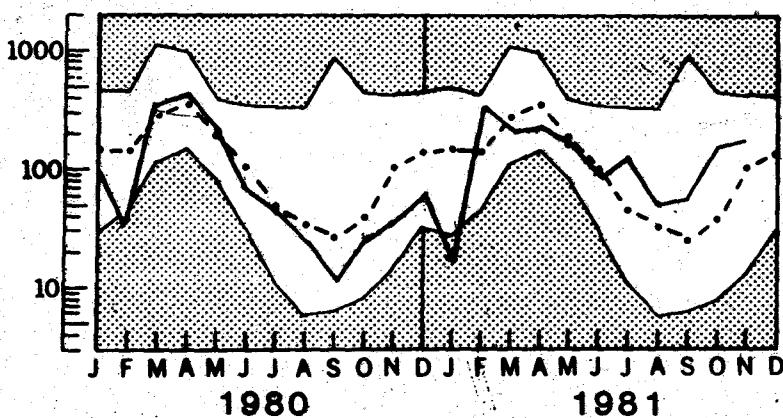
STREAMFLOW AT SELECTED INDEX GAGES

UNSHADED AREA SHOWS RANGE
BETWEEN HIGHEST AND LOWEST
MONTHLY MEAN DISCHARGES OF RECORD

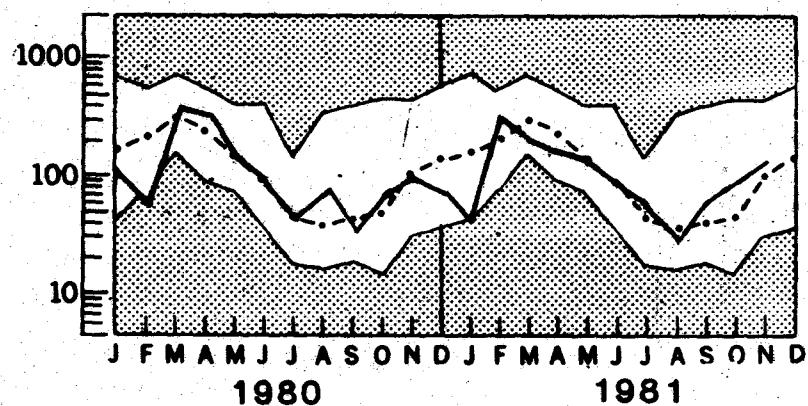
CURRENT RECORD —————

MEDIAN -----

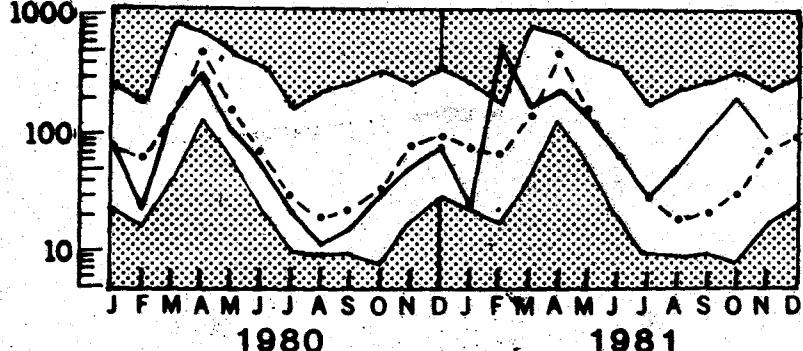
WARE RIVER AT INTAKE WORKS NEAR BARRE, MA (A)



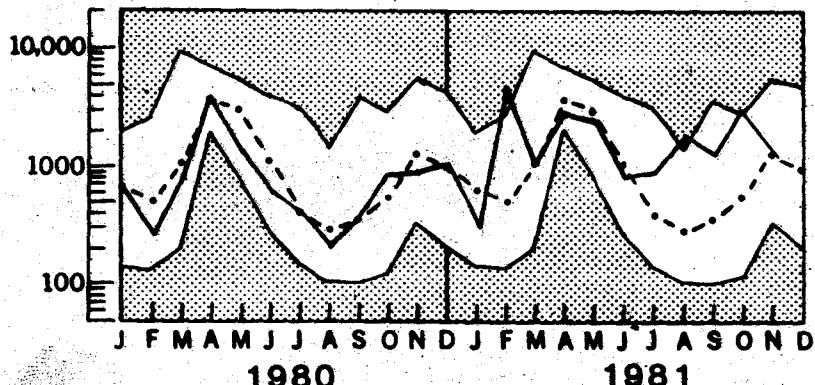
BRANCH RIVER AT FORESTDALE, R.I. (B)



DOG RIVER AT NORTHFIELD FALLS, VT. (C)



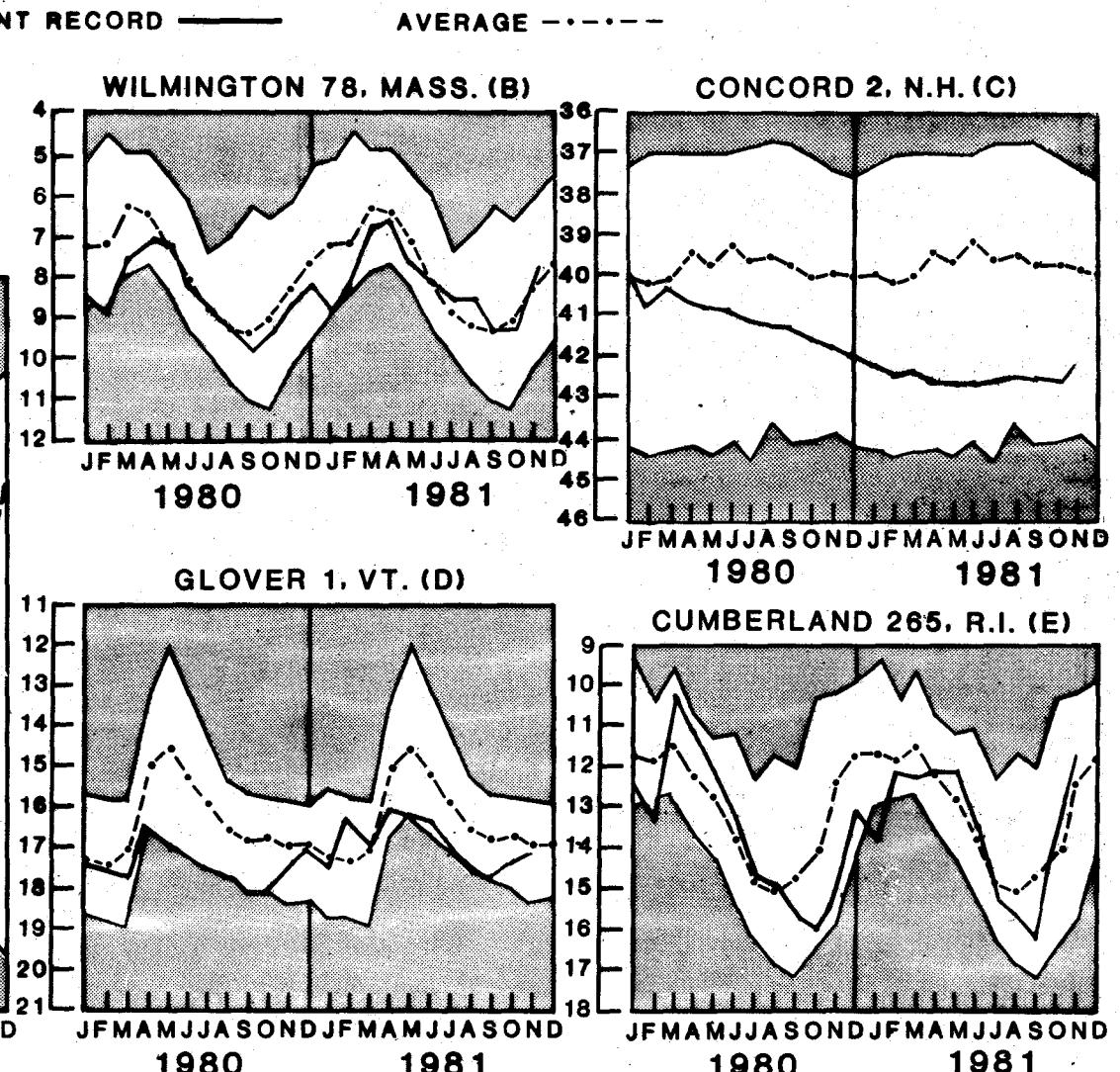
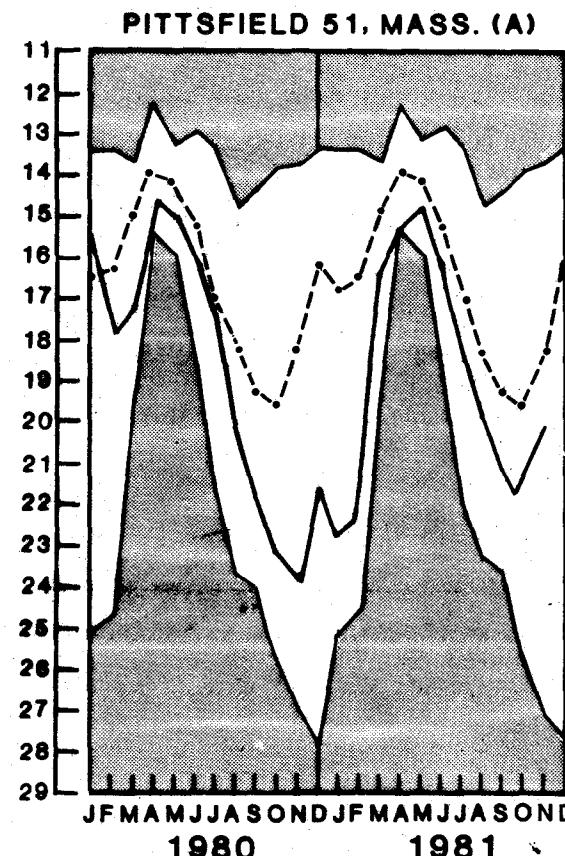
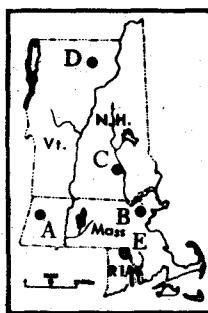
PEMIGEWASSET RIVER AT PLYMOUTH, N.H. (D)



GROUND-WATER LEVELS IN SELECTED OBSERVATION WELLS

UNSHADED AREA SHOWS RANGE BETWEEN HIGHEST AND LOWEST
MONTH-END WATER LEVEL OF RECORD

WATER LEVEL IN FEET BELOW LAND SURFACE



SUMMARY OF GROUND-WATER LEVELS, NOVEMBER 1981

PROVISIONAL

WELL	START OF RECORD	NET CHANGE		DEPARTURE FROM NOVEMBER AVERAGE*		WATER LEVEL BELOW LAND-SURFACE DATUM (FEET)
		IN MONTH (FEET)	IN ONE YEAR (FEET)	(FEET)	(FEET)	
MASSACHUSETTS						
ACTON 158	1965	+ 0.18	+ 0.39	- 0.52	20.44	
BARNSTABLE 230	1957	- 0.02	- 0.46	- 1.66	26.10 ##	
BARNSTABLE 247	1962	- 0.21	- 0.75	- 1.93	27.07	
BOURNE 198	1962	- 0.16	- 0.43	- 0.99	35.18	
BREWSTER 21	1962	- 0.06	- 1.49	- 2.66	12.89	
CHATHAM 138	1962	- 0.02	- 0.14	- 1.26	25.75	
DEDHAM 231	1965	+ 4.40	+ 4.43	+ 0.60	7.22	
DOVER 10	1965	+ 0.07	+ 0.04	- 0.80	35.61	
EAST BRIDGEWATER 30	1958	+ 0.54	+ 0.65	- 3.88	16.27	
FREETOWN 23	1964	+ 0.28	- 0.01	- 0.95	14.91	
GRANVILLE 5	1965	- 0.06	- 0.66	- 0.82	34.62	
GREAT BARRINGTON 2	1951	+ 0.35	+ 0.49	- 1.28	12.48	
HAVERHILL 23	1960	+ 0.62	+ 0.76	- 0.17	13.53	
LOWELL 14	1939	+ 0.95	+ 1.64	- 0.08	15.64	
MONTAGUE 5	1942	+ 0.79	+ 0.26	- 0.91	4.58	
NORTHBOROUGH 38	1962	+ 1.58	+ 3.32	+ 1.52	4.78	
NORTHBRIDGE 1	1965	+ 0.48	+ 0.44	+ 0.31	2.99	
PITTSFIELD 51	1963	+ 1.87	+ 3.81	- 1.90	20.11	
PLYMOUTH 22	1956	- 0.21	- 0.78	- 2.21	27.66	
SANDWICH 252	1962	+ 0.23	- 0.05	- 0.29	47.77	
SANDWICH 253	1962	0.0	- 0.93	- 2.12	52.33	
STERLING 1	1947	+ 3.01	+ 10.79	+ 3.05	3.03	
TRURO 89	1962	+ 0.10	+ 0.02	- 0.36	12.58	
WELLFLEET 17	1962	- 0.08	+ 0.04	- 1.12	12.12	
WENHAM 76	1965	+ 1.37	+ 0.72	+ 0.86	1.94	
WEST BROOKFIELD 10	1970	+ 1.83	+ 7.26	+ 3.24	4.65	
WEYMOUTH 2	1965	+ 4.44	+ 6.44	- 0.25	16.19	
WILMINGTON 78	1951	+ 1.29	+ 0.92	+ 0.41	7.83	
WINCHENDON 13	1939	+ 0.34	+ 9.23	+ 4.67	3.42	
NEW HAMPSHIRE						
CONCORD 2	1963	+ 0.48	- 0.38	- 1.95	42.16	
CONCORD 3	1966	+ 0.01	+ 0.01	- 0.48	57.79	
CONCORD 4	1966	+ 0.86	+ 2.50	+ 0.50	17.47	
FRANKLIN 1	1966	+ 1.11	+ 4.46	+ 2.13	11.29 #	
KEENE 2	1963	+ 0.81	+ 2.21	+ 0.89	2.30	
LEE 1	1953	+ 0.66	+ 0.70	+ 0.16	31.08	
MERRIMACK 22	1958	+ 2.70	+ 2.87	+ 1.56	6.28	
MILFORD 36	1962	+ 0.98	*****	+ 1.75	7.13	
NASHUA 218	1964	+ 1.63	+ 2.21	+ 1.10	27.68	
NEW LONDON 1	1947	+ 4.16	+ 9.37	+ 4.82	6.58	
WARNER 1	1965	+ 0.56	+ 1.92	+ 0.28	31.38	
RHODE ISLAND						
BURRILLVILLE 187	1968	+ 0.92	+ 0.61	- 0.61	17.28	
CHARLESTOWN 18	1946	+ 0.05	- 0.04	- 1.85	21.21	
CUMBERLAND 265	1946	+ 2.11	+ 3.35	+ 0.66	11.96	
EXETER 16	1946	+ 0.14	+ 1.30	+ 0.13	12.64	
PROVIDENCE 48	1944	+ 0.73	+ 0.97	+ 1.50	5.83	
WEST GREENWICH 181	1969	+ 0.49	+ 0.88	- 0.04	16.05	
VERMONT						
BERKSHIRE 1	1966	+ 1.06	+ 1.48	+ 1.06	12.84	
BRIGHTON 1	1966	+ 0.04	+ 0.35	+ 0.11	3.65	
CHESTER 1	1966	+ 0.21	+ 0.68	- 0.17	5.07	
GLOVER 1	1966	+ 0.40	+ 0.30	- 0.13	17.18	
HARTLAND 54	1969	+ 0.12	+ 0.81	- 0.01	9.06	
MILTON 3	1956	+ 4.84	+ 7.88	+ 4.73	28.73	
MONTPELIER 2	1966	+ 0.11	+ 0.89	+ 0.31	14.99	
MORRISTOWN 1	1966	+ 0.77	+ 0.82	+ 0.68	18.63	
PITTSFORD 8	1957	+ 0.50	+ 2.02	+ 1.80	35.09	
POWNAL 1	1964	+ 0.32	+ 1.36	+ 0.59	13.62	
ROCHESTER 1	1966	+ 0.13	+ 2.74	+ 1.49	9.31	
WEST FAIRLEE 1	1966	+ 0.25	+ 2.39	+ 1.35	2.68 #	

SET NEW HIGH OR EQUALLED HIGHEST RECORDED WATER LEVEL FOR END OF NOVEMBER

SET NEW LOW OR EQUALLED LOWEST RECORDED WATER LEVEL FOR END OF NOVEMBER

* - MONTHLY AVERAGE INCLUDES CURRENT MEASUREMENT

***** - DATA NOT AVAILABLE

A MONTHLY REPORT PREPARED BY THE
U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION
150 CAUSEWAY STREET, BOSTON, MA 02114

IVAN C. JAMES II, DISTRICT CHIEF

IN COOPERATION WITH THE STATES OF
MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, AND VERMONT