

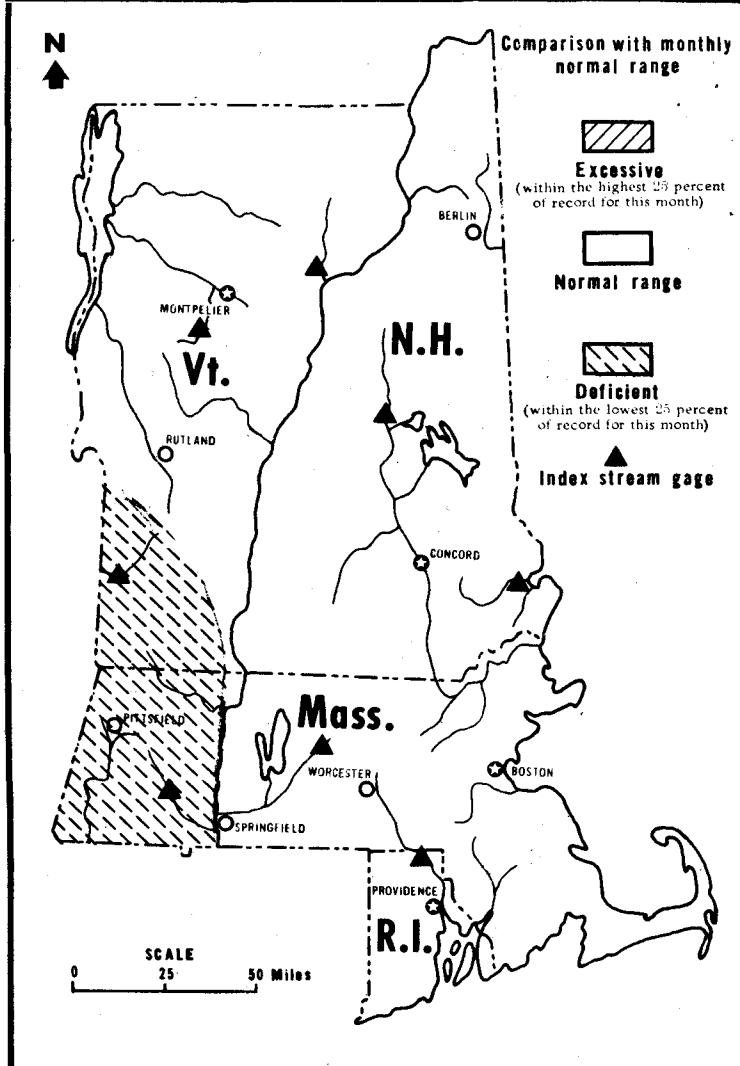


CURRENT WATER RESOURCES CONDITIONS IN CENTRAL NEW ENGLAND

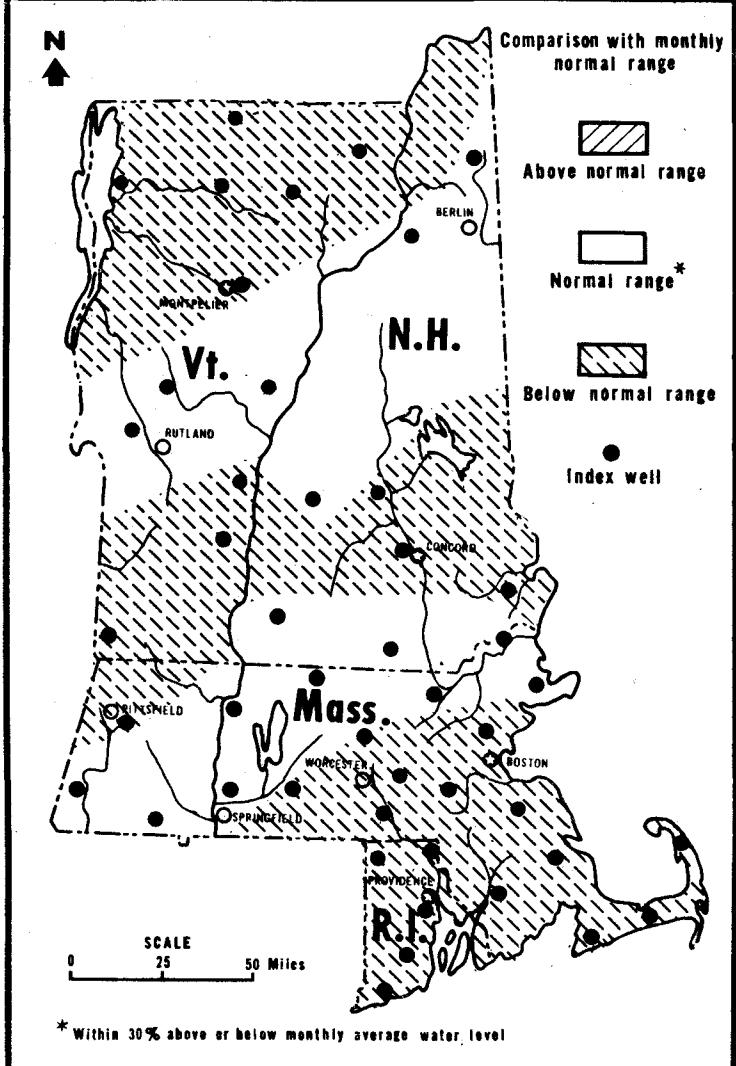


WATER RESOURCES DIVISION, U.S. GEOLOGICAL SURVEY
IN COOPERATION WITH THE STATES OF
MASSACHUSETTS, NEW HAMPSHIRE, RHODE ISLAND, AND VERMONT

SURFACE-WATER RUNOFF MAY 1981



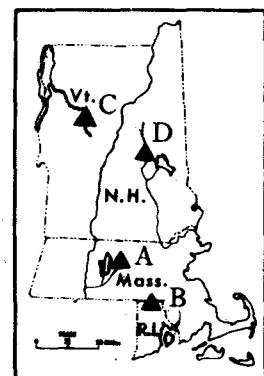
GROUND-WATER LEVELS MAY 1981



Runoff was in the normal range except in southwestern Vermont and western Massachusetts, where it was deficient. Following high water about May 16-18, streamflow declined rapidly, and by the end of the month was in the low-normal range in the northern half of New Hampshire and Vermont and in the deficient range elsewhere. With normal precipitation during June, runoff is expected to be in the low-normal range in northern New Hampshire and Vermont and in the deficient range in the remainder of central New England.

Ground-water levels showed mixed trends and ranged from normal to below normal, as shown on the map above. Five of the wells reported on page 4 set new lows for May for periods of record. If present trends continue, levels during June are expected to be generally in the below-normal range.

Storage in major reservoirs increased in extreme northern New Hampshire, decreased slightly in central New Hampshire, and remained about the same in Massachusetts, Rhode Island, and southern Vermont. Storage ranged from 73 to 133 percent of average near the end of May. Total contents of all index reservoirs was about 96 percent of that of a year ago.



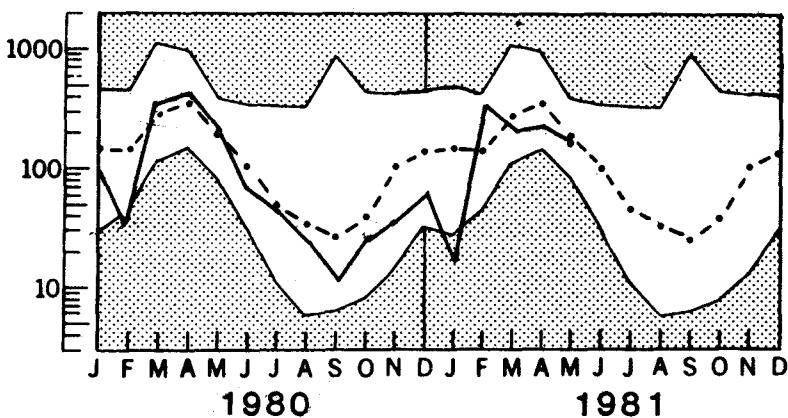
STREAMFLOW AT SELECTED INDEX GAGES

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

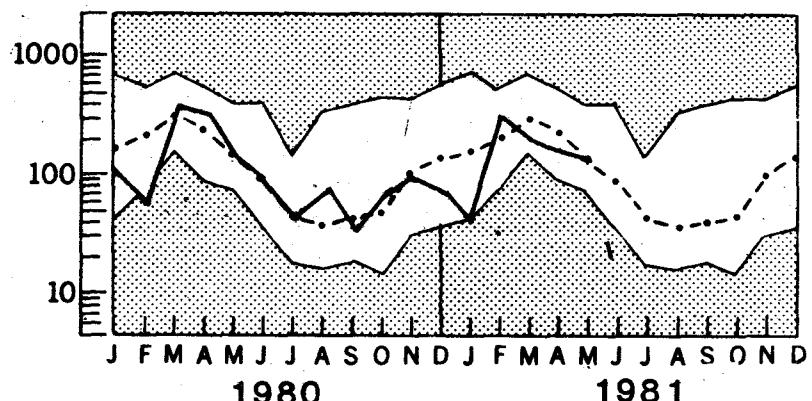
CURRENT RECORD —

MEDIAN -----

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



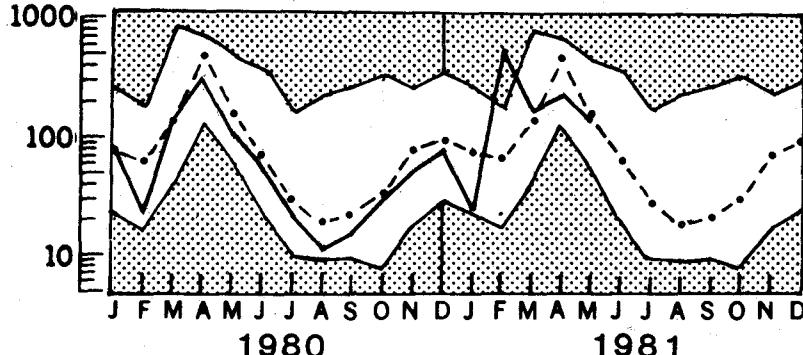
BRANCH RIVER AT FORESTDALE, R.I. (B)



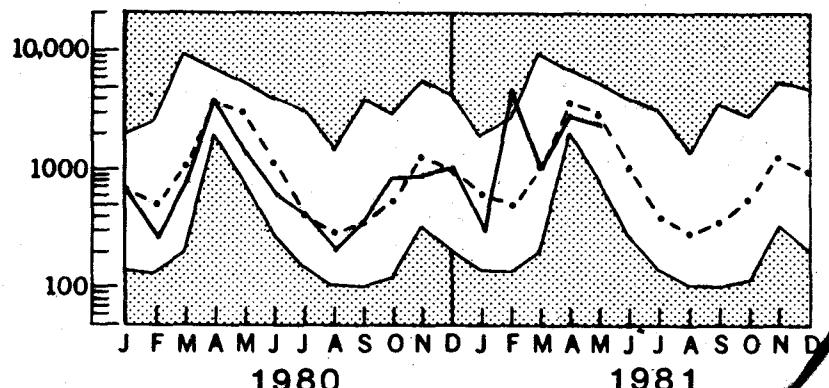
MONTHLY MEAN DISCHARGE, IN CUBIC FEET PER SECOND

-2-

DOG RIVER AT NORTHFIELD FALLS, VT. (C)



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

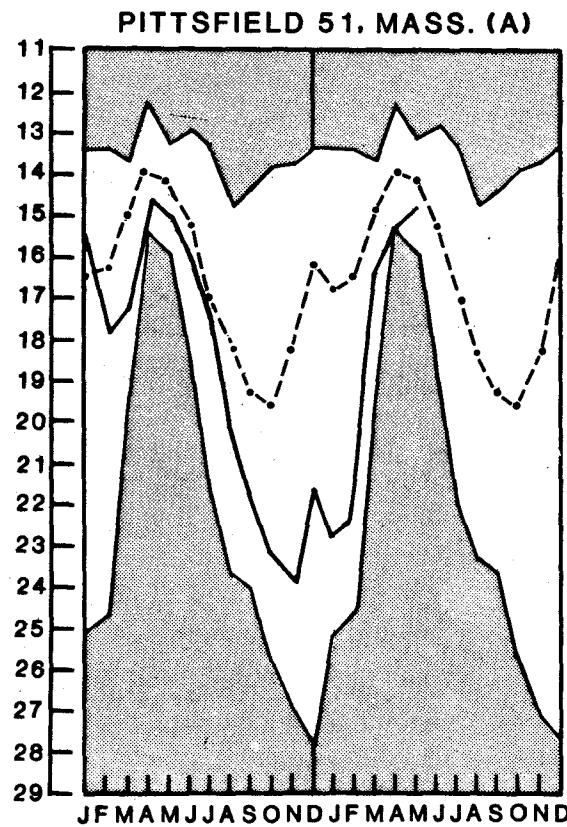
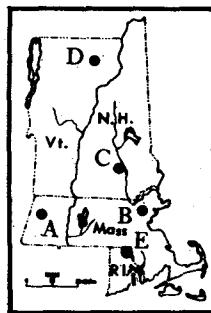


GROUND-WATER LEVELS IN SELECTED OBSERVATION WELLS

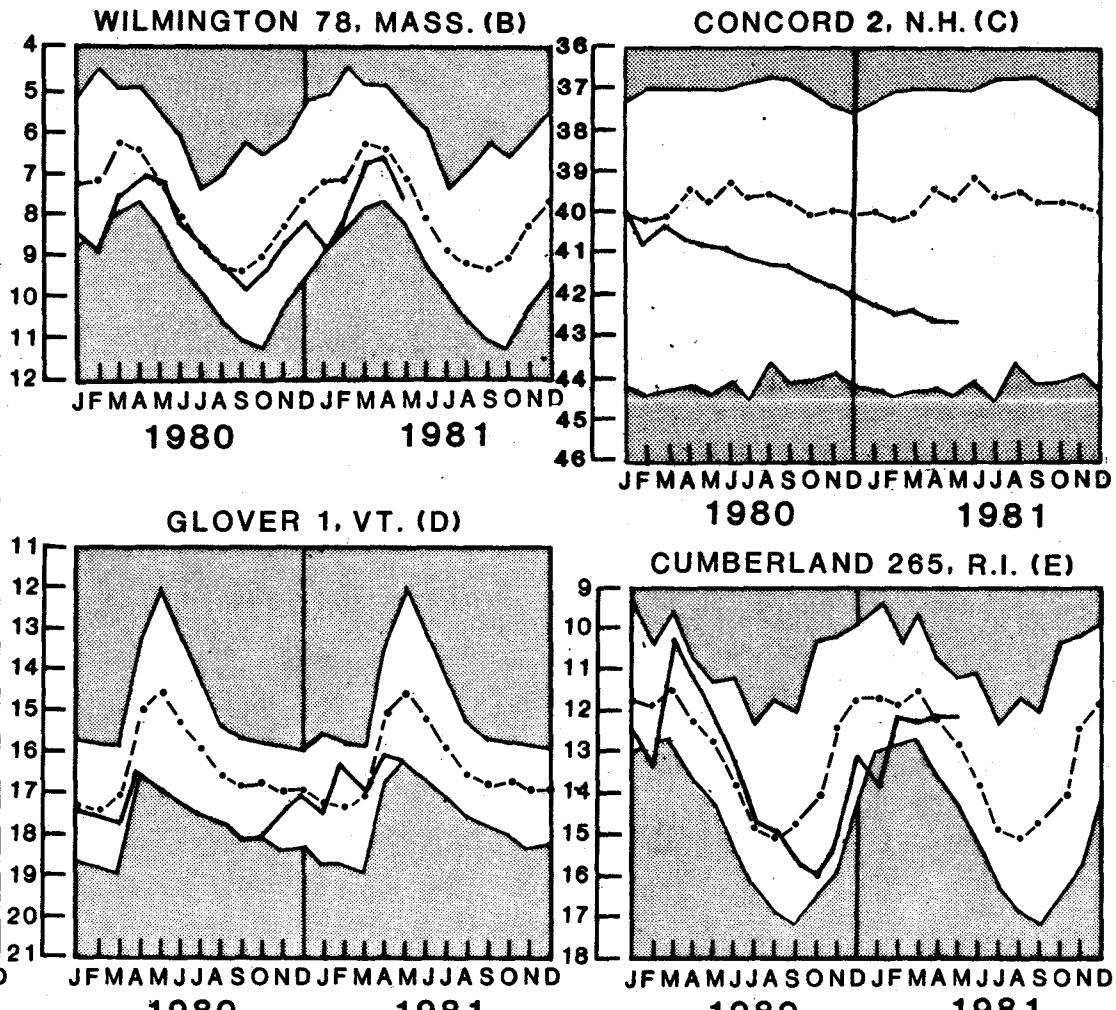
UNSHADED AREA SHOWS RANGE BETWEEN HIGHEST AND LOWEST
MONTH-END WATER LEVEL OF RECORD

WATER LEVEL IN FEET BELOW LAND SURFACE

-3-



CURRENT RECORD ————— AVERAGE -----



SUMMARY OF GROUND-WATER LEVELS. MAY 1961

PROVISIONAL

WELL	START OF RECORD	NET CHANGE		DEPARTURE FROM MAY AVERAGE*	WATER LEVEL BELOW LAND-SURFACE DATUM (FEET)
		IN MONTH (FEET)	IN ONE YEAR (FEET)		
MASSACHUSETTS					
ACTION 158	1965	- 0.13	- 1.36	- 1.27	19.22
BARNSTABLE 230	1957	- 0.10	- 1.13	- 1.57	24.44
BARNSTABLE 247	1962	- 0.08	- 1.74	- 2.09	25.88
BOURNE 158	1962	- 0.35	- 0.67	- 0.83	33.41
BRYANTER 21	1962	- 0.14	- 2.60	- 2.63	12.00
CHATHAM 138	1962	- 0.04	*****	- 1.77	24.92
DEUFAN 231	1965	- 0.80	- 0.23	- 0.62	6.50
DOVER 10	1965	+ 0.16	- 1.26	- 1.54	33.60
EAST BRIDGEWATER 30	1958	- 0.75	- 1.69	- 1.99	8.83
FREETOWN 23	1964	+ 0.08	- 1.46	- 1.64	14.50
GRANVILLE 5	1965	- 0.04	- 2.82	- 1.10	33.12
GREAT BARRINGTON 2	1951	- 0.18	+ 1.83	+ 1.08	8.98
HAWFORTH 23	1960	- 0.26	+ 0.24	- 0.67	11.33
LOWELL 14	1939	- 0.14	- 1.40	- 0.45	11.64
MONTAGUE 5	1942	- 0.35	- 1.48	- 0.55	3.33
NORTHRIDGE 38	1962	- 0.34	- 0.46	- 0.50	5.36
NORTHERIDGE 1	1965	+ 0.13	- 0.53	- 0.13	2.88
PITTSFIELD 51	1963	+ 0.35	+ 0.27	- 0.50	14.83
PLYMOUTH 22	1956	- 0.13	- 2.22	- 2.94	26.36
SANDWICH 252	1962	+ 0.04	- 0.23	- 0.49	47.46
SANDWICH 253	1962	- 0.07	- 1.43	- 1.77	50.97
STEPPLING 1	1947	- 0.41	- 0.44	- 0.18	3.63
TRURO 89	1962	- 0.16	- 0.06	- 0.28	12.11
WELLFLEET 17	1962	- 0.23	- 0.41	- 1.17	10.88
WENHAM 76	1965	- 0.31	- 0.13	- 0.15	2.62
WEST BROOKFIELD 10	1970	- 0.42	+ 0.31	+ 0.36	3.40
WEYMOUTH 2	1965	- 0.66	- 2.26	- 3.36	12.57 ##
WILMINGTOM 78	1951	- 0.29	- 0.46	- 0.52	7.05
WINCHENDON 13	1939	- 0.54	+ 2.01	+ 0.98	3.62
WINCHESTER 14	1940	- 0.69	- 1.00	- 0.58	10.25
RHODE ISLAND					
BURRILLVILLE 187	1968	+ 0.05	- 1.11	- 1.12	15.03 ##
CHARLESTOWN 16	1946	+ 0.73	- 2.47	- 1.70	18.24
CUMHERLAND 265	1946	- 0.09	+ 0.20	+ 0.62	12.10
EXETER 16	1946	*****	- 2.90	- 1.44	11.92
PROVIDENCE 48	1944	+ 0.16	- 1.00	+ 0.14	6.75
WEST GREENWICH 181	1969	- 0.24	+ 0.12	- 0.25	15.82
NEW HAMPSHIRE					
CONCORD 2	1963	- 0.05	- 1.89	- 2.66	42.62
CONCORD 3	1966	+ 0.01	- 0.27	- 0.82	57.84
CONCORD 4	1965	+ 0.40	- 0.32	- 1.41	17.84 ##
FRANKLIN 1	1966	+ 0.58	- 1.63	- 3.34	13.40 ##
KEENE 2	1963	- 0.37	+ 0.45	- 0.20	3.43
LEE 1	1953	- 0.11	- 0.16	- 0.34	31.05
MERRIMACK 22	1958	- 0.54	- 0.10	- 0.33	7.10
MILFORD 36	1962	- 0.20	+ 0.09	+ 0.20	8.02
NASHUA 218	1964	+ 0.09	*****	- 0.05	27.31
NEW LONDON 1	1947	- 0.37	- 2.17	+ 0.68	5.61
WARNER 1	1965	+ 0.28	*****	- 1.76	30.27
VERMONT					
BERKSHIRE 1	1966	- 0.62	+ 0.52	- 0.83	14.30
BRIGHTON 1	1966	- 0.05	- 0.14	- 0.69	4.00 ##
CHESTER 1	1966	- 0.32	+ 0.33	- 0.53	5.03
GLOVER 1	1966	- 0.14	+ 0.68	- 1.54	16.25
HARTLAND 54	1969	- 0.12	+ 0.46	- 0.62	8.55
MILTON 3	1956	+ 0.93	+ 0.17	- 2.42	32.30
MONTPELIER 2	1966	+ 1.00	- 1.44	+ 0.08	13.70
MORRISTOWN 1	1966	- 0.65	+ 1.18	- 0.30	18.25
PITTSFORD 8	1957	+ 0.21	- 0.28	- 0.22	36.67
POWNAL 1	1964	- 0.27	+ 0.04	- 0.32	13.56
ROCHESTER 1	1966	- 0.04	+ 1.35	+ 0.30	8.84
WEST FAIRLEE 1	1966	+ 0.62	+ 1.39	+ 0.34	2.16

SET NEW LOW OR EQUALS LOWEST RECORDED WATER LEVEL FOR END OF MAY

* - 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