



**EXPLANATION**

— 20 — WATER-TABLE CONTOUR— Shows approximate altitude of water table; dashed where uncertain. Interval is 20 feet. Datum is National Geodetic Vertical Datum of 1929. Based on (1) water levels measured in 96 dug wells and 21 drilled wells and (2) altitudes of springs, ponds, and wetlands estimated from topographic map. Depth to water ranged from less than 1 to 24 feet; mean depth to water was 6 feet. Seasonal fluctuations in four shallow wells measured monthly during 1988, 1989, and 1990 ranged from 2 to 9 feet. The glacial deposits of Block Island are predominantly silt and sand and gravel interbedded with numerous lenses of silt and clay.

The 40-foot depression contour in Rodman Hollow at the southern end of the island encloses an area where ground water flows downward, then laterally seaward and upward into the ocean. The 120-foot depression contour that encloses Sachem Pond is caused by withdrawals from the pond for public water supply. Occasionally, the pond-surface altitude is higher than ground-water level at the northern end of the pond. On these occasions, shallow ground water flows northward from the pond toward the Great Swamp.

ARROW— Shows general direction of horizontal component of ground-water flow near the water-table surface.

(1) Number is altitude of water table in feet above National Geodetic Vertical Datum of 1929. Shown to nearest foot if determined by altimeter or estimated from topographic map; to nearest 0.1 foot if determined by leveling. Altitudes in parentheses measured during March-September 1988-90; all other altitudes measured during June-September 1962.

○ Dog well, less than 35 feet deep

○ Drilled well or boring, less than 35 feet deep

○ Spring

Use of water levels from different years in contouring the water-table surface is justified because water levels in eight of nine dug wells on Block Island in 1962 differed by less than 2 feet from levels at about the same time of year in 1988, 1989, and 1990. The map represents a generalized water-table configuration based on measurements made at two distinct periods in time. It does not represent an average or steady-state water-table surface and should not be used for site-specific investigations.

SCALE 1:12,000

CENTIMETER INTERVAL: 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929  
DEPTH CURVES AND SOUNDINGS IN FEET— DATUM IS MEAN LOW WATER  
SOUNDING SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN LOW WATER  
THE MEAN RANGE OF TIDE IS APPROXIMATELY 2.6 FEET IN THE GREAT SALT POND  
AND 2 FEET IN OTHER ISLAND SOUNDINGS

**GENERALIZED WATER-TABLE MAP OF BLOCK ISLAND, RHODE ISLAND**  
By  
H.E. Johnston and A. I. Veeger  
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Base modified from U.S. Geological Survey 1:24,000, 1957

For additional information write to:  
Subcontract Chief  
U.S. Geological Survey  
227 J.O. Patton Federal Building  
Providence, RI 02903-1720

Copies of this map can be purchased from:  
U.S. Geological Survey  
Rock and Open-File Reports Section  
Federal Center Box 2525  
Denver, Colorado 80225