

# GROUNDWATER STUDY of the STRAFFORD REGION

## GROUNDWATER AVAILABILITY in SOUTHEASTERN NEW HAMPSHIRE

### EXPLANATION

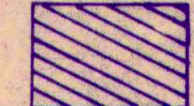
Patterns used below to designate areas apply only to the New Hampshire part of the Piscataqua and other coastal river basins and not to the adjoining areas.



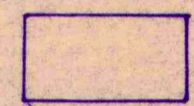
Areas inferred to be underlain by medium to very coarse sand or sand and gravel with sufficient saturated thickness to have high potential to yield water. Included are areas with fine-grained surficial deposits, which are inferred to be underlain by medium to very coarse sand or sand and gravel. Wells located by systematic groundwater exploration within these areas should yield sufficient quantities of water to meet or augment municipal and industrial requirements. Deposits are thinner and wells would be less productive along the margins of these areas. Pumping wells adjacent to streams, lakes or tidewater may induce surface water to infiltrate the aquifer.



Areas inferred to be underlain by relatively thin saturated sections of medium to very coarse sand or sand and gravel that have medium potential to yield water. Shallow wells and infiltration galleries located by systematic groundwater exploration within these areas may yield sufficient quantities of water for small municipal and rural water districts and commercial and light industrial use. Deposits are thinner and wells would be less productive along the margins of these areas, except where they border areas of high potential. Pumping wells adjacent to streams, lakes, or tidewaters may induce surface water to infiltrate the aquifer.

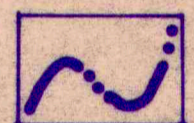


Areas inferred to be underlain by fine and very fine sand, silt, and clay that have low potential to yield water. These deposits may yield sufficient water to wells for domestic and light commercial use. In places, thin lenses of coarse sand or sand and gravel with higher potential yield may occur within or underlie these deposits, but these lenses may or may not have adequate storage or recharge to provide large sustained well yields. Pumping wells adjacent to streams, lakes, or tidewater may induce surface water to infiltrate the aquifer.

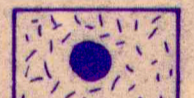


Areas in which glacial till (hardpan) and bedrock (ledge) are at, or inferred to be near, the surface and have low potential to yield water. Included are areas with thin deposits of gravel, sand, silt, or clay, underlain by till or bedrock, and areas of relatively thick deposits of sand or sand and gravel (high terraces) with little or no saturated thickness during dry periods, sandy barrier beaches where salty groundwater occurs beneath thin lenses of fresh groundwater, and tidal marshes where groundwater is commonly brackish. Wells in till and bedrock commonly yield sufficient water for single-family domestic use. In places, where wells penetrate extensive, saturated zones of fractures in bedrock, individual wells may yield more than 40 gallons per minute (2.5 litres per second).

River basins of the Strafford region delineated by topography from USGS quadrangle maps.



Well Field



Well



Source: Availability of Groundwater in the Piscataqua and Other Coastal River Basins, Southeastern New Hampshire; Water Resources Investigations 77-70 by John Cotton, 1977.

MAP 4 of 5

