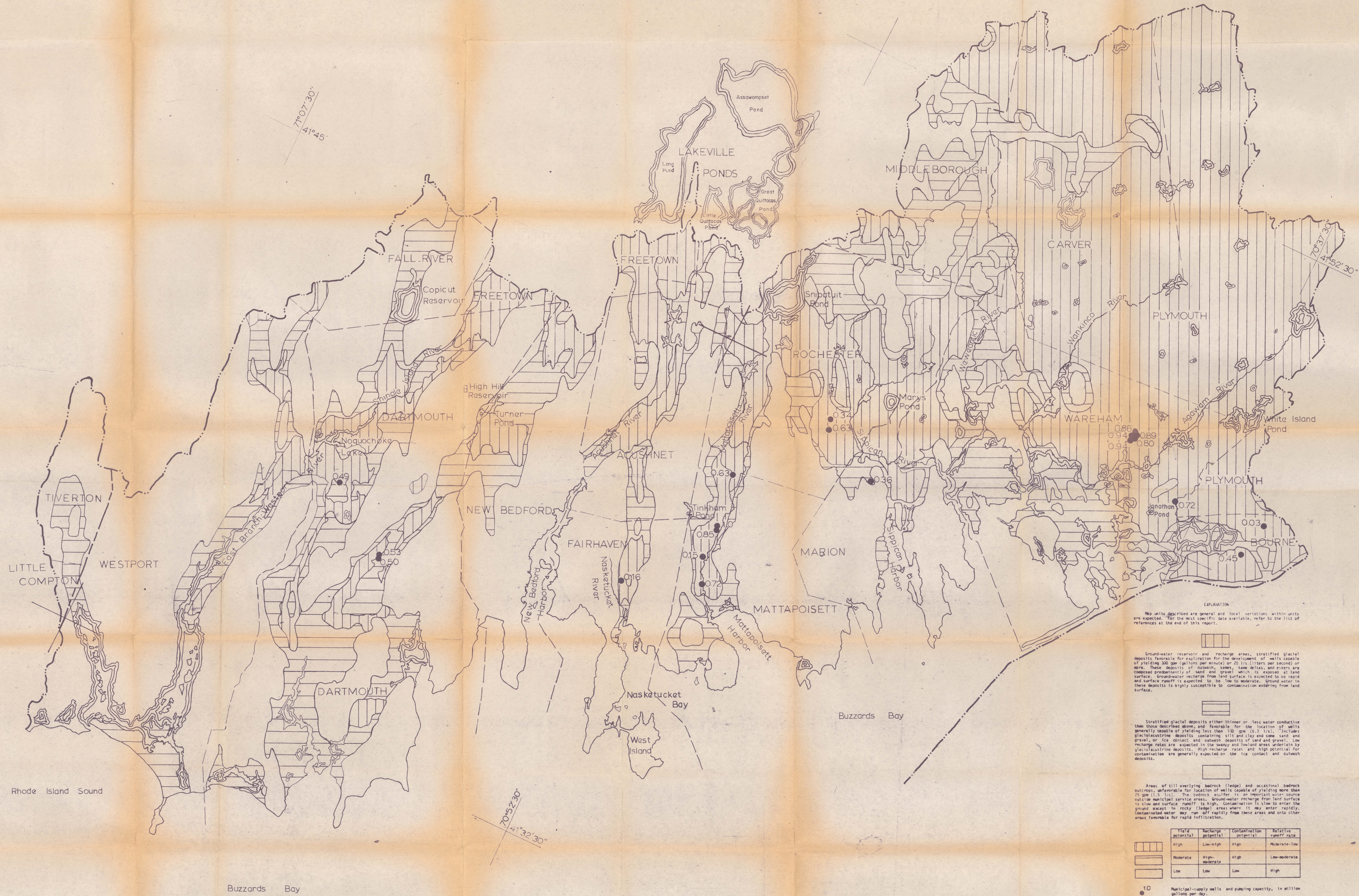


GROUND-WATER RECHARGE AND FAVORABILITY



Map units described are general and local variations within units are expected. For the most specific data available, refer to the list of references at the end of this report.

Ground-water reservoir and recharge areas, stratified glacial deposits favorable for the development of wells capable of yielding 300 gpm (gallons per minute) or 20 l/s (liters per second) or more. These deposits of outwash, sand, silt, and gravel are composed predominantly of sand and gravel which is exposed at land surface. Ground-water recharge from land surface is expected to be rapid and surface runoff is expected to be low to moderate. Ground water in these deposits is highly susceptible to contamination entering from land surface.

Stratified glacial deposits either thinner or less water conductive than those described above, and favorable for the location of wells generally capable of yielding less than 100 gpm (6.3 l/s). Includes glaciolacustrine deposits containing silt and clay and some sand and gravel, or ice contact and outwash deposits of sand and gravel. Low recharge rates are expected in the swampy and lowland areas underlain by glaciolacustrine deposits. High recharge rates and high potential for contamination are generally expected on the ice contact and outwash deposits.

Areas of alluvial bedrock (ledge) and occasional bedrock outcrops, unfavorable for location of wells capable of yielding more than 25 gpm (1.5 l/s). The bedrock aquifer is an important water source within municipal service areas. Ground-water recharge from land surface is slow and surface runoff is high. Contamination is slow to enter the ground except in rocky (ledge) areas where it may enter rapidly. Contaminated water may run off rapidly from these areas and onto other areas favorable for rapid infiltration.

Yield potential	Recharge potential	Contamination potential	Relative runoff rate
High	Low-high	High	Moderate-low
Moderate	High-moderate	High	Low-moderate
Low	Low	Low	High

10 Municipal-supply wells and pumping capacity, in million gallons per day.

Study-area boundary.

Geology from Williams and Tasker, in press; Massachusetts River Resources Commission, 1960, and J.R. Williams, written commun., 1973.