

EXPLANATION

This map is the result of an effort to determine the value of the empirical information from drilling in determining overburden thickness. Therefore, non-empirical sources (e.g., air photos, soil types, etc.) were intentionally ignored.

Current guidelines of the Department of Health stipulate that there must be at least 4 feet of overburden between the disposal field of a septic tank and bedrock. Allowing for a 2-foot depth of burial, this means that at least 6 feet of overburden must be available. This map is based on a 10-foot limit, which allows for inaccuracies of reporting. (Although specifically related to septic tanks, this information may be relevant to other studies.)

Because of the irregular nature of overburden cover, it is impossible to state exact depths to bedrock in a given area (except at a sample point). Therefore, overburden thicknesses must be reported on a percent probability basis. For example, if five out of ten samples in an area indicate an overburden thickness of less than 10 feet, the probability of bedrock's occurring within 10 feet of the surface in that area is 50%.

Two major problems have proven to attend this approach:

- (1) There are vast areas of the province almost entirely lacking data (although these are not near growth centers).
- (2) Since drill holes could rarely be pinpointed more precisely than to within one square mile, there is no way of knowing how complete the distribution within this area may be. For example, twenty holes may have been drilled in a given square mile, but fifteen of these may be within a few hundred square yards.

Conclusion:

This approach alone does provide an indication of conditions, however, a much more complete picture could be obtained by combining this and all other sources of information. These would include air photos, soil maps, surficial geology maps, data from construction sites, etc.

Of course, only a very detailed large scale map provides anything but an indication of conditions in a given area. The former could be obtained only from a comprehensive on-site survey.

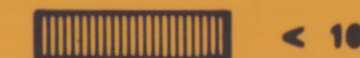

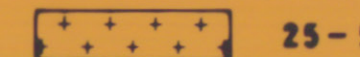

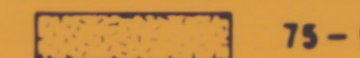
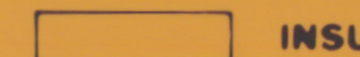
SOURCES OF INFORMATION

"Drilling Logs of Government Core Drills", Nova Scotia Department of Mines.

"Water Well Records, Nova Scotia", Groundwater Section, Nova Scotia Department of Mines.

PROBABILITY OF BEDROCK OCCURRING WITHIN 10 FEET OF THE SURFACE

LEGEND
PROBABILITY OF BEDROCK OCCURRING WITHIN 10 FEET OF THE SURFACE

-  < 10
-  10 - 25
-  25 - 50
-  50 - 75
-  75 - 90
-  INSUFFICIENT DATA

