

Groundwater Protection:
A Preventative Method

by

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ABSTRACT

Groundwater supplies require preventative protection due to their fundamental geologic structure. As this structure varies with geography, states must take a general policy design and implement it according to their specific situation. The broad policy design combines a philosophical base and the basic geology of the resource. The hydrogeology and specific knowledge of activities give rise to categories of risk which governments may use in their final policy design.

To reach the design stage, governments must adopt: criteria and goals, consider various policy options, and evaluate the latter in terms of the former. Application of these broad policy guidelines to the different situations in a watershed may be presented as a decision table. This allows planners to prioritize policy options rapidly based on land use and geohydrology. The policies investigated include, purchase of land or land rights, zoning, standards, taxation, and liability. The decision table prescribes groups of these policies based on activities and their location. The final step is a case study that applies the decision table to the Kingstown Quadrangle in southern Rhode Island.