



## Analog-Model Analysis of Regional Three-Dimensional Flow in the Ground-Water Reservoir of Long Island, New York: Usgs Professional Paper 982

By Rufus T Getzen

Bibliogov, United States, 2013. Paperback. Book Condition: New. 246 x 189 mm. Language: English . Brand New Book \*\*\*\*\* Print on Demand \*\*\*\*\*.A three-dimensional analog model of the ground-water system beneath Long Island, N.Y., provides a practical means for studying anisotropic flow on a regional scale. Constructional and operational techniques influence the simulation almost as much as model design does. Usefulness and accuracy of the model depend on (1) inherent and practical limitations of the finite-difference method, (2) accuracy and completeness of the data base, and (3) accuracy of the assumptions and approximations that were made in applying the simulation technique to this particular ground-water reservoir. Reliable data used in design of the model are (1) horizontal hydraulic conductivity and thickness of three major aquifers, (2) extent of confining beds, (3) specific yield, and (4) locations of streams. Estimates of vertical hydraulic conductivity and specific storage were applied to the model. Most spatially fixed model boundaries are good representations of prototype (real-world) boundaries. Most dynamic boundaries are only approximately represented, and some dynamic boundaries require application of unproved assumptions. The simulated ground-water reservoir generally agrees with prototype hydrology, and the model is being used for predictive studies.

### Reviews

*Extensive information for book fans. It is written in basic words and never hard to understand. It is extremely difficult to leave it before concluding, once you begin to read the book.*

-- **Otis Wisoky**

*This publication is great. It is full of wisdom and knowledge. You will not really feel monotony at any time of the time (that's what catalogs are for relating to when you ask me).*

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