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**Full Description:**

*Water Resources Systems Analysis through Case Studies: Data and Models for Decision Making* consists of 10 case studies suitable for the classroom to demonstrate engineers' use of widely available modeling software in evaluating complex environmental and water resources systems.

Simulation and optimization models, visualization tools, and spatial analysis tools are applied to real-life situations. Each case study includes background on the geography, hydrology, and natural resources of the area as well as relevant social, economic, developmental, and political issues. A series of active-learning exercises is provided, along with additional resources for instructors. Software is not included, but all programs and data sets are freely available online.

**Audience:** Scholarly/Professional

Primarily intended for students in upper-level undergraduate and graduate level systems analysis courses, this book may also be of interest to practicing engineers in the field of water resources planning and management.