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ESTIMATING ACTUAL EVAPOTRANSPIRATIONEvapotranspiration/Potential Evapotranspiration Approach; Water Budget Approach; SUMMARY AND LEARNING POINTS; REFERENCES; CHAPTER 5 Infiltration, Pathways of Water Flow, and Recharge; INTRODUCTION; INFILTRATION; Infiltration Capacity; Measurement of Infiltration; Infiltration Equations; Land-use Impacts on Infiltration; Water-Repellent Soils; Soil Frost; PATHWAYS OF WATER FLOW; Groundwater Recharge; Water Flow into Stream Channels; Streamflow Regimes; Streamflow Hydrograph; Hillslope Hydrology; Variable Source Area Concept
Factors Affecting Stormflow ResponseSUMMARY AND LEARNING POINTS; REFERENCES; CHAPTER 6 Streamflow Measurement and Analysis; INTRODUCTION; MEASUREMENT OF STREAMFLOW; Measuring Discharge; Precalibrated Structures for Streamflow Measurement; Monitoring Streamflow in the United States; Obtaining Discharge Information on Ungauged Streams; METHODS FOR ESTIMATING STREAMFLOW CHARACTERISTICS; Direct Transfer of Streamflow Information; Estimating Peak Discharge; Stormflow Response; Analysis of Recession Flows; Computer Simulation Models; Streamflow Routing; Streamflow-Frequency Analysis
SUMMARY AND LEARNING POINTS

Sommario/riassunto

This new edition is a major revision of the popular introductory reference on hydrology and watershed management principles, methods, and applications. The book's content and scope have been improved and condensed, with updated chapters on the management of forest, woodland, rangeland, agricultural urban, and mixed land use watersheds. Case studies and examples throughout the book show practical ways to use web sites and the Internet to acquire data, update methods and models, and apply the latest technologies to issues of land and water use and climate variability and change.