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### Sommario/riassunto

Water is not only an interesting object to be studied on its own, it also is an important component driving almost all ecological processes occurring in our landscapes. Plant growth depends on soil water content, as well is nutrient turnover by microbes. Water shapes the environment by erosion and sedimentation. Species occur or are lost depending on hydrological conditions, and many infectious diseases are water-borne. Modeling the complex interactions of water and ecosystem processes requires the prediction of hydrological fluxes and stages on the one side and the coupling of the ecosystem process model on the other. While much effort has been given to the development of the hydrological model theory in recent decades, we have just begun to explore the difficulties that occur when coupled model applications are being set up.

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