

Special Issue

Optimizing Land Use Patterns in a Context of Watershed Management

Message from the Guest Editor

Most parts of the world will experience the consequences of climate change in the coming decades. A higher frequency of extreme weather events is expected. In order to reduce the financial and societal costs related to the arriving climate change, mitigation plans need to be developed at the level of watersheds. Since spatial patterns of urbanization, deforestation and afforestation and agricultural land use control to a large extent the hydrological cycle in a catchment, it is clear that land use planning and optimization is a key element in the development of resilient watersheds. Although most hydrological processes are well described and sophisticated hydrological simulations models have been developed, in relatively few studies this process knowledge is applied to optimize land use patterns. This Special Issue aims to provide a state-of-the-art of the coupling of hydrological process models and land use optimization models. Both conceptual papers and case-studies illustrating various aspects of the integration of land use change models in watershed management are welcomed.

Guest Editor

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

Dr. Jean-Luc PROBST

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