Special Issue

Recent Advances in Flood Risk Assessment and Management

Message from the Guest Editors

Flood risk management is increasingly critical due to the rising frequency and severity of floods driven by climate change, urbanization, and environmental degradation. Accurate risk assessment and effective management strategies are essential to minimize the impacts on infrastructure, ecosystems, and vulnerable communities. This Special Issue aims to present recent advances in methodologies and tools for flood risk assessment and management. We welcome research articles, case studies, and reviews on hydrological and hydraulic modeling, climate change impacts, flood risk mapping, protection system design, early warning systems, and community-based adaptation strategies. Studies addressing the socioeconomic dimensions of flood resilience and practical solutions for enhancing flood management are particularly encouraged.

Keywords:

- flood risk assessment
- hydraulic and hydrological modeling
- climate change and flood frequency
- flood risk mapping
- flood protection infrastructure
- early warning systems
- socioeconomic impacts of flooding
- community-based flood management
- flood resilience

Guest Editors

Dr. Xiaolei Zhang

China Institute of Water Resources and Hydropower Research, Beijing, China

Dr. Xiao Liu

China Institute of Water Resources and Hydropower Research, Beijing, China

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Water
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

mdpi.com/journal/water

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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
Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

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