Special Issue

Impact of Climate Change on Groundwater Resources in Coastal Aquifers: Qualitative and Quantitative Assessments

Message from the Guest Editors

This Special Issue aims to compile original research articles and reviews that provide insights into the vulnerability of coastal aquifers to natural and human-induced pressures. We welcome manuscripts that contribute to innovative solutions to safeguard groundwater resources and ensure sustainable water supplies in the face of climate change. This Special Issue will focus on the following themes:

- **Vulnerability of Coastal Aquifers**: Exploring the susceptibility of coastal aquifers to climate change and human activities.
- **Risk of Saltwater Intrusion**: Emphasizing the increasing vulnerability of coastal aquifers to saltwater intrusion, driven by sea-level rise and over-abstraction.
- **Methodological Approaches**: Highlighting statistical analyses, hydrological models, field studies, and advanced remote sensing to assess and manage groundwater vulnerability.
- **Sustainable Management Strategies**: Addressing the need for innovative strategies to sustainably manage groundwater resources under changing climatic conditions.

Guest Editors

Dr. Maria Rosaria Alfio

Dr. Francesco Maria De Filippi

Dr. Yong Xiao

Prof. Dr. Cüneyt Güler

Deadline for manuscript submissions

closed (31 March 2026)

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

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About the Journal

Message from the Editor-in-Chief

Hydrology is the study of the waters of the Earth. Hydrology has close ties with hydraulics, hydrogeology and the multiple sciences that study the atmosphere, the land surface, the soil and the subsoil, and ranges from complex problems of risk, forecasting and optimization of water resources to interactions with ecological, urban, social and economic systems. The purpose of *Hydrology* is then to provide a journal where research results and real-world problems can be presented and discussed in order to bridge the traditional gaps between the academic world and the professionals and decision makers. Therefore, *Hydrology*, invites authors to submit their original theoretical, field, experimental, and numerical studies on hydrology with strong emphasis on multidisciplinary approaches and interdisciplinary topics, which cross the typical boundaries of our science.

Editor-in-Chief

Prof. Dr. Ezio Todini
Italian Hydrological Society, Piazza di Porta San Donato 1, 40126 Bologna, Italy

Author Benefits

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.9 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).