Special Issue

The Influence of Landscape Disturbance on Catchment Processes

Message from the Guest Editors

Hydrology is running a Special Issue to advance scientific understanding of how various forms of landscape disturbance influence catchment-scale hydrological processes and associated ecosystem services. This Special Issue will welcome manuscripts that link the following themes:

- Landscape disturbance effects on hydrological processes (e.g., runoff, infiltration, baseflow, evapotranspiration);
- Interactions between land use/land cover change and ecosystem service dynamics in catchments;
- Modeling approaches to assess watershed responses to natural and anthropogenic disturbances (e.g., using InVEST, SWAT, CA-Markov, machine learning);
- Soil erosion, sediment transport, and water quality under disturbance scenarios;
- Ecological restoration and its hydrological and ecosystem service impacts (e.g., reforestation, ecological zoning, slope management);
- Climate change and its compound effects with land use disturbance on hydrological regimes;
- Integration of hydrological modeling with ecosystem service valuation for policy and watershed planning;
- Case studies on catchment-scale management under environmental stressors.

Guest Editors

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Deadline for manuscript submissions

31 December 2025



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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

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Author Benefits

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Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.7 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).