

Call for papers

Safety and protection of groundwater for drinking use

Groundwater, extracted from wells and springs, supplies nearly 50% of the world's drinking water and accounts for approximately 85% of the water distributed through the Italian aqueduct network, making it a strategic resource for public supply. Ensuring access to safe water, both in terms of quantity and quality, is a fundamental right. The recent EU Directive 2020/2184 on the quality of water intended for human consumption, transposed into Italian law through Legislative Decree No. 18 of 23 February 2023 and Legislative Decree No. 102 of 19 June 2025, sets out two key objectives: protecting human health by preventing contamination of drinking water and ensuring it is clean and safe; improving access to drinking water for all citizens.

Among the most significant innovations is the adoption of a risk-based approach to safety of drinking water, that requires: public authorities to conduct and approve risk assessments and risk management plans for recharge areas associated with groundwater abstraction points; water utilities to perform risk assessments and implement management strategies for each drinking water supply system, through the development of a Water Safety Plan (WSP). In relation to hydrogeological aspects, the risk assessment must specifically address: impacts of climate change; vulnerability mapping; exposure to contamination, including emerging pollutants.

This Special Issue is proposed by the working group [“Safety of groundwater abstractions” \(SiCaptAS\)](#) of the Italian Chapter of the International Association of Hydrogeologists (IAH Italy), and aims to bring together methodologies, experiences, and case studies related to groundwater abstraction and hydrogeological challenges, with a specific focus on the implementation of the WSP. Research papers and technical notes are welcome from all stakeholders involved in the water safety process, such as water utilities, regional and provincial authorities, environmental protection agencies, technical and scientific communities.

In the specific framework of groundwater for drinking use, topics include the following or a combination of those:

- Vulnerability assessment and mapping
- Spring and well protection zones
- Emerging contaminants
- Climate change scenarios
- Groundwater management
- Groundwater modeling
- Groundwater monitoring

Scientific papers, technical reports and technical notes are welcome, in English or Italian language, following the Journal rules.



Submission deadline
31 March 2026

Publication date
30 September 2026



[Guidelines for authors](#)
[Instructions for submission](#)

About the journal

Acque Sotterranee – Italian Journal of Groundwater is one of the oldest European journals dealing with groundwater. The journal, Open Access, free of charge submission, indexed in Scopus and ESCI databases, recently obtained I.F. of 0,7 (2024). Submitted papers undergo a double blind review.

Acque Sotterranee - Italian Journal of Groundwater obtained the patronage of the National Association of Hydrogeology and Water Wells (ANIPA), of the Italian Chapter of the International Association of Hydrogeologists (IAH-Italy) and of the Geological Survey of Italy (ISPRA).

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