

#### Session title

Managed Aquifer Recharge for Climate Change Adaptation

#### Description

Managed aquifer recharge (MAR) is increasingly implemented as a practical measure to climate change adaptation aiming to enhance the aquifer storage, manage variability in water availability, and support conjunctive water use under growing climatic and socio-economic pressures. This session will address both technical and non-technical aspects of MAR, including site selection, aquifer characterisation, planning and design of recharge systems, water quality management, and the use of modelling tools to support decision-making across different spatial and temporal scales. Contributions are also invited on risk assessment, policy and governance frameworks, regulatory pathways, stakeholder engagement, and cost-benefit analyses that influence MAR feasibility and long-term sustainability. The session aims to share operational experiences, lessons learned, and transferable practices that support reliable, scalable MAR implementation across diverse social, institutional, and hydrogeological settings.

#### Keywords

managed aquifer recharge, groundwater resilience, climate adaptation, groundwater governance, soil-aquifer treatment

#### Session Chair

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