



*water*

an Open Access Journal by MDPI



## Water Resources Investigation: Geologic Controls on Groundwater Flow

Guest Editors:

**Dr. Donald Sweetkind**

U.S. Geological Survey DFC, MS  
980, Denver, CO 80225, USA

**Mr. Philip Gardner**

U.S. Geological Survey Nevada  
Water Science Center, 2730 N.  
Deer Run Rd Carson City, NV  
89701 USA

Deadline for manuscript  
submissions:

**closed (30 June 2018)**

### Message from the Guest Editors

The geologic system often exerts considerable control on the surface and subsurface hydrologic system. Stratigraphy, juxtaposition across faults, physical properties of the faults themselves, 3D lithologic heterogeneity of aquifer systems, and variably connected fault-fracture networks can all affect the occurrence, movement, and quality of surface and groundwater. Water resource investigations may evaluate the degree of geologic control on hydrologic phenomenon through conceptualization of the hydrogeologic system, numerical modeling studies. Water resource investigations develop and integrate geologic and hydrologic data at the watershed, basin, or regional scale, requiring expertise and judgement when determining what spatial scale of geologic feature or level of geologic detail to include. This Special Issue invites papers that report on water resource studies in which the geologic setting plays a crucial role. These include regional groundwater assessments, basin-scale groundwater studies, numerical modeling studies that include 3D geologic frameworks, and use of geophysics to better characterize regional aquifer frameworks.

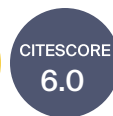


[mdpi.com/si/11419](https://mdpi.com/si/11419)

# Special Issue



*water*



an Open Access Journal by MDPI

## 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

## Message from the Editor-in-Chief

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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (Water Resources) / CiteScore - Q1 (Aquatic Science)

## Contact Us

---

Water Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/water](http://mdpi.com/journal/water)  
[water@mdpi.com](mailto:water@mdpi.com)  
[X@Water\\_MDPI](https://twitter.com/Water_MDPI)