



*water*



an Open Access Journal by MDPI

## The Nexus of Alpine Glacier Watersheds, Climate Change and Human Activity

Guest Editor:

**Prof. Dr. Mauri Pelto**

Environmental Science, Nichols  
College, 129 Center Road Dudley,  
MA 01571, USA

Deadline for manuscript  
submissions:

**closed (29 November 2018)**

### Message from the Guest Editor

Alpine glacier watersheds are changing significantly, this is not happening at a “glacial” pace, and the regional impacts are profound. The rapid decline of alpine glacier area and volume is a consistent trend from mountain range to mountain range, emphasizing that though regional climate and glacier response differ, global changes are driving the response. The trend of glacier loss is expected to increase with continued anthropogenic warming further altering the timing and magnitude of glacier runoff. Mountain glaciers are important as water resources for agriculture, hydropower, aquatic life and municipal water supply, melting fastest in the summer when precipitation is lowest and water demand from society is largest. The specific cascade of impacts downstream varies between glacier fed watersheds. The goal of this Special Issue is to examine the nexus of alpine glacier runoff change, driven by climate change, and the impact on human activity and ecologic systems in specific watersheds.

### Keywords

- glacier recession
- hydropower
- alpine glaciers
- glacier runoff
- alpine aquatic ecology



[mdpi.com/si/14598](https://mdpi.com/si/14598)

**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 (Water Science and Technology)

## 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)