



*water*

an Open Access Journal by MDPI



## Agriculture Land Use and Its Effect on Nitrogen Contamination of Surface Water and Groundwater

Guest Editor:

**Prof. Dr. William Frederick Ritter**

Center for Energy and  
Environmental Policy, University  
of Delaware, Newark, DE, USA

Deadline for manuscript  
submissions:

**closed (31 March 2023)**

### Message from the Guest Editor

Agriculture uses 70 percent of the world's water, and nitrates from agriculture are a major source of groundwater contamination worldwide. It has been 30 years since the European Nitrate Initiative was established, and little progress has been made in many places in Europe toward lowering the concentration of nitrates. China is the largest user of nitrogen fertilizer in the world, and 60 percent of their groundwater is polluted. Groundwater nitrate pollution in the U.S. caused by agriculture has been reported in the literature since the 1970s. Many programs have been developed for farmers to implement best management practices (BMPs). There is still a need to measure the effectiveness of some BMPs, and more implementation are needed for agriculture land in some areas.

For this Special Issue, entitled “Agriculture Land Use and Its Effect on Nitrogen Contamination of Surface Water and Groundwater”, we are looking for case studies, long-term monitoring studies, the adoption of new technology, regulatory policies and the development of sustainable land use practices in order to solve this worldwide and contribute new information to the literature.



[mdpi.com/si/130585](https://mdpi.com/si/130585)

# Special Issue



*water*



an Open Access Journal by MDPI

## Editor-in-Chief

### Dr. Jean-Luc PROBST

Laboratory of Functional Ecology  
and Environment, Centre  
National de la Recherche  
Scientifique (CNRS), University of  
Toulouse, Campus ENSAT,  
Auzeville Tolosane, 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, St. Alban-Anlage 66  
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)