

Special Issue

Methods and Tools for Sustainable Agricultural Water Management

Message from the Guest Editors

Irrigated agriculture is the primary water user, consuming about 90% of all consumptive water use in water-scarred regions. The approaches of applying water-saving irrigation systems (drip/sprinkler irrigation), selecting drought-resistant crops, and soil amendment practices such as conservation tillage and cover crops could not only significantly reduce water usage but also improve soil health and help retain soil moisture.

Therefore, this Special Issue aims to discuss the latest advances in methods and tools for sustainable agricultural water management. The Special Issue may include, but is not limited to, the following topics: (1)

Monitoring and modeling crop water use in cultivated fields;

(2) Crop water relations, crop yields and quality, and water productivity;

(3) Deficit irrigation and salinity management strategies for improving water use efficiency in agriculture;

(4) Conservation tillage and cover crops;

(5) Farm-level and regional water management in agriculture;

(6) Use of brackish water or RO concentrate in agriculture;

(7) Other tools and methods for sustainable agricultural water management. We look forward to receiving your submissions.

Guest Editors

Dr. Hui Yang

Prof. Dr. Manoj K. Shukla

Dr. Yusen Yuan

Deadline for manuscript submissions

closed (25 October 2025)



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Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

water@mdpi.com

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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.

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

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