

Special Issue

Restoration of Wetlands for Climate Change Mitigation

Message from the Guest Editors

Wetlands play key roles in global hydrologic, biogeochemical and climatic cycles and has been extensively implemented and researched. There has been much academic research but little practical research to determine their benefits for climate change mitigation and to identify potential issues, especially in the north-central United States. Some of the roles of wetlands in mitigating climate change include:

- Regulating surface flow to store flood waters and reduce downstream impacts;
- Moderating the loss of carbon dioxide in drained peatlands;
- Regulating methane release and the cycling and transport of pollutants such as mercury and excess nutrients.

Wetland restoration designs have focused on water quality benefits and/or providing waterfowl habitat. Prioritization and design for climate change mitigation is relatively new and may vary from previous goals. For example, establishing the *Sphagnum* moss layer is vital to many ecological processes and carbon retention in restored peatlands. [This Special Issue](#) will focus on the role of peatlands in mitigating climate change; however, research or policy assessment on other types of wetland restoration are welcome.

Guest Editors

Dr. Kristen Blann

The Nature Conservancy (TNC), Baxter, MN, USA

Dr. Christian Lenhart

1. Department of Bioproducts and Biosystems Engineering, University of Minnesota, St. Paul, MN, USA

2. The Nature Conservancy, Minneapolis, MN, USA

Dr. Randall K. Kolka

Marcelle Experimental Forest, The United States Forest Service (USFS), Grand Rapids, MN, USA

Deadline for manuscript submissions

closed (15 January 2024)



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



mdpi.com/si/152904

Water

Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

water@mdpi.com

mdpi.com/journal/

[water](https://mdpi.com/journal/water)





Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0



[mdpi.com/journal/
water](https://mdpi.com/journal/water)



About the Journal

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

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)