

Special Issue

Sea Level Rise Vulnerability and Coastal Management

Message from the Guest Editor

Sea level rise (SLR) is a critical, accelerating impact of climate change, with global mean levels rising at roughly 0.44 cm per year, driving increased coastal erosion, flooding, and saltwater intrusion. Effective management requires transitioning from reactive disaster responses to proactive, integrated frameworks that combine "hard" engineering (seawalls, tidal gates) with "soft" natural solutions (restoring mangroves, wetlands, and dunes) to enhance resilience. As a countermeasure against sea level rise and saltwater intrusion, Managed Aquifer Recharge (MAR), a hybrid approach sitting between soft and hard engineering, is also recommended. Numerical simulations and Artificial Intelligence (AI) are rapidly transforming sea level rise (SLR) prediction and coastal management, moving from slow, traditional, physics-based modeling to rapid, data-driven, hybrid approaches. This Special Issue examines coastal water management under sea level rise (SLR) through integrated approaches combining traditional engineering, nature-based solutions, advanced numerical modeling, and Artificial Intelligence (AI) to enhance resilience and mitigate flooding and erosion.

Guest Editor

Prof. Dr. Claudia Cherubini

Department of Mathematics and Geosciences, University of Trieste, Trieste, Italy

Deadline for manuscript submissions

10 October 2026



Water

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 6.7



mdpi.com/si/273919

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 3.5
CiteScore 6.7



[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)