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**ENVIRONMENTAL &  
WATER RESOURCES  
INSTITUTE**

## Call for Papers

Special Collection on Total Maximum Daily Load Analysis and Modeling Advances: Connecting Climate Resilience, Socio-Environmental Systems, and Holistic Watershed Management



### Aims & Scope

The Total Maximum Daily Load (TMDL) process in the Clean Water Act is critical for improving water quality at a watershed level because it serves as a link between water quality standards and the implementation of control actions designed to attain those standards. The ASCE-EWRI TMDL Analysis and Modeling Task Committee (<https://bit.ly/3OAdpLs>) wrote and published the ASCE Manual of Practice 150, "Total Maximum Daily Load Development and Implementation: Models, Methods, and Resources," <https://ascelibrary.org/doi/book/10.1061/9780784415948>) in February 2022 that fills the gap of a guidance document, continues to work on addressing climate resilience, socio-environmental systems, and holistic concepts as applicable to TMDLs and watershed management, and has initiated this Special Collection.

The purpose of this Special Collection is to showcase recent advances in analysis and modeling for TMDL development and implementation as well as for holistic watershed management addressing climate resilience and socio-environmental systems in a transdisciplinary approach.

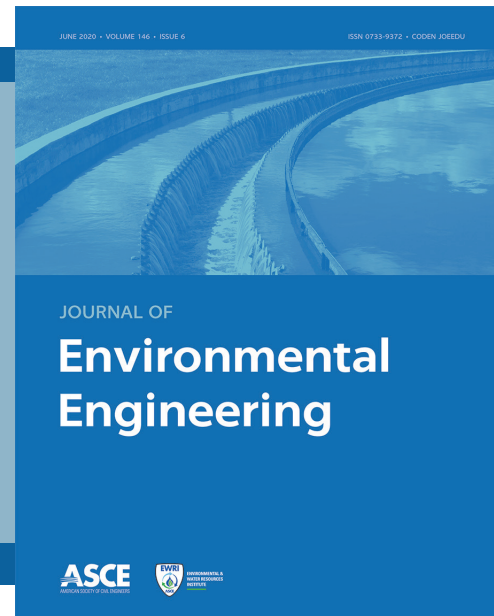
This special collection will specifically focus on the following themes:

- Advancement in the state-of-the-art of analysis and modeling in TMDL development and implementation planning, including model calibration and validation, and uncertainty analysis, optimization, and use of artificial intelligence / machine learning
- Advancements in the watershed, receiving water, and integrated models; and modeling of best management practices, including low impact development and green infrastructure
- Critical evaluations of completed TMDLs and holistic watershed management approaches in a changing climate

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- Data science in support of TMDL monitoring and modeling, including modeling under data-scarce situation
- Harmful algae blooms (HABs) management approaches through monitoring, prediction, and mitigation
- Incorporation of social aspects of watershed management (justice, equity, diversity, and inclusion), stakeholder participations and cooperation, and development of socio- environmental system models

### Manuscript Submission Guidelines

1. Please submit your manuscript via ASCE Journal of Environmental Engineering website: <https://www.editorialmanager.com/jrneeng>
2. Once on the Editorial Manager website, please indicate that your paper is for the special collection “Total Maximum Daily Load Analysis and Modeling Advances: Connecting Climate Resilience, Socio-Environmental Systems, and Holistic Watershed Management” edited by Deva Borah, Harry Zhang, Nigel Quinn, Vamsi Sridharan, Saurav Kumar, G. Padmanabhan, Zhonglong Zhang, and Rene Camacho-Rincon.
3. Detailed information on the submission process is provided in the document “Publishing in ASCE Journals: A Guide for Authors” available at <https://doi.org/10.1061/9780784479018>

Please note that all accepted papers submitted in response to this Call for Papers will be published in regular issues of the ASCE Journal of Environmental Engineering and assembled online on a page dedicated to this Special Collection. See <https://ascelibrary.org/page/joeedu/specialcollections> for the list of Special Collections already published.

### Deadline for Paper Submissions

The deadline for paper submissions under this solicitation is June 30, 2024.