Matthew Wilfong

Last update: August 1, 2025

Contact Information

Personal Homepage
E-mail: mtwilfong@smcm.edu
Google Scholar
LinkedIn
Twitter
Office Phone: 240-895-4402

Professional Focus

I am a highly interdisciplinary scholar conducting research investigating water-society relationships and urban environmental justice. I seek to harness transdisciplinary frameworks and methodologies to conduct problem-based research towards solving issues arising within human-water and urban systems. Broadly, our HydroCommunity Lab aims to conduct community-based, applied research that helps to address water and environmental justice concerns within our region towards improving public and environmental health for local and regional communities. In particular, this research seeks to understand the political and power dynamics involved within urban development and water governance and management. My teaching aligns with this research portfolio by focusing on interdisciplinary coursework centered on bridging the natural and social sciences and coupled human-natural systems. In addition, I am particularly interested in incorporating undergraduates into this research through both in-class projects and summer/capstone research programs.

Education

University of Maryland, College Park, MD — Aug. 2018 - May 2022

- Ph.D. in Environmental Science and Technology
  Dissertation - *Decentralizing Stormwater Management: Shifting Infrastructure and Evolving Hydrosocial Relationships*

Towson University, Towson, MD — Aug. 2015 - Dec. 2017

- M.S in Environmental Science
  Thesis - *Performance of Commercially Available Soil Amendments for Enhanced Removal of Copper in Bioretention Media*

Washington College, Chestertown, MD — Aug. 2011 - May 2015

- B.S in Chemistry and B.A in Environmental Studies
  Determining Trace Metal Concentrations in Estuarine Sediments of the Chester River using Aluminum as a Reference Element.

Professional Experience

St Mary's College of Maryland — Aug. 2025 - Current

- Assistant Professor of Environmental Studies

St Mary's College of Maryland — Aug. 2023 - Aug. 2025

- Visiting Assistant Professor of Environmental Studies

School of Sustainability - Arizona State University — Aug. 2022 - Aug. 2023

- Postdoctoral Research Scholar
- Advisor: Dr. Diane Pataki

Urban Ecology Lab - University of Maryland — Aug. 2018 - May 2022

- Graduate Research Assistant and Teaching Assistant
- Advisors: Dr. Mitchell Pavao-Zuckerman and Dr. Michael Paolisso

Urban Environmental Biogeochemistry Lab - Towson University — Aug. 2015 - Dec. 2017

- Graduate Research Assistant and Teaching Assistant
- Advisors: Dr. David Ownby and Dr. Ryan Casey

Publications

1. *Irrigation and Evapotranspiration Rates of Residential Turfgrass Lawns across the United States*
   M Wilfong, E Litvak, N Grijseels, D Kucera, K Hamilton, L Welsh, J Endter-Wada, D Jenertte, D Pataki
   Journal of the American Water Resource Association - Sept. 2024
2. *Introduction: Applying Anthropology to Water*
   M Wilfong, M Paolisso, J Trombley
   Human Organization - Sept. 2023

3. *Special Issue: Applied Anthropology of Water*
   Guest Co-Editors: M Paolisso, **M Wilfong**, J Trombley
   Human Organization - Sept. 2023

4. *Shifting Paradigms in Stormwater Management – Hydrosocial Relations and Stormwater Hydrocitizenship*
   M Wilfong, M Paolisso, D Patra, M Pavao-Zuckerman, P Leisnham
   Journal of Environmental Policy and Planning - Jan. 2023

5. *Diffusing Responsibility, Decentralizing Infrastructure: Hydrosocial Relationships within the Shifting Stormwater Management Paradigm*
   M Wilfong, D Patra, M Pavao-Zuckerman, P Leisnham
   Journal of Environmental Planning and Management - Oct. 2022

6. *State Factors Control Progressive Stages of Freshwater Salinization Syndrome*
   S Kaushal, P Mayer, G Likens, J Reimer, C Maas, M Rippy, S Grant, I Hart, R Utz, R Shatkay, B Wessel, C Maiett, M Pace, S Duan, W Boger, A Yaculak, J Galella, K Wood, C Morel, W Nguyen, S Querubin , R Sukert, A Lowien, A Wellman-Houde, A Roussel, A Houston, A Cacopardo, C Ho, H Wendlandt, J Widmer, J Slagle, J Bader, J Chong, J Wollney, J Kim, L Shepherd, **M Wilfong**, M Houlihan, N Sedghi, R Butcher, S Chaudhary, and W Becker
   Limnology and Oceanography Letters - Mar. 2022

7. *Performance of Commercially Available Soil Amendments for Enhanced Copper Attenuation in Bioretention Media*
   M Wilfong, DR Ownby, RE Casey
   Journal of Environmental Management - Jun. 2021

8. *Rethinking Stormwater: Analysis using the Hydrosocial Cycle*
   M Wilfong, M Pavao-Zuckerman
   Water - Apr. 2020

In Review

1. *An Oasis Suitable for the Desert: Opportunities and Obstacles towards Residential Xeriscaping*
   M Wilfong, D Pataki
   People and Nature - Oct. 2024

In Prep

1. *Decentralization of Water Management and the Rise of Hydrocitizenship*
   M Wilfong

2. *Investigating the Hydrologic Performance of Decentralized Stormwater Best Management* Practices at the Treatment Train Scale
   M Wilfong, K Hopkins, M Pavao-Zuckerman

Presentations

1. *Decentralization of Water Management and the Rise of Hydrocitizenship*
   M Wilfong
   Society for Applied Anthropology Annual Meeting - Santa Fe, New Mexico - Mar. 2024

2. *Searching for an Applied Anthropology of Water*
   M Wilfong and Michael Paolisso
   Washington Association of Professional Anthropologists - Virtual - Oct. 2023

3. *Using Anthropology for Environmental Policy and Action: Skill and Training Needs*
   M Wilfong - Panelist
   Society for Applied Anthropology Annual Meeting - Cincinnati, Ohio - Mar. 2023

4. *Multifaceted Water Insecurity: Local and Regional Concerns for Health, Equity, and Justice, Parts I and II*
   M Wilfong and A Roque - Co-Session Organizers
   Society for Applied Anthropology Annual Meeting - Cincinnati, Ohio - Mar. 2023

5. *The "Hydrocitizen" and Why Anthropology is Key to Water Quality*
   M Wilfong - Invited Speaker
   York River and Small Coastal Basins Roundtable - Gloucester Point, VA - May 2022

6. *Diffusing Responsibility, Decentralizing Infrastructure: Hydrosocial Relationships within the Shifting Stormwater Management Paradigm*
   M Wilfong, M Paolisso D Patra, M Pavao-Zuckerman, P Leisnham
   Society for Applied Anthropology Annual Meeting - Salt Lake City, UT - Mar. 2022

7. *Rethinking Stormwater: An Analysis using the Hydrosocial Cycle*
   M Wilfong, M Pavao-Zuckerman
   Society for Applied Anthropology Annual Meeting - Virtual - Mar. 2021

8. *Performance of Commercially Available Soil Amendments for Enhanced Copper Attenuation in Bioretention Media*
   M Wilfong, DR Ownby, RE Casey
   Society for Environmental Toxicology and Chemistry - Orlando, FL - Nov. 2017

Teaching Experience

St Mary's College of Maryland

- **LEAD 101 - First-Year Seminar: Slow Food** **Fall 2024**
  - Designed and led a first-year writing seminar centered around the Slow Food movement.
  - Guided students through experiential learning based at the campus farm that connected course learning outcomes with hands-on activities like, growing, harvesting, and cooking produce from our sustainable campus farm.

- **ENST 250 - Introduction to Environmental Science with Lab** **Spring 2024**
  - Led class through primarily direct instruction covering a wide range of environmental science topics including climate change, environmental cycles, and ecology.
  - Designed introductory labs that allowed students experiential learning opportunities alongside of lecture in the form of lab experiments, field methodologies, and off-campus field trips.

- **ENST 490 - Junior Seminar for Environmental Studies** **Fall 2023 - Fall 2024**
  - Course designed to prepare students for post-undergraduate careers by developing skills in research, resume building, and critical thinking.
  - Led class through in-class discussions centered on assessing various perspectives on climate change promoting students to lead and own discussion sessions.
  - Guided students in writing literature reviews for topics related to climate change focused on preparing students for their Senior Capstone experiences.

- **ENST 283 - Urban Environmental Justice** **Fall 2023/Fall 2024**
  - Designed course to examine and explore issues of environmental justice centered in urbanized environments using approaches from urban ecology, urban political ecology, and critical science and technology studies.
  - Led class through primarily a flipped classroom pedagogical approach where in-class sessions were active discussions, engaged learning, and/or critical assessment of case studies.
  - Formulated a final zine project for the course where students worked collaboratively and independently to self-publish a zine centered on summarizing environmental justice theory and case studies from across the United States.

- **ENST 385 - Water and Society** **Fall 2023**
  - Designed course to explore the complex and ever-changing relationships between society and the natural world using water as a medium and centered on a hydrosocial approach.
  - Led class through a mixed flipped classroom pedagogical approach where one in-class session a week was traditional lectures to reinforce readings and one in-class session a week was active discussions, engaged learning, and/or critical assessment of case studies.
  - Created a final podcast project where students worked in small groups to prepare a podcast episode focused applying a hydrosocial lens to understanding a water-related problem.

University of Maryland

- **ENST 360 - Ecosystem Ecology** **Fall 2021**
  - Led discussions utilizing variety of methods to promote active engagement and supplemental and reinforced learning of lecture materials.

- **ENST 104 - Introduction to Environmental Health** **Fall 2020**
  - Led fully remote discussions focused on real-world applications of complex public and environmental health research and problem-solving.

Towson University

- **CHE 121L - Chemistry I Lab - as Adjunct Professor** **Spring 2018**
  - Led and instructed students in basic chemistry lab focused on applying lecture-based theory in laboratory practice.
- **CHE 211L - Chemistry II Lab - as Adjunct Professor** **Spring 2018**
  - Led and instructed students in basic chemistry lab focused on applying lecture-based theory in laboratory practice.
- **ENV 104 - Introduction to Environmental Chemistry Lab** **Fall 2015 - 2017**
  - Led and instructed students focused on applying environmental chemistry to real-world examples through laboratory experimentation.

Grants

1. St Mary's College of Maryland Faculty Development Grant 2023-2024
   Presentation at Society for Applied Anthropology Conference on Current Research and Special Issue - **$ 2,100**
2. Maryland Sea Grant Research Support Grant 2019-2020
   Assessing the Ecohydrological Performance of Stormwater Green Infrastructure Treatment Trains at the Subwatershed Scale in Montgomery County, MD
   M Pavao-Zuckerman (PI, advisor) and **M Wilfong** (Co-PI) - **$ 9,996**