

Water Infrastructure Graduate Research Fellow

Funded by: EPA and William Penn Foundation through American Rivers
Project Lead/PI: Ellen Kohler, Director of Applied Research and Programs

Job title

Water Infrastructure Graduate Research Fellow

Contract type

Start date: September 3, 2024
Contract type: Monthly Stipend
Length of contract: 4 months, with potential to extend through spring semester 2025
Hourly rate: Up to 8 hrs/wk at \$19/hr

Project description

The Water Center at Penn is part of a team that will be delivering water infrastructure technical assistance to communities to help them address the challenges they are facing with their drinking water, wastewater and stormwater system. The University of Maryland Environmental Finance Center is the lead on the project that covers all of EPA Region 3 and the Water Center is the lead for engagement with Pennsylvania and Delaware. Other partners include engineering and finance organizations. The technical assistance focuses on technical, managerial and financial issues involved in water system operations. More information about the project is available on the Water Center website at [this link](#).

The Water Center is also partnering with American Rivers to analyze how federal water infrastructure funding is hitting the ground in the Delaware River basin. This includes considering how to better deploy green stormwater infrastructure and nature-based solutions and how to better support disadvantaged and environmentally burdened communities.

Project outcomes

- Portfolio of technical assistance projects for various communities throughout the mid-Atlantic Region (EPA Region 3).
- Informational sessions and trainings to a larger number of water utilities as time and resources allow.
- An increase in water utilities and water systems in Pennsylvania that have accessed available state and federal funding, have improved water infrastructure, and reliable water services.
- Analysis of co-benefits of selected green stormwater infrastructure projects/nature-based solutions funded by PENNVEST in the Delaware River basin using an existing analytical tool.
- Update and finalize three community water infrastructure case studies in the Delaware River basin.

Job description

The Water Center is an applied research and policy center that partners with communities to find integrated solutions to the challenges facing their built and natural water systems. We use an interdisciplinary approach to our projects. To support this specific work, the Water Center is hiring a graduate research fellow to provide project coordination, provide GIS mapping to support communities with their lead service line inventories, and conduct the co-benefits analysis. This will be a hybrid position and will include regular project team meetings. The position will report to Ellen Kohler, Director of Applied Research and Programs at the Water Center.

The ideal candidate will:

- Be a current University of Pennsylvania student.
- Hold a B.S. in environmental studies, civil engineering, environmental policy, governmental policy, environmental economics or other related fields.
- Be pursuing a graduate degree in environmental studies, environmental policy, law, civil engineering, applied engineering, public policy, environmental economics.
- Be comfortable using Excel.
- Be comfortable using GIS platforms to generate maps.
- Be able to work independently but also as part of a team.
- Be passionate about water issues.
- Familiarity with R and/or Python skills for coding and data analysis would be beneficial

List of responsibilities

- Develop the co-benefits analysis of selected green stormwater infrastructure/nature-based solution projects.
- Update and finalize three water infrastructure case studies.
- Develop community maps for lead service line inventories.
- Work with our full water technical assistance team including partners at the University of Maryland Environmental Finance Center and other project partners as needed.

To apply

Submit a cover letter and resume via email to Emma Denison at emmade@sas.upenn.edu with a subject line of "Water Infrastructure Graduate Research Fellow". Review of applications will occur on a rolling basis; applications will be accepted until the position is filled. Questions can also be sent to the email address above.