Catawba Wateree Integrated Water Resources Plan, and
White Clay Creek Municipal Support Project

Funded by: Catawba Wateree Water Management Group, and White Clay Creek Wild & Scenic Program
Project Lead/PI: Ellen Kohler, Director of Applied Research and Programs

Job title
Environmental Economics Graduate Research Fellow

Contract type
Start date: September 1, 2023
Contract type: Monthly Stipend
Length of contract: 4 months, with potential to extend
Hourly rate: Up to 8 hrs/wk at $19/hr

Project description
Utilities, municipalities, and counties are at a crossroads; not only must they face external stressors due to climate change (e.g., extreme events with increasing frequency and intensity), but they must also address aging infrastructure, population shifts (densification and shrinking cities), and additional pressure on networks already over-capacity. Funding and financing to address these challenges poses a significant challenge. Understanding the impacts of infrastructure investments is important to the decision making process as is understanding the impacts of water rate increases.

The Water Center has two projects for which it is seeking support. One focuses on the Catawba Wateree watershed, which starts in North Carolina and flows through South Carolina. There are several reservoirs in this watershed that are managed by Duke Energy for power generation as well as 18 drinking water utilities that form the Catawba Wateree Water Management Group. They are embarking on an integrated water resources plan and want to include an economic evaluation in that planning process. The Water Center has committed to provide 3 possible approaches to this evaluation for the management group to consider. The approaches would help the stakeholders better understand the value of water quality protection investments that have been made over the past 10 years and the potential value of future investments with particular emphasis on managing for climate change.

The second project involves the Borough of Avondale, Pennsylvania. This is a borough of approximately 1300 people with a drinking water and wastewater system with 350 customers. They would like to have their rate structure reviewed with consideration to how to support customers who are facing affordability challenges.

Project Outcomes
Catawba Wateree Watershed Economic Evaluation
- Limited literature review and summary document.
The ideal candidate will
- Be a current University of Pennsylvania student
- Be located on campus for the majority of the fellowship
- Hold a B.S. in environmental economics (other disciplines welcomed with technical experience; undergraduates with relevant experience will also be considered)
- Experience with administrative support (emails, virtual meeting management, coordinating meetings, etc.)
- Strong communication skills
- Understanding of water utilities or water/wastewater infrastructure is highly desired

List of responsibilities
- Literature/desk review.
- Utility finance and rate structure review.
- Support workshop coordination with key stakeholders.
- Help schedule meetings, draft reports, present findings.

To apply
Submit a cover letter and resume via email to Emma Denison at emmade@sas.upenn.edu with a subject line of “Environmental Economics 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.