

The Water Workforce Project partners the Water Resources Institute with the Vermont Rural Water Association to cultivate a new generation of diverse, skilled water professionals – through facility tours, summer internships, and course-based learning – to develop a pipeline of skilled water professionals for the future.



A CRITICAL NEED AND PARTNERSHIP

Access to clean drinking water and proper wastewater treatment is a fundamental human right and essential for public health, environmental protection, housing access, and economic development. However, Vermont's rural communities face an ongoing workforce shortage, and combined with limited local resources, this is threatening the ability to provide adequate water and wastewater services.

The Water Resources Institute and the Vermont Rural Water Association (VRWA), supported by a capacity partnership grant from UVM's Leahy Institute for Rural Partnerships, are working to implement targeted workforce development initiatives, aiming to train, diversify, and inspire the next generation of water leaders



ADDRESSING THE CHALLENGES

This project will implement targeted workforce development initiatives by exposing UVM students to career pathways in water resources, attracting a younger and more diverse workforce through educational experiences and VRWA's Apprenticeship Program.

By developing a skilled and diverse workforce, the project ensures that rural water and wastewater systems can continue to operate effectively, even as operators retire. This is critical for maintaining public health standards and environmental integrity in Vermont's rural areas.

Program Specifics:

- Field trips and job shadows to rural water facilities.
- Hands-on fieldwork, laboratory activities, and mentorship connecting academics with professional practice.



Water Resources Institute
University of Vermont

CREATING EDUCATIONAL OPPORTUNITIES

Exposing undergraduates to water resources, rural development challenges, and professional pathways by:

During UVM's 2025 calendar year, four courses participated in this partnership: Cheryl Morse's Restoration Cultures, Laura Webb's Earth Materials, Kennedy Brown and Arne Bomblies' Hydraulics, and Matt Scarborough's Special Topics - Design of Wastewater Treatment Facilities participated.

The students gained a better understanding of water operation careers through a trip to Hinesburg's water treatment facility, the Burlington Wastewater Facility, and through a lecture with Geologist Jonathan Kim from the Vermont Geological Survey (VGS).

The students were introduced to essential services provided by drinking water and wastewater professionals and learned how their interests are transferable to water workforce opportunities. They were able to witness textbook concepts in action at these plants, as they learned about the treatment process, fluid dynamics, aeration, and more. In the classroom, Dr. Kim's presentation highlighted a multi-year project that investigated the PFAS contamination of groundwater in bedrock aquifer, underscoring the importance of a comprehensive geoscience curriculum for real-world applications and careers.

By focusing on rural water, the students are being introduced to essential services provided by drinking water and wastewater professionals, revealing the intersection with public health and environmental resources.



JOIN US FOR IMPACT

Your support will launch a new generation of water professionals who keep Vermont's communities safe and thriving, strengthening rural resilience and ensuring water systems can withstand floods, droughts, and contamination threats.

This is the beginning of an exciting future. For information on how you can engage, contact Beverley Wemple, Director of UVM Water Resources Institute bwemple@uvm.edu or visit us online at www.uvm.edu/water.



KEY PARTNERS

- Vermont Rural Water Association
- Leahy Institute for Rural Partnerships
- Vermont Geological Survey