



FY 2020-2021: Innovative Water Infrastructure Workforce Development Grant Program

Wichita State University Environmental Finance Center (WSU EFC): *Building the Next Generation of Water Workforce*



INTRODUCTION

The Safe Drinking Water Act (SDWA) authorized the Environmental Protection Agency (EPA) to award grants to nonprofit professional or service organizations, nonprofit labor organizations, nonprofit community colleges, institutions of higher education, or other nonprofit training and educational institutions to (1) assist in the development and use of innovative activities relating to water workforce development and career opportunities in the drinking water and wastewater utility sector, and (2) expand public awareness about drinking water and wastewater utilities and to connect individuals to careers in the drinking water and wastewater utility sector.

A total of 9 organizations were recently selected by EPA to receive grant funding under this program. EPA has developed Fact Sheets on each of these projects that includes the language from the grant submission.

To learn more about the range of activities EPA is undertaking to support our Nation's water workforce, please go to [Sustainable Water Infrastructure-Water Sector Workforce](#).



PROJECT OBJECTIVES

The Wichita State University Environmental Finance Center (WSU EFC) proposes to develop a national network of career guidance counselors that will accelerate the pipeline to careers in the water utility sector by connecting secondary and post-secondary students to career exploration opportunities with local utilities. Counselors in the network will be supported by a toolkit of resources to employ when encouraging students to explore careers in water. An online portal will house the toolkit, along with teaching resources for education specialists and educators to use in a variety of educational settings to introduce elementary, middle, and secondary students to key watershed and water treatment concepts and the variety of important,

stable, well-paying, challenging and personally and professionally fulfilling careers in the water treatment industry.

Teaching resources will primarily be gathered from existing sources; however, new resources will be developed to fill gaps identified through engagement with focus groups and a national advisory board that will provide on-going support for the network once established.

One key resource that will be developed as part of the project is a culminating experience and targeted learning opportunity for students who express interest in careers in water. Called WaterCorps, this project will pilot curriculum, utility and student engagement, and internship experiences which will be designed to be adaptable to secondary and post-secondary settings.



MAJOR ACTIVITIES

- ◊ The core component of the project establishes a national network of career guidance counselors and education specialists promoting careers in the water utility sector, supported by an online toolkit with resources that can be used to promote and encourage exploration of careers in water and wastewater treatment.
- ◊ This proposed project expands that network by connecting with counselors to capitalize on existing educational resources that introduce students to water treatment concepts and existing interest from water utilities by creating a needed link between education and career opportunities. By engaging local career and guidance counselors in this process, they are creating a new avenue that is not solely classroom-based and reinforces the pipeline from secondary and post-secondary education to the water workforce.
- ◊ The project team will develop a toolkit for career and guidance counselors to inform them of the needs and requirements for water utility positions, assist them in



February 2022- January 2023



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MAJOR ACTIVITIES (CONTINUED)

sharing information with students, and connect them with local utilities that may be seeking interns or may be willing to engage in additional educational opportunities for students such as treatment facility tours, job shadowing, or focused service-learning projects. The project team will engage existing networks and establish relationships with professional associations for career and guidance counselors and education professionals to promote adoption of these resources and supporting materials for classroom educators.

- ◇ The counselor toolkit will be accessible through an online portal, which, in addition to resources for direct use by career and guidance counselors, will include teaching resources to further enhance the K-12+ learning experience. The project team will compile existing resources from partner networks as well as refine and develop new resources.
- ◇ The project team will use a series of focus group meetings for initial research related to available resources and potential partners. Focus group activities will draw from existing partnerships with the project team to help identify possible curriculum and career exploration resources, contacts to engage in additional conversations, and potential advisory board members.



OUTCOMES

- ◇ Increased number of guidance counselors and educators familiar with and actively promote careers in water
- ◇ Increased number of students who are aware of exposed to water careers and/or participated in a water career exploration
- ◇ Increased number of Water utilities contacted by schools and/or students to inquire about tours or career opportunities
- ◇ Increased number of young people pursuing careers in the water industry
- ◇ Decreased number of vacant water and wastewater positions
- ◇ Decreased number of Systems out of compliance



PARTNERSHIPS

WSU EFC's core partnerships for this project will include the University of New Mexico (UNM) Southwest Environmental Finance Center (SW EFC, Center for Water and the Environment (CWE) and the Syracuse University Environmental Finance Center (SU EFC). Partners at UNM have developed teaching resources and an online sharing tool that will be enhanced as part of this project. The SW EFC will also apply lessons learned through ongoing research of social media to inform communication approaches integrated into various aspects of the project, and will support efforts to develop the counselor network, advisory board, WaterCorps, and other partnerships. The SU EFC will update and share curriculum resources for the toolkit and portal, provide administrative and evaluation support for events and develop, co-manage and support the creation of the WaterCorps program.

The project team will be able to leverage existing relationships with the American Water Works Association (AWWA), the Water Environment Federation (WEF) and related state associations to recruit participation in focus groups, the advisory board, WaterCorps development, and to promote and transfer project resources. The core partners will also leverage the reach of the greater EFC Network, which includes an EFC in each EPA Region, by engaging these EFCs to identify potential focus group and advisory group members, utilities, and educational institutions.

The project team will also develop new partnerships with state and national associations for career and guidance counselors (e.g. American School Counselor Association and related state-level associations), national and state-level associations for educators, especially those focused on science, environmental, and agricultural education, and Tribal education associations to develop the national counselor network and promote educational resources. The team will seek to form partnerships with technical schools, colleges and universities, including Tribal colleges and universities, as part of the advisory board and WaterCorps pilot. Finally, the team will work with existing partners in state-level departments of education and agriculture who focus on college and career readiness and work-based learning opportunities to expand those partnerships to a regional and/or national level. Additional partnerships will be developed as focus groups and the advisory board identify stakeholders who can contribute to the goals of this project.