

Water Security and Resiliency

A certificate for one continuing education contact hour will be offered for this webinar

**Tuesday, April 25, 2017
2:00 to 3:00 pm EST***

*Optional Q&A session from 3:00 to 3:30 pm EST

Resiliency Framework and the Route to Resilience Tool

Maintaining and repairing aging drinking water infrastructure remains a significant challenge for the water sector. Utilities must be able to increase their readiness and resilience to potential all-hazard incidents, and adapt to future hazards that may impact their ability to provide safe and clean drinking water. The Resiliency Framework defines what it means to be a resilient drinking water/wastewater utility and provides a greater sense of cohesion among EPA's water security products and services. The Route to Resilience (RtoR) Tool, features the framework and is specifically designed to help small- and medium-sized drinking water and wastewater utilities learn more about becoming resilient to all-hazards, such as floods, tornadoes, hurricanes and contamination incidents. This presentation will introduce the framework and provide an overview of the RtoR Tool.

Presented by Jeffrey Fencil – EPA's Office of Water (OW).
Jeffrey is an Environmental Scientist with the Office of Ground Water and Drinking Water's Water Security Division within EPA's Office of Water. Since joining the division in 2006, he has served as the lead for Consequence Management under the Water Quality Surveillance and Response System program and currently works on emergency response related activities under the Security Assistance Branch. Prior to joining EPA, Jeffrey worked as a technical instructor for the New England Water Works Association, where he conducted numerous training programs on drinking water related topics. He holds a B.A. degree in biology from Providence College and a M.S. in Environmental Science from the University of New Haven.

Using Hydraulic Modeling to Assess Resilience of Drinking Water Systems to Natural Disasters & Other Hazards

Drinking water systems are subject to floods, power outages, extreme winter storms, contamination incidents and other hazards that can disrupt service to customers and damage critical infrastructure. This presentation will demonstrate a new hydraulic modeling tool—the Water Network Tool for Resilience (WNTR)—that will be available to the public later this year. WNTR will help water utilities investigate the resilience of their water systems to a wide range of hazardous scenarios and evaluate emergency response actions and long term resilience-enhancing strategies. The software estimates potential damages from disaster scenarios; predicts how damage to infrastructure would occur over time; evaluates preparedness strategies; prioritizes response actions; and identifies worse case scenarios, efficient repair strategies, and best practices for maintenance and operations. An application to a small system will be presented.

Presented by Dr. Regan Murray – EPA's Office of Research and Development (ORD). Regan is Chief of the National Risk Management Research Laboratory's Drinking Water Treatment and Distribution Branch within EPA's Office of Research and Development. During her 15 years at the EPA, she has developed systems modeling approaches to address security and resilience to natural disasters. Regan has a Ph.D. in Applied Mathematics and Hydrology and Water Resources from the University of Arizona.

Registration: <https://attendee.gotowebinar.com/register/287664509489298691>

Who should attend?

State primacy agencies, tribes, community planners, technical assistance providers, academia, and water systems interested in issues facing community water systems and solutions to help solve them.

Looking for more webinars?

This webinar is part of EPA's monthly series: *Challenges and Treatment Solutions for Small Drinking Water Systems*. A webinar will be held each month in 2017.



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