EPA
United States Environmental Protection Agency

EPA's Office of Research and Development and Office of Water Invite you to attend a free webinar.
Small Drinking Water Systems Webinar Series

Wildfire Impacts on Drinking Water

July 25, 2023 from 2 to 3 p.m. ET

Optional Q&A session From 3 to 3:30 p.m. ET

A certificate of attendance will be offered for this webinar

Wildfire Implications for Drinking Water Systems

Amanda Hohner, Ph.D. (Montana State University)

The rise in wildfire activity in municipal watersheds has created new uncertainties, unprecedented challenges, and substantial costs for drinking water utilities. Source water quality can be highly variable and dramatically altered following fire, which can challenge water treatment process performance. The results of several projects in collaboration with water providers will be discussed with particular emphasis on dissolved organic matter character and treatability, as well as disinfection byproduct formation. Lastly, a new transdisciplinary project with the overarching goal of increasing water system resiliency to wildfire will be discussed.

Wildfires Can Increase Drinking Water Contamination: Nitrate, Arsenic, and Disinfection Byproducts

Michael Pennino, Ph.D. and Jana Compton, Ph.D. (EPA Office of Research and Development)

Wildfires are a concern for water quality in the United States, particularly in the wildland-urban interface of populous areas. On average, in the contiguous United States, wildfires are associated with an increase in drinking water concentrations and maximum contaminant level violations for nitrate, disinfection byproducts, and arsenic and it can take several years for impacted systems to recover. This presentation will discuss these issues and the how the impact of wildfires on drinking water is regionally important, with larger impacts in certain locations or no impacts in other locations, which may be attributed to other factors, such as the use of drinking water treatment or the type of land use.

Registration: us02web.zoom.us/webinar/register/WN_ViTvu6DISBGU9_K0oY90rQ

Who should attend?
State, and territory, and tribal personnel responsible for drinking water regulations compliance and treatment technologies permitting, water system operators, technical assistance providers, local government personnel, and others may benefit from attending.

Looking for more webinars?
This webinar is part of EPA's Monthly Small Drinking Water Systems Webinar Series. A drinking water focused webinar will typically be held every month.
epa.gov/water-research/small-drinking-water-systems-webinar-series

About the Presenters

Amanda Hohner, Ph.D.

Amanda is an assistant professor in the Department of Civil Engineering at Montana State University. Her primary area of expertise focuses on the characterization of source water quality and drinking water treatment processes. Within this area, she evaluates the effects of climatic disturbances on watersheds and drinking water system resiliency. Amanda earned her Ph.D. and M.S. degrees in environmental engineering at the University of Colorado-Boulder.

Michael Pennino, Ph.D.

Michael is and ecologist with EPA's Office of Research and Development based in Washington, DC. His work focuses on understanding spatial and temporal trends for indicators of environmental quality and human health. He is particularly interested in developing predictive models to assess risk to water quality at regional and national scales. Currently, Michael's work focuses on assessing impacts of wildfires, watershed management, harmful algal blooms, and other factors influencing nitrate and contaminants in drinking water. Michael holds a Ph.D. from the University of Maryland, Baltimore County (2014) and a B.A. from Oberlin College.

Jana Compton, Ph.D.

Jana Compton is a research ecologist and biogeochemist with EPA's Office of Research and Development based at the Pacific Ecological Systems Division in Corvallis, Oregon. Her work focuses on identifying sources of nutrient pollution and connecting those issues to how they affect water quality. She obtained both her Ph.D. and M.S. degrees at the University of Washington.