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After Drinking Water Contamination Disasters, is Policy Enough to Protect Public Health?

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ZOOM: https://unm.zoom.us/j/95608045485

Abstract: Disasters like floods, hurricanes, wildfires, and chemical spills can damage drinking water distribution systems and building plumbing, jeopardizing fire-fighting, public health, and economic recovery. Following a disaster, water use restrictions are sometimes issued to discourage populations from coming into contact with the potentially harmful water. Water distribution system and building plumbing testing and repairs are necessary. Lessons from past disasters will be described regarding the 2017 Tubbs Fire and 2018 Camp Fire in California. Results from ongoing wildfires in the American West will also be discussed. A key challenge with post-disaster response is the lack of federal statutes that explicitly require state, county, local agencies, water system owners, and operators to notify the public about contaminated water, guide the design and conduct of testing regimes to determine whether contamination exists and has been removed, and support impacted households during recovery. Insights about how federal, state, and local policies and decisions can be informed, better developed, and implemented to lessen the health and economic risks will be described.

Short Bio: Professor Whelton has 20 years of experience in the infrastructure, public health, and environmental areas. He is nationally recognized for water infrastructure disaster response and recovery among other expertise. His teams have been called to help respond to and recover from widespread water distribution and building plumbing contamination in response to the 2014 MCHM chemical spill, 2017 Tubbs Fire, 2018 Camp Fire, and others. Prof. Whelton previously worked for the U.S. Army, private sector, National Institute for Standards and Technology (NIST), and University of South Alabama. He earned a B.S Civil Engineering, M.S., Environmental Engineering, and Ph.D. Civil Engineering degrees from Virginia Tech.

About CWE: The mission of the CWE is to increase the participation of underrepresented minorities in STEM professions while conducting cutting-edge research into technological and engineering-based solutions to problems with water and the environment.

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