SPEAKER INFORMATION

Date:Thursday, November 7, 2019Event:"Plumbing Disaster Response and Safe Water for Schools and Homes"Time:9:15 am - 10:00 am

Andrew Whelton, Ph.D.

Associate Professor Purdue University Phone: 540 230 6069 awhelton@purdue.edu

Andrew Whelton, Ph.D. is a Purdue University associate professor of civil, environmental, and ecological engineering who is nationally recognized for water infrastructure disaster response and recovery. Dr. Whelton has applied his unique skill set for 16 years to uncover and address problems at the interface of infrastructure materials, the environment, and public health. Topics pertaining to disaster response and recovery as well as construction site safety are just two of many topics his research has impacted. Dr. Whelton's discoveries have positively changed how government agencies (EPA, CDC, NRC, NIOSH, NIST, ARMY), water utilities, nonprofit organizations, health departments, state legislatures, and building owners approach their responsibilities. Since February 2019, his team has been assisting in the 2018 Camp Fire response and recovery, the largest most destructive fire in California's history. The team's efforts have included conducting a survey and hosting a public meeting about drinking water and plumbing after the Camp Fire. Previously, his team's discoveries resulted in briefing invitations from the Indiana Senate, the National Academies of Sciences Standing Committee on Disaster Science, and the U.S. Chemical Safety and Hazard Investigation Board. Here, he helped agencies understand emerging public health issues, their root causes, and federal actions needed to prevent chemical disaster reoccurrence. His research teams have identified best practices for planning for and recovering from natural and man-made disasters that affect water systems. He has extensive experience understanding material aging and chemical fate in water distribution systems and building plumbing, with an emphasis in plastic materials. He has organized and presented at town hall public meetings, conducted sampling at private residences and government buildings, provided feedback to governor's staff on evidence-based public messaging, and engaged in press conferences.

At present, he's leading a nationally funded drinking water plumbing safety initiative with multiple universities and industrial collaborators. His research efforts have been supported by \$4.8 million dollars from government and private sectors. He has authored more than 50 peer-reviewed publications and delivered more than 200 presentations. A hallmark of his work is direct engagement with communities at risk. His teams have established websites (www.PlumbingSafety.org; www.CIPPSafety.org) to make discoveries accessible to the public and communities of interest. He earned a B.S. in civil engineering, M.S. in environmental engineering, and Ph.D. in civil engineering from Virginia Tech University.