



## Speakers for Low-Head Dams: Explained, Purposes, and Inventory

**Dr. Rollin Hotchkiss** is a professor of civil and environmental engineering at Brigham Young University. He is currently chairing a joint Task Force comprising members of USSD, ASDSO, and the Environmental and Water Resources Institute of the American Society of Civil Engineers to create a national inventory of low-head dams. Besides working to reduce fatalities at such structures, Dr. Hotchkiss conducts research in extending the useful life of dams and reservoirs and applications of machine learning in water resources. He is a professionally licensed civil engineer and holds advanced professional registration with the American Academy of Water Resources Engineers.

**Manuela Johnson** works at the Indiana Department of Homeland Security in the Response and Recovery Division. She is the administrator of the State Disaster Relief Fund. She is the State Lead for the National award-winning Indiana Silver Jackets Team. The Indiana Silver Jackets has been actively working to draw public awareness to the issues associated with low head dams. During the last legislative session Indiana passed a law directed specifically at safety at low head dams.

Manuela also serves as co-Vice Chair of the Joint Task Force on Low-head Dams and is a member of the ASDSO Safety AT Dams subcommittee.

Manuela graduated from Indiana Purdue University at Indianapolis (IUPUI) with a Bachelor's degrees in Chemistry and Biology. Manuela has worked and volunteered in public safety and emergency management for nearly 40 years. She holds a number of firefighting and EMS certifications and has served as a certified fire service instructor and fire investigator. She is married and enjoys gardening, photography, volunteering at her church and working as a safety team member for motorsports events regionally.

**Brian Crookston** is an Assistant Professor at Utah State University in the Civil and Environmental Engineering Department and at the Utah Water Research Laboratory. His research group is focused on water sustainability and resiliency including: hydraulic structures, fluvial hydraulics, and modeling and technology. Brian has particular interest in public safety at low-head dams along with the hydraulics of spillways, chutes, energy dissipators, nonlinear weirs, physical and numerical modeling, machine learning algorithms, flow acoustics, scour and erosion, ecohydraulics, embankment failures, flooding, and surface hydrology. Brian serves as co-Vice Chair of the joint Task Force on Low-head Dams and as Chair of the USSD Spillways subcommittee. He and his wife have five fantastic kids and love spending time together in a very wide variety of family activities.