

AEG's 2020 Virtual Annual Meeting
 September 16-18, 2020

TECHNICAL SESSION #5: DAMS AND LEVEES LESSONS LEARNED SYMPOSIUM, PART I

Presenter Biographies (In order of Presentation)

Doug Boyer - Keynote: Current Status of Risk-Informed Decision Making for Dam and Levee Safety Programs



Doug is a civil engineer and engineering geologist with over 34 years of experience in dam engineering and dam safety. He has a B.S. in Geology and M.S. in Civil Engineering. He currently serves as the Chief of the Risk-Informed Decision Making Branch for the Federal Energy Regulatory Commission in Portland, Oregon. Previous employment includes positions with the U.S. Army Corps of Engineers, Bureau of Reclamation, and consulting. Doug is a past chair of the former AEG Rocky Mountain Section and past AEG Communications Director. He currently serves as the chair of the USSD Foundations Committee.

Matt Balven - Dam Failures in Hindsight. Lessons Learned?



Matthew Balven, P.E., PMP – Matt has 20 years of experience as a dam safety and geotechnical engineer. He has a B.S. degree in Geological Engineering for Missouri University of Science & Technology and a M.S. in Civil Engineering from Oklahoma State University. He currently works for Gannett Fleming, with primary responsibilities in dam safety, risk analysis, and geotechnical engineering.

Scott Walker - The Wheeler Dam Lock Failure: A Case History and The Hales Bar Project: Construction, Mitigation, and Removal of a Dam Founded on Karst and The Wheeler Dam Lock Failure: A Case History



Scott Walker received bachelor's and master's degrees in geological engineering from, respectively, the Colorado School of Mines and University of Missouri-Rolla and he holds professional licenses as a professional engineer, professional geologist, and certified engineering geologist. As a Federal Corporation, the Tennessee Valley Authority's Dam Safety Program is self-regulated, and Scott is a member of the Governance & Oversight team. He led TVA's post-Oroville spillway assessment program and was responsible for researching and collecting historical reports, analyses, and construction photographs from TVA's archives. Scott has over 20 years of professional experience and recently completed a rotational assignment as the Responsible Engineering Manager for 7 of TVA's river dams. In addition to dam engineering, has experience with heavy civil construction, rock slope engineering, rockfall mitigation, and tunnels. He has been a member of AEG since he was an undergraduate.

Suzanne Hess-Brittelle - Phased Approach for Evaluating Piezometers to Inform a Risk Assessment, Blakely Mountain Dam, Ouachita River, Arkansas



Suzi Hess-Brittelle is a Licensed Professional Geologist (WA) and has worked for the U.S. Army Corps of Engineers since 2000, in the field of engineering geology and dam safety. She has worked as a geologist in both Seattle and Albuquerque Districts and served as Albuquerque Dam Safety Program Manager for 6 years. She is currently working for the Risk Management Center as a technical advisor for dam and levee safety. She received a B.S. in Geology from Northern Illinois University and a M.S. in Geology from Portland State University.

Co-Presenter

Amy LeFebvre is a Licensed Professional Geologist (WA) and has been working for the U.S. Army Corps of Engineers Seattle District since 2005. She has served as a member of the Northwest Division Dam and Levee Safety Risk Cadre since 2012, performing site characterization and potential failure mode analyses in support of risk assessments. She has received a B. A. in Geology from the University of Minnesota, a M.S. in Geology from Portland State University, and a M.E. in Geotechnics from the University of Missouri S&T.

Brian Greene and Greg Braun - History of Internal Erosion at East Branch Dam, Pennsylvania, and Cutoff Wall Remediation Project



Dr. Brian Greene is a Senior Consultant with the firm Gannett Fleming, Pittsburgh, PA. He retired from the Pittsburgh District U.S. Army Corps of Engineers where he worked for 32 years - primarily on dams. Over the span of his 42 year career, Brian has served on several Boards of Consultants for dam rehabilitations and peer reviews. He has authored numerous professional papers on the topic of dams. In 2018, Brian stepped down as Chairperson of AEG's Dams & Levees Technical Working Group after a decade of service to the Association in this capacity and is still active in professional societies.

Greg Braun



Greg Braun is a Geotechnical Engineer with the U.S. Army Corps of Engineers, Dam Safety Modification Mandatory Center of Expertise (DSMMCX). Prior to joining the DSMMCX in May 2020, he worked for the Pittsburgh District of the U.S. Army Corps of Engineers and previously Gannett Fleming. Greg's experience spans deep foundations, anchored retaining systems, landslide stabilizations, and dam rehabilitation. Greg currently serves as the cutoff wall project engineer for the East Branch Dam Safety Modification. Greg is an active member of the NCEES Civil PE Geotechnical Exam Committee and has served in several roles for the Pittsburgh Chapter of the ASCE Geo-Institute. This is his first time attending and presenting at AEG.

Philip Shaller - Construction, Operation, and Failure of Ka Loko Dam, Kauai, Hawaii



Dr. Shaller earned his Ph.D. from the California Institute of Technology in the fields of Geology and Planetary Science, where his research focused on the investigation of large-scale landslides on Earth and Mars. He also holds bachelor's and master's degrees in Geochemistry from Occidental College and Montana Tech. He has worked as an engineering geology consultant for the past 29 years. His early experience included several years working on the construction of the Getty Center museum complex in Los Angeles, California. He has over 20 years of experience in forensic scientific investigations, and has offered expert testimony over a wide range of topics, including landslides, debris flows, illegal grading, post-wildfire flooding, lake sedimentation, sand migration, and dam failure. He has authored or co-authored over 60 published works, including posters, papers, abstracts, and symposia proceedings. He is a registered professional geologist in three states and a Certified Engineering Geologist in the State of California. He has project experience in the majority of U.S. states as well as New Zealand and Venezuela.

Visty Dalal - “From Scoured to Safety” – Rehabilitation of Lake Roland Water Supply Dam, Baltimore, Maryland



Mr. Visty P. Dalal is a Senior Engineering Geologist with the Maryland Department of the Environment, Baltimore, Maryland, where he has worked for the past 29 years, first as the Division Chief of the Dredging Coordination and Assessment Division and then with the Dam Safety Division for the past 19-years. He is responsible for regulating and overseeing over 100 dams in Maryland, working with the dam owners on maintenance and repairs of dams and conducting county-wide EAP tabletop exercises. He is an active ASDSO and AEG member and has published and presented several technical papers at the ASDSO & AEG conferences and in technical journals over the past 15-years. He is on ASDSO’s ‘*Emergency Preparedness & Consequence Reduction Committee*’; and AEG’s ‘*Dams Technical Working Group Committee*’ and is also the *Acquisitions Editor* for the AEG *NEWS* seasonal magazine since 2019. Visty has earned double master’s degree in engineering geology from India and the petroleum geology degree from Wichita State University, Kansas. He is an adjunct associate professor at several universities in the country as well as at a local community college.

John A. Mundell, P.E., L.P.G., P.G. - Geophysical Evaluation of Dam Seepage to Support Rehabilitation Efforts



John Mundell is president and senior consultant for Mundell & Associates, Inc., an earth science, environmental engineering and water resources consulting firm based in Indianapolis. He is a professional engineer and a licensed professional geologist with 40 years of consulting experience in geotechnical, environmental and water resource engineering, geology, hydrogeology and geophysics. John has a B.S. and M.S. in Civil Engineering from Purdue and completed doctoral coursework in environmental engineering at the University of Notre Dame. During his career, John has been involved in the investigation and characterization of thousands of sites across the world for the purpose of evaluating the design, construction and monitoring of various engineering structures including dams, levees, embankments, roads and bridges. He has been active in developing various innovative modeling strategies for assessing the impact of the interaction of groundwater and surface water on the ability of those structures to withstand the forces of mother nature. John has been a technical consultant to multinational corporations, major American cities, several state agencies, the U. S. Environmental Protection Agency and the U.S. Army Corps of Engineers on issues related to environmental and engineering sustainability.