



SATURDAY, SEPTEMBER 20

1:30 PM – 5:00 PM
Executive Boardroom 206
ASDSO Board of Directors Meeting

SUNDAY, SEPTEMBER 21 – Leadership Day

8:30 AM – 10:30 AM
Room 304
Northeast Regional Caucus Meeting

8:30 AM – 10:30 AM
Room 307B
Southeast Regional Caucus Meeting

8:30 AM – 10:30 AM
Room 308
Midwest Regional Caucus Meeting

8:30 AM – 10:30 AM
Room 307A
West Regional Caucus Meeting

11:00 AM – 12:30 PM
Room 302
Annual Meeting of State Representatives

12:00 PM – 5:00 PM
Atrium
Registration Open

1:00 PM – 6:00 PM
Room 203
Speaker Preview Room Open

4:00 PM – 6:00 PM
Executive Boardroom 206
Advisory Committee Meeting

7:00 PM – 10:00 PM
Rock & Roll Hall of Fame
Conference Kick-off Event

MONDAY, SEPTEMBER 22

7:00 AM – 7:00 PM

Room 203

Speaker Preview Room Open

7:00 AM – 8:00 AM

Room 205A

First-Time Attendee Breakfast (Space is Limited. RSVP Required)

7:00 AM – 8:30 AM

Grand Ballroom Foyer

Breakfast

7:00 AM – 5:30 PM

Atrium

Registration Open

8:30 AM – 10:00 AM

Grand Ballroom

Opening General Session

ASDSO Welcome

Mia Kannik, P.E., and Mindy Bankey, OH Department of Natural Resources

A hundred+-year legacy of flood protection: the past, present and future, told through the experiences of Miami Conservancy District in Southwest Ohio.

Marylynn Lodor, Don O'Connor, P.E., and Barry Puskas, Miami Conservancy District; Mia Kannik, P.E., OH Department of Natural Resources, and Nathaniel Gee, P.E., TVA

10:00 AM – 10:30 AM

Grand Ballroom Foyer

Refreshment Break

10:30 AM – 12:00 PM

Atrium Ballroom A

Session 1: Recent Failures and Incidents

Moderator: Andrew Cummings, Pare Corporation

P *Lightning Strikes Twice at Rapidan Dam*

Jim Herbert, P.E., Joe Hjerpe, P.E., and Tom MacDonald, P.E., Barr Engineering Co.; Ryan Thilges, P.E., Blue Earth County

P *Hitting the Curve - Riphshin Lake Dam Repairs*

Jason Reeves, P.E., S&ME, Inc.

Terror in the San Francisquito Canyon

Andy Yung, P.E., CFM, BC.WRE, and Neel Salvi, P.E., Walter P Moore; Josh Yung, EIT, Stantec Consulting Services, Inc.

10:30 AM – 12:00 PM

Atrium Ballroom D

Session 2: Extreme Rainfall Updates

Moderator: Jeffery Powers, P.E., Hazen and Sawyer

Updating Precipitation Design Standards for Oregon: Precipitation Frequency and Probable Maximum Precipitation

Luciana Cunha, Matthew Koszuta, and Benjamin Choat, WEST Consultants Inc; Tony Janicek, Ph.D., P.E., and Keith Mills, OR Water Resources Department

Understanding Tropical Storm Risk in the Appalachian Mountains – An Assessment of Tropical Storm Areal Reduction Factors

Debbie Martin, Kyle Chudler, Ph.D., and Victoria Sankovich Bahls, RTI International; Mel Schaefer, Ph.D., P.E., MGS Engineering Consultants, Inc.; Miles Yaw, Tennessee Valley Authority

P *New Probable Maximum Precipitation (PMP) for Dam Safety – the case of North Carolina*

Hadush Seged Hagos, Ph.D., P.E., and William E. Toby Vinson, P.E., CPM, NC DEQ Division of Energy, Mineral and Land Resources; Bill Kappel and Jake Rodel, GISP, Applied Weather Associates

10:30 AM – 12:00 PM

Atrium Ballroom C

Session 3: Spillway Hydraulic Modeling Tools

Moderator: Joshua Myers, P.E., Hazen and Sawyer

Beyond Boundaries: CFD Modeling for Innovative Spillway Design

Ann Houseman, P.E., and Benjamin Winter, EIT, Hazen and Sawyer

Suite-ly, Modeling a New Dam – Using a Variety of H&H Tools to Accomplish Multiple Tasks with Different Goals

David Hayson, P.E., and Daniel Hoffman, P.E., Stantec Consulting Services, Inc

Optimizing Spillway Rehabilitation: A Multi-Tool Hydraulic Approach at McCloud Dam

Greg Richards, P.E., CFM, Seth Thompson, P.E., SPRAT I, and Josh Paquet, P.E., SPRAT I, GFT; Abbas Dorostkar, Ph.D., P.Eng, P.E., and Jeff Jukkola, P.E., Pacific Gas & Electric Company; Zac Sharp, Ph.D., P.E., Utah Water Research Laboratory

10:30 AM – 12:00 PM

Atrium Ballroom F

Session 4: Construction Lessons Learned

Moderator: Zachary Mickel, P.E., Black & Veatch

P *Replacing 5000-lb (2268-kg) Trunnion Pins on a Giant Radial Spillway Gate*

Tony Vader, P.E., Grant County Public Utility District

Muskingum River Dam Replacement: Construction Manager at Risk Approach at McConnelsville

Mike Garver, The Ruhlin Company; James Hilovsky, P.E., OH Department of Natural Resources

P *Engineering Oversight Lessons Learned - An Owner's Perspective*

Eric Eisinger, P.E., Colorado Parks and Wildlife

10:30 AM – 12:00 PM

Room 205B

Session 5: Geotechnical Innovations

Moderator: Jonathan Andrews, P.E., GZA GeoEnvironmental, Inc.

CANCEL - A Practical Methodology for Static Liquefaction Potential Evaluation and Post Triggering Stability

Assessment in Embankment Dams

Casey Fritsch and Carlin Grundemann, P.E., GEI Consultants, Inc.

P *Alternative Method to Model Dam Concrete-Rock Foundation Interface Shear Strength*

R Craig Findlay, Ph.D., P.E., G.E., BC.GE, Findlay Engineering, Inc.; Gary Dale, P.E., and Jason Clere, P.E., G.E., Brookfield Renewable; Stephen Rabasca, P.E., Soil Metrics LLC

P *Geotechnical Innovation in Floodwall Design: Addressing Subsurface Challenges in the Dallas-Fort Worth Metroplex*

John Briand, P.E., Cory Rauss, P.E., Meryl Higgins, P.E., and Glen Andersen, P.E., CDM Smith; Donovan Blakeley, P.E., US Army Corps of Engineers

12:00 PM – 2:00 PM

Grand Ballroom

Awards Luncheon

2:00 PM – 3:30 PM

Exhibit Hall B

Exhibit Hall Opening/Poster Lightning Talks

2:30 PM – 3:30 PM

Room 307B

Peer Review Committee & Pool of Reviewers Meeting

3:30 PM – 5:00 PM

Atrium Ballroom A

Session 6: Decade Dam Failures and Incidents (DDF)

Moderator: Scott Arends, P.E., CFM, Hazen and Sawyer

Decade Dam Failures - Update on the 2005 Failure of Hadlock Pond Dam, Fort Ann, NY

Kevin Ruswick, P.E., CFM, and Michael Quinn, P.E., Schnabel Engineering

P 1925 Eileen Dam Failure - Know Your Foundation!

Robb Roy, P.E., Colliers Engineering & Design; Bill Kussmann, P.E., Hatch Associates Consultants, Inc.

P Dam Failure Case Studies from the 2015 South Carolina Flood

Carmen Lepsch, P.E., Schnabel Engineering; Riley Manwaring, P.E., GFT

3:30 PM – 5:00 PM

Atrium Ballroom D

Session 7: Modeling and More Modeling

Moderator: Cory Miyamoto, P.E., Pacific Gas & Electric

P Keeping a Level Head: Challenging Level Pool Routing and Other Common Assumptions in Hydrologic and Hydraulic Modeling

Nathan Clymer, P.E., and Benjamin Winter, EIT, Hazen and Sawyer

The Reverse Roller: Remote Sensing and Modeling Low-head Dams

Brian Crookston, Ph.D., P.E., Utah State University; Rollin Hotchkiss, Ph.D., P.E., D.WRE, Brigham Young University

Modeling Communications: Phase II – Post-modeling

Seth Thompson, P.E., SPRAT I, GFT; Devon McLay, P.E., GeoEngineers; Brent Zundel, P.E., CFM, and Michele Lemieux, P.E., MT Dept. of Natural Resources and Conservation

3:30 PM – 5:00 PM

Atrium Ballroom C

Session 8: Seepage Evaluation and Remediation

Moderator: Richard Graham, P.E., Spicer Group

P From PFMs to PZ Readings: Considerations for a Dam Seepage Modification

Kyle Blakley, P.E., Stantec Consulting Services, Inc.

P Lake Ilo Revival: A Story of Dam Rehabilitation

Paul Perri, P.E., W. W. Wheeler and Associates, Inc.; Dave Hibbs, U.S. Fish & Wildlife

A Case Study of Design and Construction Challenges of a Soil-Cement Bentonite Hydraulic Cutoff Wall in a Loose Sand Embankment

Carl Honkala, Carlin Grundemann, P.E., and Michael Carpenter, P.E., GEI Consultants, Inc.; Joshua Ehlich, DeWind One Pass Trenching

3:30 PM – 5:00 PM

Atrium Ballroom F

Session 9: Spillway Design and Construction

Moderator: Nicholas Ciomei, Kleinschmidt

Safeguarding Communities and Agriculture: Tule River Spillway Enlargement

Ike Pace, P.E., Tetra Tech, Inc; Mostafa Mostafa Mostafa, P.E., US Army Corps of Engineers

P *A New Concrete Spillway Chute Concept that Addresses Flow Induced and Seepage Potential Failure Modes (60 minutes)*

Frederick Lux, P.E., Aubian Engineering Inc.; Paul G. Schweiger, P.E., CFM, GFT; Shawn Perrin, Barnard Construction Company, Inc; and Enrique Farfan, Ph.D., P.E., HDR

3:30 PM – 5:00 PM

Room 205B

Session 10: Construction: Alternative Delivery and Construction Risks

Moderator: Caden Gigliotti, P.E., HDR

What Are We Learning Through Alternative Project Delivery in A Dam World

Jared Deible, P.E., HDR

Using the Progressive Design Build Model to Balance Risk and Costs when Sizing a Diversion for a Small Dam on a Flashy Watershed

Greg Shaffer, P.E., CFM, Scott Jones, Ph.D., P.E., Greg Glunz, P.E., and Garret Fosmer, Kiewit

P *Navigating Design & Constructability Risks During Construction of Second Dam*

Nisheet Reddy, P.E., and Chetan Swarn, P.E., GEI Consultants Inc.; Zachary Servinski and Rusty Friedle, Fisher Contracting Company

3:30 PM – 5:00 PM

Room 307A

Young Professionals Interest Group Meeting

5:00 PM – 6:30 PM

Hall B

Opening Reception in Exhibit Hall/ Poster Lightning Talks

7:00 PM – 9:00 PM

Suite 301

Young Professionals Game Night

TUESDAY, SEPTEMBER 23

7:00 AM – 7:00 PM

Room 203

Speaker Preview Room Open

7:30 AM – 8:30 AM

Grand Ballroom Foyer

Breakfast

7:30 AM – 5:30 PM

Atrium

Registration Open

8:30 AM – 10:00 AM

Grand Ballroom

General Session: Studying Hurricane Helene: What Have We Learned?

Analysis of Historic Rainfall from Hurricane Helene-Does This Change PMP? (15 Minutes)

Bill Kappel and Marty Venticinque, Applied Weather Associates

Hurricane Helene: A Panel Discussion on Impacts to Dams in Western North Carolina and Eastern Tennessee

Jonathan Pittman, P.E., and Brendan Stepek, P.E., Schnabel Engineering, LLC; William E. Toby Vinson, P.E., CPM, NC DEQ Division of Energy, Mineral and Land Resources; Dustin Waycaster, Town of Lake Lure; Stan Aiken, P.E., NC DEQ

Dam Safety Asheville Region; Leslie Carreiro, City of Asheville; Laura Groce, Tennessee Valley Authority; and Mark McIntire, Duke Energy

10:00 AM – 10:30 AM

Exhibit Hall B

Refreshment Break in the Exhibit Hall

10:30 AM – 12:00 PM

Session 11: The National Dam Safety Program; How it started, How it's going?

Atrium Ballroom A

Moderator: William Ashby, P.E., MD Department of the Environment

P *Historical Review of President Jimmy Carter's Role in Dam Safety*
Martin McCann, Stanford University

ASDSO Panel on Legislative Advocacy

Lori Spragens and Cody Holt, ASDSO; John Roche, P.E., MD Department of the Environment; and Mia Kannik, P.E., OH Department of Natural Resources

10:30 AM – 12:00 PM

Atrium Ballroom D

Session 12: Physical and Numerical Hydraulic Modeling

Moderator: Nicole Chiles, P.E., HDR

P *The State of Using CFD to Calculate Air Entrainment on Spillways*

Dan Gessler, Ph.D., P.E., D.WRE, Brian Fox, P.E., and John Haywood, Ph.D., Flow Science; Tom Molls, Ph.D., P.E., CA Department of Water Resources; Chris Kissick, P.E., GEI Consultants

Wet versus dry stability berm erosion embankment overtopping research

Bryan Heiner, P.E., Barr Engineering; Daniel Livsey, Ph.D., and Sherry Hunt, Ph.D., P.E., USDA - ARS

P *Garrison Dam Spillway Modification - CFD Modeling to Evaluate Spillway Overlay Measures with 70 ft of Uplift Resistance (Hydraulic White Paper Series)*

Chad Vensel, P.E., Ethan Thompson, P.E., Brian Hall, P.E., D.WRE, and Curtis Miller, P.E., US Army Corps of Engineers

10:30 AM – 12:00 PM

Atrium Ballroom C

Session 13: Case Studies in Dam Rehabilitation

Moderator: Edward Race, P.E., Michael Baker International, Inc.

P *Innovative Design for High Head Bulkhead Used in Slots With Multiple Openings*

Paul Schiller, P.E., Barr Engineering Co.; Mike Sondag, P.E., Alltech Engineering Corp.; and Madelyn Rubin, P.E., San Francisco Public Utilities Commission

Repurposing a Dormant FERC Exemption: Notre Dame's Hydropower Development on the St. Joseph River in South Bend, Indiana

Kevin Siedlecki, P.E., Lawson-Fisher Associates

P *Improvements at Flat Rock Dam*

Kevin Grim, P.E., Ramboll

10:30 AM – 12:00 PM

Atrium Ballroom F

Session 14: Dewatering and Reservoir Control for Maintenance and Construction

Moderator: Clinton Carlson, Geosyntec Consultants

Dewatering, High Risk and Low Reward.

Andrew Baxter, P.E., P.G., GEI Consultants

P *Innovative Bulkhead System for Hydraulic Structures*

Meredith Shaw, P.E., and Mark Graeser, P.E., Verdantas

P *Tackling Hydrogeologic Complexity for Construction Dewatering at Bull Lake Reservoir, Wyoming*
Erik Blumhagen, LHG, Malcolm Drilling Company, Inc.

10:30 AM – 12:00 PM
Room 205B

Session 15: Low Level Outlet Rehabilitations

Moderator: Ghazoll Motlagh, P.E., CFM, WSP

Relining Nichols Dam Conduit Using Casing Spacers

John Sikora, P.E., D.WRE, and Jackson Moloney, P.E., AECOM; John Del Mar, P.E., City of Santa Fe Utilities

P *Low-Level Outlet Retrofit at Lake Lure Dam*

Josh Parsons, Brendan Stepek, P.E., Charles Johnson, P.E., S.E., and Steve Fischer, P.E., Schnabel Engineering; Jason Fischer and Will Lawton, E.I.T., Morgan Corp.

Revitalizing Resilience: How Cured-In-Place Pipe Lining Helps Address Aging Infrastructure

Jennifer Gaines, P.E., Freese and Nichols, Inc.; James Grimes, P.E., Gwinnett County Department of Water Resources

10:30 AM – 12:00 PM
Room 307A

Committee on Career Development and Student Outreach Meeting

10:30 AM – 12:00 PM

Extreme Precipitation Investigation Committee (EPIC) Meeting

12:00 PM – 1:30 PM

Lunch on Your Own

1:30 PM – 3:00 PM

Atrium Ballroom A

Session 16: Decade Dam Failures: Programmatic Changes

Moderator: Sushil Chaudhary, P.E., NM Office of the State Engineer

P *Systemic and Underlying Causes of the 1965 Fontenelle Dam Incident: A Manmade Disaster Theory Perspective*

Mark Baker, P.E., DamCrest Consulting

P *Big Boils? Big Problems: The 20th Anniversary of the Incident at Salt Fork Lake Dam*

Brianne Cochill, EI, and Karen Cabrera Gomez, OH Department of Natural Resources

Picking Up the Pieces - The Failure of Walter Bouldin Dam, Its Aftermath, and the Lessons Learned by Alabama Power and FERC

William Brown, P.E., Federal Energy Regulatory Commission; Bobby Williams, P.E., Tri-L Engineering; Richard Mickwee, P.E., Southern Company

1:30 PM – 3:00 PM

Atrium Ballroom D

Session 17: Breach Inundation Modeling

Moderator: Nathan Clymer, P.E., CFM, Hazen and Sawyer

2D Dam Breach Modeling Best Practices and Troubleshooting

Chris Goodell, P.E., BC.WRE, Kleinschmidt Associates

P *Land O' Lakes Inundation Mapping: Challenges of Modeling and Mapping an Above Ground Reservoir*

Madison Miro and Kevin Chapman, P.E., Hazen and Sawyer

P *Manning's n for 2D Hydraulic Modeling of Dam Breaches*

William Barry, P.E., BC WRE, F ASCE, Justin Collins, P.E., Patrick McMahon, Ph.D., P.E., CFM, Civil and Environmental Consultants, Inc.

1:30 PM – 3:00 PM

Atrium Ballroom C

Session 18: Dam Removal

Moderator: Carmen Lepsch, P.E., Schnabel Engineering

P *Hamilton Dam Removal - Innovative Design and Collaboration to Achieve a Wide Variety of Objectives*

Jonathan Scheibly, P.E., PWS, CERP, Michael Sendelbach, P.E., and Jacob Cochrane, P.E., Stantec Consulting Services, Inc.

Should I Stay or Should I Go - Dam Disposition Feasibility Studies

Janeen McDermott, P.E., GEI Consultants, Inc.

Thompson Mill Dam Removal - The Intersection of Community Resilience, Environmental Restoration and Public Safety

Manuela Johnson, CEM, Christopher B. Burke Engineering, LLC

1:30 PM – 3:00 PM

Atrium Ballroom F

Session 19: Cutoff Walls

Moderator: Paul Perri. W.W. Wheeler and Associates, Inc.

P *Secant Pile Cutoff Wall to Mitigate Flooding at Kentucky's Panbowl Lake*

Stan Worst, P.E., Schnabel Foundation Company; Aaron Wallace, P.E., Kentucky Transportation Cabinet

Back in Time: An Actual Look Inside of a 120-Year-Old Timber Crib Dam

Timothy Hampshire, P.E., DLZ National, Inc.

P *Tailoring Cutoff Wall Installation Techniques to the Task*

Michael Arnold, Ph.D., BAUER Foundation Corp.

1:30 PM – 3:00 PM

Room 205B

Session 20: Instrumentation

Moderator: Ben Greenwell, P.E., Stantec Consulting Services, Inc.

P *Seepage Assessment in Embankment Dams Using Active Fiber Optic Sensing Technology*

Matthew Walker, P.E., Jason Harvey, P.E., and Ivan Contreras, Ph.D., P.E., Barr Engineering Co

P *More Bang for your Buck? Making Instrumentation Worth the Investment*

Nicole Wiesner, P.E., Russ Springer, P.E., and Matthew Davis, P.E., Freese and Nichols; and Jennifer Montgomery, North Texas Municipal Water District

Coupling Hydro-Dynamic and Geotechnical Models with Hyperspectral Imaging for Resilient Dam

Audrika Nahian, Omer Alzaghoul, and Sadik Khan, Jackson State University; Jasim Imran and Austin R.J. Downey, University of South Carolina

2:00 PM – 3:00 PM

Room 307A

Journal Committee Meeting

3:00 PM – 3:30 PM

Exhibit Hall B

Refreshment Break in Exhibit Hall

3:30 PM – 5:00 PM

Atrium Ballroom A

Session 21: Damfailures.org

Moderator: Greg Richards, P.E., CFM, GFT

P *Kingsley Dam Incident (Nebraska, 1972)*

Tim Gokie, P.E., NE Department of Natural Resources

P *Carsington Dam*
Michael Bennett, P.E., GFT

Gros Ventre Slide
Kevin Ruswick, P.E., CFM, Schnabel Engineering

3:30 PM – 5:00 PM
Atrium Ballroom D

Session 22: Levees

Moderator: Brianna Crotty, P.E., Schnabel Engineering

National Levee Safety Program – Capacity Building in the Nation (60 Minutes)
Jennifer Laux and Michael Bachand, US Army Corps of Engineers

Our Levees are Failing Us
Jacob Bench, P.E., CFM, and Dena Barnhouse, P.E., OH Department of Natural Resources

3:30 PM – 5:00 PM
Atrium Ballroom C

Session 23: Communication and Collaboration for Emergency Preparedness

Moderator: Jonathan Keeling, Stantec Consulting Services, Inc.

P *Improving Collaboration to Benefit Dam Safety and Emergency Management Programs*
Tony Subbio, CEM, CFM, PMP, CDM Smith

Emergency Response for Statewide Dams
James Hilovsky, P.E., OH Department of Natural Resources

Too big or too small? Why communicating at the watershed level might help us solve our flood risk awareness challenges.
Megan Pierce, P.E., and Katelyn Noland, US Army Corps of Engineers

3:30 PM – 5:00 PM
Atrium Ballroom F

Session 24: Spillways and Gates

Moderator: Erin Krug, Consor

P *Cedar Cliff Dam Spillway Upgrade with Giant Fusegates*
Hasan Kocahan, PMP, Hydroplus, Inc.; Brad Keaton, P.E., Duke Energy; Ryan Makela, Barnard Construction Company, Inc.; Fares Abdo, P.E., Morgan Corp

North Fork Dam Fusegate Activation – Hurricane Helene
Aaron Collins, Schnabel Engineering

Physical Modeling of Valenciano Dam
Albert Molinas, Ph.D., P.E., and Brett Sollenberger, Hydrau-Tech, Inc.; Christopher Thornton, Ph.D., P.E., Colorado State University; Greg Hebel, Ph.D., P.E., Josh Myers, P.E., and Justin Lennon, P.E., WSP

3:30 PM – 5:00 PM
Room 205B

Session 25: Grab-n-Go

Moderator: Matthew Marquis, OH Department of Natural Resources

P *A Comparison of Trencher Method vs. Slurry Trenching and Soil Mixing for Seepage Barriers in Dams (15 minutes)*
Charlie Krug, Nathan Coughenour, P.E., and Daniel Ruffing, P.E., Geo-Solutions, Inc.

Improving Tailings Dam Safety with Near Real-time Piezometer Monitoring (15 minutes)
Summer Sun, Ph.D., P.E., Ray Dorow, and Philip Crouse, Stantec Consulting Services, Inc.

P *Influence of Wet-Dry Weathering on Hydraulic Conductivity and Infiltration Rate for Fine-Grained Soils and Weathered Shales (15 minutes)*

Calvin Tohm, Ph.D., M.ASCE, South Dakota School of Mines and Technology; Bret Lingwall, Ph.D., P.E., BC.GE, M.ASCE, Bureau of Reclamation

P *Seismic-Induced Cracking of Earth Dams: Updated Database and Recommendations (15 minutes)*

Juan Jimenez-Pirajan, EIT, Purdue University/Stantec; Antonio Bobet, Purdue University

Assessing Change and Uncertainty in Future Flood Estimates with Large-Ensemble Streamflow Projections

Ganesh Chimire, Ph.D., Shih-Chieh Kao, Ph.D., Sudershan Gangrade, Ph.D., and Scott DeNeale, Oak Ridge National Laboratory; Mark Christian, Ph.D., and Brenda Brickhouse, Electric Power Research Institute

How a Barton-Choubey Evaluation can be Used to Better Assess the Effective Friction Angle at Your Dam Foundation's Rock Interface (15 minutes)

Helen Russell, P.E., Nick Ciomei, P.E., and Emily Erhart, P.E., P.G., Kleinschmidt Associates

5:00 PM – 6:30 PM

Room 205B

USACE Town Hall

5:00 PM – 6:30 PM

Exhibit Hall B

Reception in Exhibit Hall

WEDNESDAY, SEPTEMBER 24

7:00 AM – 3:30 PM

Room 203

Speaker Preview Room Open

7:30 AM – 4:00 PM

Atrium

Registration Open

7:30 AM – 8:30 AM

Floor 2 Pre-Function

Breakfast

8:30 AM – 10:00 AM

Atrium Ballroom A

Session 26: Decade Dam Failures: International Failures

Moderator: Christopher Keenan, P.E., GEI Consultants, Inc.

P *130th Anniversary of the Bouzey Dam Failure –The Importance of Internal Uplift Pressure in Stability Design of Gravity Dams*

Siavash Sajedi, Ph.D., P.E., GFT

P *Understanding Human Factors that Contributed to the Banqiao and Shimantan Dam Failures*

Andy Lynch, P.E., CFM, GFT

P *Technical Lessons and Regulatory Impact: The 1925 Eigiau and Coedty Dam Failures*

Dan McGraw, P.E., Reuben Sasaki, P.E., and Keil Neff, Ph.D., P.E., US Army Corps of Engineers

8:30 AM – 10:00 AM

Atrium Ballroom D

Session 27: State Dam Safety Program Updates

Moderator: Matthew Hook, P.E., OH Department of Natural Resources

Great I Own A Lake; Damn I Own A Dam

Whit Montague, P.E., CFM, Arkansas Department of Agriculture, Natural Resources Division; Ben Hunter, BEng, Arkansas Department of Agriculture/ Natural Resources Division

Regulating Dam Safety in Oklahoma: Updating SOPs to Enhance Enforcement Efforts

Natalie Orbesen and Emma Moradi, OK Water Resources Board

Insights, Challenges and Opportunities of the Kansas Dam Safety Program

Maria Neeland, P.E., Benesch; Terry Medley, P.E., KS Dept of Agriculture

8:30 AM – 10:00 AM

Atrium Ballroom C

Session 28: Probabilistic or Probable Maximum Floods

Moderator: Heather Shanks, Pare Corporation

P *Probabilistic Flood Model to Evaluate Hydrologic Loadings and Evaluate the Operational Conservatisms of the PMP/PMF, An Owner's Perspective*

Bruce Barker, P.E., MGS Engineering Consultants, Inc; Josh Gile, P.E., Tacoma Public Utilities; Nicole Novembre, P.E., and Kyle Chudler, Ph.D., RTI International; Mel Schaefer, Ph.D., P.E., MGS Engineering Consultants, Inc.

P *Comparison of Two Stochastic Modeling Approaches for PFHA Development*

Nicole Novembre, P.E., Ryan Johnson, P.E., Shaun Carney, P.E., and Kyle Chudler, Ph.D., RTI International; Mel Schaefer, Ph.D., P.E., and Bruce Barker, P.E., MGS Engineering Consultants, Inc.; C. Haden Smith, P.E., US Army Corps of Engineers

P *Probable Maximums Should Probably Have Rare Probabilities: Implications of Modernizing Probable Maximum Precipitation*

Derek Kinder, P.E., and David Margo, P.E., US Army Corps of Engineers

8:30 AM – 10:00 AM

Atrium Ballroom F

Session 29: Roller Compacted Concrete

Moderator: Fares Abdo, P.E., Morgan Corp.

P *Midwestern Dam Rehabilitation with Artesian Conditions... What could go wrong?*

Matthew Marquis, P.E., and Michael Becker, P.E., OH Department of Natural Resources

Application of RCC for Small Dam Projects - Rehabilitation of Rawson Hill, Bear Creek and Beaver Creek Dams

Paul Schweiger, P.E., CFM, GFT

Lake Williams Dam Rehabilitation - Unique Placement of Roller-Compacted Concrete

Ethan Miller, P.E., and Paul Schweiger, P.E., CFM, GFT; Brett Steers, The York Water Company

10:00 AM – 10:30 AM

Exhibit Hall B

Refreshment Break in the Exhibit Hall

10:30 AM – 12:00 PM

Exhibit Hall B

Topic Tables and Committee Meetings

10:30 AM – 12:00 PM

Room 307A

Dam Failures and Incidents Committee Meeting

12:00 PM – 1:30 PM

Exhibit Hall B

Lunch in Exhibit Hall/Door Prize Drawings

1:30 PM – 3:00 PM
Executive Boardroom 206
Public Safety at Dams Committee Meeting

1:30 PM – 3:00 PM
Atrium Ballroom A

Session 30: Decade Dam Failures: Tailings Failures

Moderator: Dean Korri, Cleveland Cliffs

Unmitigated Disaster, Val di Stava Dam Failure
Clint Brown, P.E., Engineering Analytics

P *A River Runs Through It - The 1975 Failure of Mike Horse Tailings Dam*
Ben Webster, P.E., PMP, and Jonathan Pittman, P.E., Schnabel Engineering

2015 Failure of Fundao Dam
Tom MacDougall, P.E., RJH Consultants, Inc.; John France, P.E., D.GE, D.WRE, M. ASCE, JWF Consulting LLC

1:30 PM – 3:00 PM
Atrium Ballroom D

Session 31: Complex Ownership Issues

Moderator: Dudley McFadden, P.E., BC.WRE, Sacramento Municipal Utility District

Loeey Pond Dam Improvements: A collaboration with multiple dam owners
AJ Smith; and George Carleton, Verdantas

Establishing a Capital Program
Jeremy Wenner, P.E., James Hilovsky, P.E., and Steven Berezansky, OH Department of Natural Resources

Building a municipal dam safety program and restoration case studies on dam embankments in Charlotte, NC.
Rebecca Deal and Kara Becker, City of Charlotte Storm Water Services

1:30 PM – 3:00 PM
Atrium Ballroom C

Session 32: Hydrology in an Uncertain World

Moderator: Randall Bowersox, P.E., GFT

Cracking Complex Conundrums: Hydrologic and Hydraulic Modeling of Newark's High Hazard Dams
Rex Gamble, EIT and Mia Hildebrandt, P.E., CFM, GZA GeoEnvironmental Inc.

Improving dam safety with operational AI hydrologic forecasts: sharing case studies and insights
Alex Truby, Upstream Tech

P *Basic Strategies to Perform Calibration of a Hydrologic Model (Win TR20) for Purposes of More Accurate Analysis Related to Planning/Design of NRCS Dams for Their Rehabilitation*
Geoffrey Cerrelli, P.E., USDA - NRCS

1:30 PM – 3:00 PM
Atrium Ballroom F

Session 33: Operational Case Studies

Moderator: Joe Hjerpe, Barr Engineering Co.

P *Rubber J-Bulb Seals Used for High Head Bulkhead on Corroded Surface*
Paul Schiller, P.E., Barr Engineering Co.; Mike Sondag, P.E., Alltech Engineering Corp.; and Madelyn Rubin, P.E., San Francisco Public Utilities Commission

P *Title Transfer of Two Dams in California from Federal to State Regulatory Jurisdiction*
Casey Phradichith, Nicolas Oettle, Ph.D., P.E., G.E., and David Gutierrez, P.E., G.E., GEI Consultants, Inc.; Joshua Zupan, Ph.D., P.E., Consultant (formerly GEI); Anthony Morales, P.E., Associate Engineer (formerly Contra Costa Water District)

Florida's New Dam System Rules
Tracy Woods, P.G., FL Department of Environmental Protection

3:00 PM – 3:30 PM
Floor 2 Pre-Function
Refreshment Break

3:30 PM – 5:00 PM
Atrium Ballroom A

Session 34: Hurricane Katrina 20 Years Later

Moderator: Jesse Pope, Stantec Consulting Services, Inc.

20 Years Later: Reflecting on the Impact of Hurricane Katrina

Meghan Walter, USDA - NRCS; Lee Wooten, GEI; Eric Halpin, Halpin Consulting LLC; Bill Kussmann, P.E., Hatch Associates Consultants, Inc.; Matthias Lindenbauer, P.E., HDR; Julien Cohen-Waeber, Exponent; Walter Baumy, ARCADIS; and Dr. Richard Varuso, US Army Corps of Engineers

3:30 PM – 5:00 PM
Atrium Ballroom D

Session 35: Risk for Evaluation, Prioritization, and Design

Moderator: William Dressel, Barr Engineering Co.

P *An Updated Methodology for Performing Screening Level Risk Evaluations for Large Portfolios: Part 1 – Tool Development and System Response Probability Estimation*

Jennifer Pitcher, P.E., Daniel DeVaun, P.E., and Kerri A. Puckett, P.E., GEI Consultants; Lucas Trumble, P.E., Michigan EGLE Dam Safety Unit

P *Prado Dam Spillway Risk Informed Structural Design*

Steve Dominic, P.E., Jerry Casto, P.E., and Melinda Dirdal, P.E., US Army Corps of Engineers; and Patrick Luff, P.E., Dewberry

A Decade of RIDM: Lessons Learned from the First Ten Years of Modern Risk Management Practices at BIA

Matthew Young, P.E., CFM, Bureau of Indian Affairs; Andrew Lockman, P.G., Bureau of Indian Affairs (contractor)

3:30 PM – 5:00 PM
Atrium Ballroom C

Session 36: Rehabilitation Case Histories

Moderator:

From Severe Deterioration to a “Butte”: Rehabilitating an 1890s Dam with Post-Tensioned Anchor Bars and a Concrete Overlay

Aimee Corn, P.E., GFT; Jim Keenan, Butte-Silver Bow; Justin Evertz, Great West Engineering

Fortifying History: Ensuring Structural Stability and Flood Resiliency at Lake Hamilton Dam

Seth Thompson, P.E., SPRAT I, Ethan Miller, P.E., and Paul Schweiger, P.E., CFM, GFT; Zachary Tallmadge, P.E., Aqua Ohio; Matthew Marchisello, P.E., Aqua Pennsylvania

The Reconstruction of Clam Falls Dam: Upgrading and Repurposing a Century-Old Hydropower Facility to Meet Contemporary Demands

Ethan Smith, P.E., and Austin Rieder, P.E., Ayres Associates; Rod Polk, Polk County Public Works Division

THURSDAY, SEPTEMBER 25

8:00 AM – 5:00 PM
Berlin Dam Field Trip

8:30 AM – 12:30 PM
Room 202

Half-Day Workshop: DSS-WISE Web: A Web-Based Flood Inundation Simulation System. Hands-On Training, Tips & Tricks, and Discussion of Upcoming Enhancements.

Marcus McGrath, Mohammad Al-Hamdan, Ph.D., Nuttita Pophet, Ph.D., Paul Smith, Noor Dibou, and Ujwal Srinivasa, National Center for Computational Hydrosience and Engineering/University of Mississippi

8:30 AM – 1:00 PM

Room 207 A-C

Hinckley Dam Field Trip (Starts with a short presentation at the convention center)

8:30 AM – 1:00 PM

Lake View Cemetery Dam Field Trip

8:30 AM – 5:00 PM

Room 205A

Full-Day Workshop: Understanding Internal Erosion Mechanisms and Pathways

Jennifer Williams, P.E., Jason Boomer, P.E., Harry Donaghy P.E., and Julie Smolarek, P.E., AECOM; Tim O'Leary, US Army Corps of Engineers

8:30 AM – 5:00 PM

Room 205B

Full-Day Workshop: The Dam Fundamentals – A One-Day Construction Inspection Workshop

Terry Arnold, Henrik Forsling, Ted Montoya, and Amanda Clarke, AECOM

POSTER-LIGHTNING TALKS

Precision is the backbone of engineering—but what if it's also a barrier

Dave Michelson, UNC Asheville's NEMAC; Jacob Smith, NC Department of Environmental Quality

O'Shaughnessy Dam – An Owner's Reflection on 100-years of Service

Stephen Kinsley, P.E., City of Columbus

Off Channel Reservoirs: Unique Challenges and Lessons Learned

Janis Murphy, P.E., Freese and Nichols, Inc.

Unlocking Insights: Assessing State Approaches to Dam Removal

Katherine Schmidt, American Rivers; Brian Graber, American Rivers

Unlocking Dam and Levee Safety: How the Corps Water Infrastructure Financing Program (CWIFP) is Revolutionizing Project Funding

Adèle Braun, P.E., and Kevin McDonald, US Army Corps of Engineers

Willisburg Lake Dam Spillway Design – The Importance of a Multi-Faceted Design Approach

Jesse Pope, P.E., CFM, Dhaivat Patel, P.E., and Robert Hatton, P.E., Stantec Consulting Services, Inc.; Glen Alexander, P.E., KY Division of Water

Dickson Dam Capacity Enhancement: Enhancing Resilience and Safety Through Infrastructure Upgrades

Hooman Mahjoobi, WSP

P *Modifying Existing Low-Head Dams to Fish Passable Rock Rapids*

Janeen McDermott and Samuel Prentice, P.E., GEI Consultants

Effect of lime-treatment on earthen embankment failure processes

Daniel Livsey, Ph.D., and Sherry Hunt, Ph.D., P.E., USDA - ARS; Bryan Heiner, P.E.

P *Restoration and Innovation: The FishPass project on the Boardman-Ottaway River*

Megan Fryer, EIT, and Jason Plum, P.E., AECOM; Daniel Zielinski, Ph.D., P.E., M.ASCE, Great Lakes Fishery Commission

North Carolina Statewide PMP-Modernizing the Process for Dam Safety

Bill Kappel, Dr. Doug Hultstrand, and Jake Rodel, GISP, Applied Weather Associates; Hadush Seged Hagos, Ph.D., P.E., NC DEQ Division of Energy, Mineral and Land Resources; Toby Vinson, P.E., CPM, NC Department of Environmental Quality

Sediment Management at Versailles Lake Dam, Indiana Using Historical Bathymetric Data
Elizabeth Johnson, Cody Fleece, and Jim Moyer, P.E., Stantec Consulting

P *USACE Civil Works Data Management During Construction – An Integrated Approach Towards Dealing with Construction Data for a Levee Construction Project*

Meredith Beswick, P.E., P.G., Todd McKenney, and Timothy Williams, P.E., G.E., Kleinfelder; Manuel Perez, GISP, and Nagesh Malyala, P.E., Stantec Consulting Services, Inc.; Stephen Motoike, Jeffery Crovitz, P.E., and Daniel Kwon, Ph.D., P.E., US Army Corps of Engineers

P *Smallwood Dam: Innovative Solutions for Phased Cofferdam Loading Challenges*

Rusty Friedle and Zachary Servinski, Fisher Contracting Company; Chetan Swarn, P.E., and Nisheet Reddy, P.E., GEI Consultants Inc.

Design Approach for a Spillway Replacement in Weak California Rock

Nicolas Oettle, Ph.D., P.E., G.E., Christopher Bain, Ph.D., Scott Yehl, P.G., CEG, Todd Crampton, P.G., CEG, and Iqbal Ahmed, Ph.D., P.E., G.E., GEI Consultants, Inc.; Jacob Moeder, P.E., Irvine Ranch Water District

Images from Below Direct Decisions from Above

Brian Schroeder, P.E., Collins Engineers, Inc.

P *Bridging Deterministic and Probabilistic Methods for Dam Safety Evaluation*

Giselle Aviles and Rocio Segura, Ph.D., Santa Clara University; Gabriel Alcantar, P.E., Mott MacDonald

Recent Updates of the National Web-based Decision Support System for Water Infrastructural Security (DSS-WISE Web)

Mohammad Al-Hamdan, Ph.D., Marcus McGrath, Nuttita Pophet, Ph.D., Paul Smith, Noor Dibou, and Ujwal Srinivasa, National Center for Computational Hydroscience and Engineering/University of Mississippi; Gokhan Inci, Ph.D., P.E., Federal Emergency Management Agency

P *A Study of Flood Protection Systems in the Susquehanna River Basin*

Rachel Kaintz and Kaleigh Yost, Ph.D., The Pennsylvania State University

Topic Tables

Advanced Structural Analysis

Aimee L. Corn, P.E. and Siavash Sajedi, Ph.D., P.E., GFT

AI tools for instrumentation and O&M

Sujan Punyamurthula, P.E., Ph.D., Stantec

Climate Change: Evaluation and Planning

Bill Kappel, Applied Weather Associates

Dam Owner Challenges

Anthony Grubbs, P.E., Freese and Nichols, Inc.

Dam Safety Toolbox

Riley Manwaring, EIT, GFT

Early Contractor Involvement Do's and Don'ts

Ted Montoya, P.E., and Jason Boomer, AECOM

Efficient and Effective Risk Assessments?

Henry Forsling and Julie Smolarek, AECOM

Evacuation Planning

Preston W. Wilson, Sr., Resilience Solutions Consulting

Geotechnical or Structural Issues - Experiences, Ideas and New and Emerging Technologies

Wade Anderson, P.E., and Russ Springer, P.E., Freese and Nichols, Inc.

Government & Legislative Advocacy - Dam Safety
Cody Holt, Association of State Dam Safety Officials

Hydraulic Modeling Beyond 1D
Jeffery G. Powers, P.E., Hazen and Sawyer

Hydropower Workforce Challenges and Opportunities
Jennifer Daw, National Renewable Energy Laboratory

Lessons Learned from Recent FERC Comprehensive Assessments
Jonathan Harris, Schnabel Engineering

Mastering EAPs and Exercises
Jonathan Keeling, P.E., Stantec

Pathways to Success - Mentorship and Career Development
Brianna K. Crotty, P.E., Schnabel Engineering

New Trends in Instrumentation Monitoring
Jennifer Williams, P.E., AECOM

Owner Outreach
Ohio Department of Natural Resources

PMP in RIDM
Amanda Hess, P.E., CFM, GFT

Setting up a Drone Program for the Inspection of Dams
Doug Evans, P.E., Ohio Department of Natural Resources

Signage
Paul Meeks, Worthington Products, Inc.

Spillway Condition Assessment and Interim Risk Reduction
Paul G. Schweiger, PE, CFM, GFT

Tips on transitioning to retirement from your dam safety career
Steve Jamieson, P.E., W.W. Wheeler & Associates

What is FERC doing with all the L2RA results?
Daniel Osmun, P.E., HDR; Eric Halpin, Halpin Consulting LLC