Monday, April 7

7:00 a.m. - 6:00 p.m.  Registration
9:00 a.m. - 4:30 p.m. Committee Meetings
4:30 p.m. - 6:00 p.m. 2014 Annual Meeting of Members and updates from related organizations

Presiding — USSD President Keith A. Ferguson, HDR Engineering, Inc.

6:00 p.m. - 8:00 p.m.  Kick-off Reception/Exhibition Opening

Tuesday, April 8

7:00 a.m. - 6:00 p.m.  Registration
7:00 a.m. - 8:00 a.m. Continental Breakfast in Exhibit Hall
8:00 a.m. - 9:30 a.m. Opening Plenary Session

Moderator — Keith A. Ferguson

Introduction, Welcome and Strategic Plan Update
Keith A. Ferguson

Welcome to San Francisco
Edwin M. Lee, Mayor, City of San Francisco (invited)

Host Welcome
Michael Carlin, Deputy General Manager and Chief Operating Officer, San Francisco Public Utilities Commission

Seismic Performance of Earth Dams during Recent Earthquakes
Jonathan D. Bray, University of California, Berkeley

Profile in Dam Engineering: Karl Terzaghi
Richard E. Goodman, University of California, Berkeley

9:30 a.m. - 10:00 a.m.  Break in Exhibit Hall
10:00 a.m. - 12:00 noon  Opening Plenary Session (continued)

Moderator — Michael Carlin, San Francisco Public Utilities Commission

Rebuilding San Francisco's Water System Before the Big One
Daniel L. Wade, San Francisco Public Utilities Commission

34th USSD Annual Meeting and Conference
Dams and Extreme Events — Reducing Risk of Aging Infrastructure under Extreme Loading Conditions

Dam Performance in 2013 Colorado Floods
William McCormick, Chief, Dam Safety Branch, Colorado Division of Water Resources

California Delta Conveyance and Restoration
Mark W. Cowin, Director, California Department of Water Resources

San Clemente Dam Decommissioning: A Story of Perseverance
David Gutierrez, Chief, Division of Safety of Dams, California Department of Water Resources

12:00 noon - 1:15 p.m.  Lunch with Speakers in Exhibit Hall

Moderator — Keith A. Ferguson

Generation YP: Increasing Young Professional Involvement in Dam Safety
Emily Schwartz, HDR Engineering, Inc.; Amanda Sutter, Corps of Engineers; and Elena Sossenkin, HDR Engineering, Inc.

1:30 p.m. - 3:00 p.m.  Concurrent Session 1A — Earthquakes I


Transverse Cracking on Embankment Dams Caused by Earthquakes Revisited
Donald H. Babbitt, Consultant

Prediction of Seismically-Induced Longitudinal/Transverse Cracks in Embankments with Upstream Concave Curvatures
Mohsen Beikae, Metropolitan Water District of Southern California

Comparison of Liquefaction Susceptibility Criteria
Richard J. Armstrong and Erik J. Malvick, California Department of Water Resources

1:30 p.m. - 3:00 p.m.  Concurrent Session 1B — Embankment Dams

Moderators — Lawrence H. Roth, ARCADIS US, Inc.; and Joe A. Welna, Barr Engineering Company

Adverse Geological Conditions and Piping practical Considerations when Evaluating Seepage
Ray E. Martin, REM, LLC; and Joseph S. Monroe, Schnabel Engineering, Inc.
Proposed Retrofit Concepts for Chabot Dam
Sean Todaro, Atta Yiadom and Catherine Anderson, East Bay Municipal Utility District

Laboratory Modeling of Soil Erosion into Bedrock Defects
John D. Rice, Utah State University; Kenneth E. Henn, Corps of Engineers; and John W. Kovalc and Brian H. Greene, Gannett Fleming, Inc.

1:30 p.m.- 3:00 p.m. Concurrent Session 1C — Hydraulics I
Moderators — Jerry W. Webb, Corps of Engineers; and Korey Kadmia, RJH Consultants, Inc.

A Screening Tool for Identifying Potential Downstream Hazards
Lissa Robinson and Chris Karam, GEI Consultants, Inc.; and Robert White and Luyin Zhu, Pacific Gas & Electric Company

Poe Dam Radial Gate Strengthening Project: Challenge Accepted
Robert T. Indri, Schnabel Engineering, Inc; Mohammad Aslam, Pacific Gas & Electric Company; Chris Cornell, Syblon-Reid Construction; Keith De Lapp, HDR Engineering, Inc.; Stephen Hom, URS Corporation; and Frederick Lux, Aubian Engineering, Inc.

U.S. Army Corps of Engineers Tainter Gate Retrofits for Extreme Load Cases
Gavin Smith and Matt D. Hanson, Corps of Engineers

1:30 p.m. - 3:00 p.m. Concurrent Session 1D — Construction and Rehabilitation I
Moderators — Wayne D. Edwards, W.D. Edwards Consulting, LLC; and Chris Mueller, Black & Veatch Corporation

Embankment Dam Seepage Modifications — Choices and Considerations
John France, URS Corporation

Rehabilitation of the Fort Randall Dam Spillway
Clinton L. Powell, Corps of Engineers

Gilboa Dam — Major Reconstruction to Withstand Extreme Events (and Getting One)
Boyd Howard, Gannett Fleming, Inc.; Emory Chase and Thomas DeJohn, New York City Department of Environmental Protection; and Aaron Rietveld, Barnard-D.A. Collins JV

1:30 p.m. - 3:00 p.m. Concurrent Session 1E — Panel Discussion: San Clemente Dam Decommissioning
Moderator — Noel Wong, URS Corporation

Panel Members
Rich Svidland, California American Water (Owner)

Trish Chapman, California Coastal Conservancy (Lead State Sponsor)
Joyce Ambrosius, National Marine Fisheries Service (Lead Federal Sponsor)
David Gutierrez, California Department of Water Resources (Dam Safety Regulator)
Seth Gentzler, URS Corporation (Owner’s Representative)
Bill McGowan, Granite Construction, Inc. (Design-Builder)

Break in Exhibit Hall

Lessons Learned from FLAC Analyses of Seismic Remediation of Perris Dam
Steven Friesen, Ariya Balakrishnan and Mike Driller, California Department of Water Resources; Mike Beatty, Beatty Engineering LLC; and Rajendram Arulnathan, Erik Newman and Sathish Murugiah, URS Corporation

Seismic Issues at Scoggins Dam
Ron Oaks, Brian Scott and Chris Wood, Bureau of Reclamation

Risk of Seismic Deformation of a 1930’s Embankment Dam in a Highly Active Seismic Environment
Justin Phalen and Faiz Makdisi, AMEC Environment & Infrastructure; Lelio Mejia, URS Corporation; and Michael Mooers, Santa Clara Valley Water District

Influence of Stratigraphic Interfaces on Residual Strength of Liquefied Soil
Jack Montgomery and Ross W. Boulanger, University of California, Davis

3:30 p.m. - 5:30 p.m. Concurrent Session 2B — Embankment Dams (continued)
Moderators — Lawrence H. Roth and Joe Welna

Some Findings from the ICOLD Bulletin on Internal Erosion in Existing Dams
Rodney Bridle, Dam Safety Ltd

Right Abutment Seepage Mitigation at Ochoco Dam
Dennis L. Hanneman, Bureau of Reclamation; and Mark Pabst, Corps of Engineers

Probabilistic Constriction Size Application for Earth Dam/Levee Filter Design
Sangho Lee, GESTRA Engineering Inc.; and Samuel S. Lee, Federal Energy Regulatory Commission

Evaluating the Mechanisms of Piping Erosion Initiation Through Laboratory Modeling
John Rice and Mandie Fleshman, Utah State University
3:30 p.m.- 5:00 p.m.  Concurrent Session 2C — Hydraulics I
(continued)

Moderators — Jerry W. Webb and Korey Kadrmas

System Reliability Analysis of Rock Scour
Michael F. George, Nicholas Sitar and Armen Der Kiureghian, University of California, Berkeley

Increasing the Flood Capacity of a 95 Year Old Dam
Kevin Finn, Parsons Brinckerhoff; John Vallee, Brookfield Renewable Power; and Marc Buratto and Bryce Mochrie, Parsons Brinckerhoff

Design Flood Determination for the Victoria Dam Spillway Improvement Project
Ben Trotter, Integrys Business Support, LLC; and Raymond Wingert, HDR Engineering, Inc.

3:30 p.m. - 5:30 p.m.  Concurrent Session 2D — Construction and Rehabilitation I (continued)

Moderators — Wayne D. Edwards and Chris Mueller

Making Do with What You Have at the New Long Hollow Dam Project
Rick Ehat, La Plata Water Conservancy District; Chad Masching, GEI Consultants, Inc.; and Aaron Chubbuck, Weeminuche Construction Authority

Emergency Repairs to ODNR's Dam No. 6 — Muskingum Lock and Dam System, Stockport, Ohio
Pete Nix, Tetra Tech

Rehabilitation Technologies to Respond to Changing Loading Conditions at a 114 Year Old Structure
Bryce Mochrie, Parsons Brinckerhoff; Lee Talbot, Brookfield Renewable Power; and Edith Butterworth, Parsons Brinckerhoff

Lower Crystal Springs Dam Improvement Project
Myron Humeny, San Francisco Department of Public Works; Tasso Mavroudis, San Francisco Public Utilities Commission; Marty Czarnecki, URS Corporation; Chu Liu, San Francisco Department of Public Works; and Noel Wong, URS Corporation

3:30 p.m. - 5:30 p.m.  Concurrent Session 2E — Concrete Dams

Moderators — Victor Vasquez, Freese and Nichols, Inc.; and Emily Schwartz, HDR Engineering, Inc.

Earthquake Analysis of Concrete Gravity Dams: Factors To Be Considered
Anil K. Chopra, University of California, Berkeley

A Second Century for Agnew Lake Dam
John C. Stoessiel, Southern California Edison Company; and John A. Wilkes, CARPI USA, Inc.

Evaluation of Morrow Point Dam and Potentially Removable Foundation Block Using Risk
Phoebe Percell, Bureau of Reclamation

Comparison of Recorded and Computed Earthquake Response of Arch Dams
Anil K. Chopra, University of California, Berkeley

5:30 p.m.- 7:30 p.m.  Poster Session, Exhibition and Reception

Construction of La Romaine Complex in Northern Quebec, Canada: Five Years of Great Accomplishments
Vlad Aliescucu, Hydro-Québec

Seismic Deformation Analyses of Live Oak Reservoir
Mohsen Beikae and Christopher J. Hill, Metropolitan Water District of Southern California

Logan Martin Dam, Alabama: 45 Years of Remedial Grouting
Donald A. Bruce, Geosystems, L.P.; Brian Greene, Consulting Engineering Geologist; and Bobby E. Williams and John H. Williams, Southern Company

The History of Grouting at Wolf Creek Dam, Kentucky
Donald A. Bruce, Geosystems, L.P.; Brook E. Brosi, Corps of Engineers, Trent L. Dreese, Gannett Fleming, Inc.; and Michael W. Terry, Hayward Baker, Inc.

Tensile Strength of Mass Concrete — Implication of Test Procedures and Size Effects on Structural Analysis of Concrete Dams
Timothy P. Dolen, Dolen and Associates; David W. Harris, Consultant; and Larry K. Nuss, Nuss Engineering

Ohio Statewide PMP Study — Replacing HMR 51: Methods, Processes, Results
Bill Kappel, Ed Tomlinson and Doug Hultstrand, Applied Weather Associates, LLC

Finite Element Analysis of Dynamic Behavior of Large Dams
W.P. Kikstra, F. Sirumbal, G. Schreppers and M. Partovi, TNO DIANA BV

The Caribbean Commonwealth: Case History of Patillas Dam, Puerto Rico
Everett L. Litton, Black & Veatch Corporation; José M. Bermúdez Díaz, South Coast Irrigation District; Steve Dominic, Bureau of Reclamation; and Greg A. Zamensky, Black & Veatch Corporation

Dam Abutment Seepage Investigation and Erosion Repair
Michael McCaffrey, Parsons Brinckerhoff; Mark J. Gross, Alcoa Power Generating Inc.; and Tony Plizga and Paul F. Shiers, Parsons Brinckerhoff

We Got How Much Rain? Emergency Repairs at East Reservoir Dam, Portage Lakes State Park
Pete Nix and Steven Riedy, Tetra Tech

Seepage and Safety in Embankment Dams
Gopi Siddappa, P.E.S. College of Engineering
Wednesday, April 9

7:00 a.m. - 5:30 p.m.  Registration
7:00 a.m. - 8:00 a.m.  Continental Breakfast in Exhibit Hall
8:00 - 10:00 a.m.  Concurrent Session 3A — Earthquakes II

Moderators — C. Michael Knarr, Southern California Edison Company; and
Donald H. Babbitt, Consultant

Implementing Nonlinear Analysis of Concrete Dams and Soil-Structure Interaction under Extreme Seismic Loading
Mark Schultz, Phu Huynh and Vojislav Cvijanovic, California Department of Water Resources

Performance-Based Analysis of a Large Concrete Dam
Joshua B. Edelman, Peter J. Orme, Madeline R. Goldkamp, Tamara Savage and Ziyad Duron, Harvey Mudd College; and Mike Knarr, Southern California Edison Company

Performance-Based Testing of a Large Concrete Dam
Madeline R. Goldkamp, Tamara Savage, Joshua Edelman, Peter J. Orme, and Ziyad Duron, Harvey Mudd College; and Mike Knarr, Southern California Edison Company

Application of Nonlinear Analysis Methods to Hydraulic Structures Subject to Extreme Loading Conditions
Vojislav Cvijanovic, Mark Schultz and Richard Armstrong, California Department of Water Resources

8:00 a.m. - 10:00 a.m.  Concurrent Session 3B — Monitoring

Moderators — Amanda Sutter, Corps of Engineers; and B. Alex Grenoble, HDR Engineering, Inc.

Updating Existing Instrumented and Visual Monitoring Plans Following a Potential Failure Modes Assessment
Bruce R. Rogers, Corps of Engineers; Jay N. Stateler, Bureau of Reclamation; and Manoshree Sundaram, MWH

Diamond Valley Lake Automated Data Acquisition System Upgrade
Evelyn Ramos and Christopher Hill, Metropolitan Water District of Southern California

Rehabilitation of Piezometers at the Blenheim-Gilboa Pumped Storage Project — Restoring a “Classic”
John G. DeLano and James P. Guarente, GZA GeoEnvironmental, Inc.; Junyu Liang, David Weiman and Robert J. Knowlton, New York Power Authority; and Chad W. Cox, GZA GeoEnvironmental, Inc.

Accuracy of Stress Data Measured by Earth Pressure Cells Installed in Embankment Dams
Abolfazl Hojjat Ansari and Ali Asghar Mirghasemi, University of Tehran

8:00 a.m. - 10:00 a.m.  Concurrent Session 3C — Hydraulics II

Moderators — Martin J. Teal, WEST Consultants, Inc.; and James E. Lindell, MWH

Snowmelt Hydrology in the Libby Dam Probable Maximum Flood Computation
Kevin Fagot and Henry Hu, WEST Consultants, Inc.

Calculating Probable Maximum Precipitation in Complex Terrain - Updating HMR 59 for a Southern California Basin
Ed Tomlinson and Bill Kappel, Applied Weather Associates, LLC

Selecting and Accommodating Inflow Design Floods for Dams: A Behind-the-Scenes Look at Updating Federal Guidance
Paul G. Schweiger and Gregory L. Richards, Gannett Fleming, Inc.; Arthur Miller, AECOM; James E. Demby, Federal Emergency Management Agency; and Amanda J. Hess, Gannett Fleming, Inc.

Comparison of 2-Dimensional Hydraulic Models for Assessing Levee Breach Inundations
Chris Bahner, WEST Consultants, Inc.

8:00 a.m. - 10:00 a.m.  Concurrent Session 3D — Construction and Rehabilitation II

Moderators — Del A. Shannon, ASI Constructors, Inc.; and Stephen L. Whiteside, CDM Smith

Alliance Contracting: A Flexible Approach to Promote Innovation and Deal with Uncertainty
David Murray, CDM Smith Australia Pty Ltd

Water Over the Dam — RCC Dams /Cofferdams Performance When Overtopped During Construction
Kenneth D. Hansen, Consulting Engineer; and Daniel L. Johnson, Tetra Tech, Inc.

Los Alamos Canyon Dam: Development of RCC Mix Designs and Construction Challenges
Henrik Forsling and Scott Jones, URS Corporation; Tim Glasco, County of Los Alamos; and Bud Werner, CTL|Thompson Materials Engineers, Inc.

Construction Techniques for RCC Placement — San Vicente Dam Raise
Frank Collins, Parsons; Gerard E. Reed III and Wade Griffis, San Diego County Water Authority; Jim McClain, Black & Veatch Corporation; and Richard Burdette, Parsons
8:00 a.m. - 10:00 a.m.  Concurrent Session 3E — Dam Safety I

Moderators — Jason Thom, DOWL HKM Engineering; and Manoshree Sundaram, MWH

Lessons learned from Concrete Dam Failures Since St. Francis Dam
Larry K. Nuss, Nuss Engineering, LLC; and Kenneth D. Hansen, Consultant

Development of a Functional Exercise to Maximize Public Safety Cooperation and Emergency Preparedness
Justin Darling, Northern Indiana Public Service Company

Pine Creek Dam Risk Management Plan Process and Decision
Kathryn A. White and D. Wade Anderson, Corps of Engineers

A Risk Assessment with the FERC
Guy S. Lund, URS Corporation; and Bill Christman and Gene Yow, Chelan County Public Utility District No. 1

10:00 a.m. - 10:30 a.m.  Break in Exhibit Hall

10:30 a.m. - 12:00 noon  Concurrent Session 4A — Earthquakes II

Moderators — C. Michael Knarr and Donald H. Babbitt

Utilising the Curved Footprint of an 80 Year Old Gravity Dam to Aid Performance during Extreme Earthquakes
Peter Amos and John Black, Damwatch Services Ltd; Roy Dungar, Consultant; and Jim Walker, Meridian Energy Ltd

Cracking Analysis of Concrete Gravity Dams
Abdelkrim Kadid and Ali Zine, University of Batna; and Djarir Yahiaoui, University of Constantine

Seismic Analysis of Dam-Reservoir-Foundation Interaction
Bakenaz A. Zeidan, Tanta University

10:30 a.m. - 12:00 noon  Concurrent Session 4B — Monitoring (continued)

Moderators — Amanda Sutter and B. Alex Grenoble

Evaluating In-Situ Stress Behavior in Alkali-Silica Reactive Dams (Case Study: Roanoke Rapids Dam)
Brian R. Reinicker and Farzad Abedzadeh, HDR Engineering, Inc.; Robin G. Charlwood, Robin Charlwood & Associates, PLLC; and John A. Cima, Dominion Resources Services, Inc.

Remote Technology Provides a Safe Alternative for Dam Face Assessment
Richard Engel, ASI Group Limited

Detection of Weakness Zones in Helena Levee, AR, Using Ground Penetrating Radar
Hussein Khalefa Chlaib, M. Mert Su, Najah Abd, Aycan Catakli, Hanan Mahdi and Haydar Al-Shukri, University of Arkansas at Little Rock

10:30 a.m. - 11:30 a.m.  Concurrent Session 4C — Hydraulics II (continued)

Moderators — Martin J. Teal and James E. Lindell

2-Dimensional Dam-Break Inundation Modeling Provides Better Information for Risk Analysis and Emergency Action Planning
Tom Molls and Brian Brown, David Ford Consulting Engineers, Inc.; Mark Fortner, GEL Consultants, Inc.; and David Panec, California Department of Water Resources

Urban Reservoir Dam Breach Analysis and Flood Inundation Mapping
Dragosiev Stefanovic and Pedro Miguel Parames, WEST Consultants, Inc.

10:30 a.m. - 12:00 noon  Concurrent Session 4D — Levees I

Moderators — William Empson, Corps of Engineers; and Elena Sossenkina, HDR Engineering, Inc.

Cutoff Wall Remediation
Richard Millet, URS Corporation; and Mary Perlea, Corps of Engineers

Geotechnical Challenges and Design Approach for the Feather River West Levee in California
Khaled Chowdhury, URS Corporation; Derek Morley, Corps of Engineers; Leslie Harder Jr., HDR Engineering, Inc. Michael Hughes, Robert Green, Francke Walberg and Matthew Weil, URS Corporation; and Mike Inamine, Sutter Butte Flood Control Agency

Levee Reliability: How Do We Know When We Need a New Levee?
Brian Hubel, Black & Veatch Corporation; and Carmen Cheung, Corps of Engineers

10:30 a.m. - 12:00 noon  Concurrent Session 4E — Dam Safety I (continued)

Moderators — Jason Thom and Manoshree Sundaram

What is the Most Important Loading Condition for Dam Safety?
William Engemoen, Daniel Osmun and William Fiedler and Bureau of Reclamation

Approach of Risk Analysis and Assessment for Dam Safety Management in K-Water
Jeong-Yeul Lim, Korea Water Resources Corporation

Perris Dam Emergency Release Modifications
Donald Walker, California Department of Water Resources
ISO Standards Applied to Dam Sector Security Risk Methodologies
William F. Foos, Gannett Fleming, Inc.; and Joachim A. Gloschat, Consultant

12:00 noon - 1:15 p.m.  Lunch with Speakers in Exhibit Hall

Moderator — Keith A. Ferguson

Program — Calaveras Dam Replacement Project

Engineering Geologic Conditions at the Calaveras Dam Replacement Project, Alameda County, California
Keith Kelson, Phil Respeand Erik Newman, URS Corporation; and Daniel L. Wade, Susan Hou and Gilbert Tang, San Francisco Public Utilities Commission

Update on the Calaveras Dam Replacement Project
Michael Forrest and John Roadifer, URS Corporation; and Daniel L. Wade, Susan Hou and Gilbert Tang, San Francisco Public Utilities Commission

Dam Foundations & Differing Site Conditions — Calaveras Dam Replacement Project
Jeffrey M. Bair, Terence M. King and Christopher G. Mueller, Black & Veatch Corporation; and Daniel L. Wade and Susan S. Hou, San Francisco Public Utilities Commission

1:30 p.m. - 3:00 p.m.  Concurrent Session 5A — Earthquakes III

Moderators — José L.M. Clemente, Bechtel Power Corporation; and Tahereh Heidari, MWH

An Approach to Evaluating the Dynamic Strength of Soils at Dam Sites
Erik J. Malvick, Richard J. Armstrong, Kristen Martin and Phu L. Huynh, California Department of Water Resources

Probabilistic Liquefaction Hazard Analysis
Mohsen Beikae, Metropolitan Water District of Southern California

Evaluation of the Factors affecting Ratios of Drained to Undrained Cone Penetration Resistances
Robert A. Jaeger, GEI Consultants, Inc.; and Christopher Krage and Jason T. DeJong, University of California, Davis

1:30 p.m. - 3:00 p.m.  Concurrent Session 5B — Tailings Dams

Moderators — Kenneth A. Steele, Consultant; and Laura LaRiviere, Kleinfelder, Inc.

CPTu-Based State Characterization of Tailings Liquefaction Susceptibility
Christina Winckler, Richard Davidson and Lisa Yenne, URS Corporation; and Joergen Pilz, Rio Tinto T&I

Pore Pressure Characterization of Impounded Tailings
Christina Winckler, Richard Davidson and Lisa Yenne, URS Corporation; and Matt Gallegos, Rio Tinto

Two-Dimensional Numerical Analysis of Dynamic Response of a Tailings Dam Using UBCSAND Model: A Case Study
José Zuta, Itasca S.A.; Varun, Azadeh Riahi and Loren Lorig, Itasca Consulting Group Inc.

1:30 p.m. - 3:00 p.m.  Concurrent Session 5C — Foundations

Moderators — John Bischoff, URS Corporation; and Kerry Cato, Cato Geoscience, Inc.

Traditional Cement Grouts Versus Stable, High-Mobility Grout — A Case Study at the Crafton Hills Dams
Holly Nichols, Ante N. Mlinarevic and G. Robert Barry, California Department of Water Resources

Composite Cutoff Wall in Dam Foundation Using HMG and Low Slump Concrete
Tim Wehling, Joe Burke and Robert Curry, California Department of Water Resources

Foundation Improvements — Design and Construction for the New Ragged Mountain Dam
Randall P. Bass and J R. Collins, Schnabel Engineering, Inc.

1:30 p.m. - 3:00 p.m.  Concurrent Session 5D — Levees I (continued)

Moderators — William Empson and Elena Sossenkina

A Comparison of the FOSM-BT Method to a More Rigorous Reliability Method
John Rice and Lourdes Polanco, Utah State University

Wave Overtopping Levee Resiliency for Sandy Soils
Bryan N. Scholl, Christopher Thornton and Steven Hughes, Colorado State University; Jeffrey Beasley, Louisiana State University; and Natalie Youngblood, Colorado State University

A Method for Estimating Soil Properties for Transient Seepage Analyses of Levees
Matthew D. Sleep, Oregon Institute of Technology

1:30 p.m. - 3:00 p.m.  Concurrent Session 5E — Dam Safety II

Moderators — Brian Becker, Bureau of Reclamation; and Karen Ford, Tennessee Valley Authority

Reexamination of the 2004 Failure of Big Bay Dam, Georgia
Keith A. Ferguson, Scott Anderson and Elena Sossenkina, HDR Engineering, Inc.

Addicks and Barker Dam Safety Modifications Project
Bobby Van Cleave, D. Wade Anderson, Gary Chow and Andrew Weber, Corps of Engineers
Spillway Modification to Address Potential Failure Mode  
John C. Stoessel, Southern California Edison Company; and Craig McElfresh, MCS Construction, Inc.

3:00 p.m. - 3:30 p.m.  Break in Exhibit Hall
3:30 p.m. - 5:30 p.m.  Concurrent Session 6A — Earthquakes III (continued)

Moderators — José L.M. Clemente and Tahereh Heidari

Seismic Stability Evaluation of Dam Underlain by Coarse-Grained Alluvium  
Lelio Mejia, URS Corporation; Jiaer Wu, CHEC USA, Erik Newman, URS Corporation; and Michael Mooers, Santa Clara Valley Water District

Foundation Liquefaction Evaluation for the Remediation of the Isabella Auxiliary Dam  
David C. Serafini, Henri V. Mulder and Vlad G. Perlea, Corps of Engineers

Characterization of Gravelly Soils for Liquefaction Potential Assessment at Dam Sites Using the iBPT  
Mason Ghafghazi, Jason T. DeJong, Alexander P. Sturm and Daniel W. Wilson, University of California, Davis; Craig Davis and Adam Perez, Los Angeles Department of Water and Power; and Richard Armstrong, California Department of Water Resources

Current Seismic Tools Used to Evaluate a 1914 Concrete Arch Dam  
Dina Bourliea Hunt, Bashar Sudah, Jennifer Fordney, Glenn Tarbox and David Thompson, MWH Global; and Scott Willis, Alaska Electric Light & Power Company

3:30 p.m. - 5:30 p.m.  Concurrent Session 6B — Environment/Public Awareness

Moderators — Kenneth A. Steele and Laura LaRiviere

Cobbs Creek Reservoir and Dam: Offline Storage — Capturing Today’s Water for Tomorrow’s Demand  

The United States’ Aging Hydroelectric Infrastructure: History, Development, Regulation, and Decommissioning  
Edward Harcourt, Indiana University

Determining the Feasibility of Fish Passage — Calaveras Dam Replacement Project, California  
Jonathan Stead and Steve Leach, URS Corporation; and Craig Freeman and Susan Hou, San Francisco Public Utilities Commission

Securing Approvals for Large Scale Spoils Disposal at a Dam Replacement Project  
Steve Leach and John Roadifer, URS Corporation; and Craig Freeman, Daniel L. Wade and Susan Hou, San Francisco Public Utilities Commission

3:30 p.m. - 5:30 p.m.  Concurrent Session 6C — Foundations (continued)

Moderators — John Bischoff and Kerry Cato

Treatment of Gravity Dam Foundations During Construction  

Building an RCC Dam on a Karstic Foundation and a Tight Schedule  
Victor M. Vasquez, Tina Stanard, Mathew L. Moses, M. Leslie Boyd and Adam Payne, Freese and Nichols, Inc.

Slope Stability, Geology, and Rock Reinforcement, Folsom Auxiliary Spillway Joint Federal Project, Folsom, CA  
Kylan A. Kegel and Tatia R. Taylor, Corps of Engineers

Effective Surveillance and Monitoring Allows a Phased Approach to Stabilization  
Gerald Robblee, Andy Baxter, Robert Cannon and Jesus Gomez, Schnabel Engineering, Inc.; and Adam J. Monroe, Consumers Energy

3:30 p.m. - 5:00 p.m.  Concurrent Session 6D — Levees II

Moderators — Mike Shiflett, Freese and Nichols, Inc. and Richard A. Millet, URS Corporation

Applicability of Levee Fragility Functions Developed from Japanese Data to California’s Central Valley  
Dong-Youp Kwak and Scott J. Brandenberg, University of California, Los Angeles; Atsushi Mikami, University of Tokushima; Ariya Balakrishnan, California Department of Water Resources; and Jonathan P. Stewart, University of California, Los Angeles

The New Corps of Engineers Guidelines for Seismic Evaluation of Levees  
Vlad Perlea, Mary Perlea and George Hu, Corps of Engineers; and Khaled Chowdhury, URS Corporation

Needs-Oriented Project Evaluation Tool (NOPET)  
David Moore, Tetra Tech; Dwayne Bourgeois, North Lafourche Conservation Levee and Drainage District; and Patti Sexton, Tetra Tech
Thursday, April 10

7:30 a.m. - 8:00 a.m.  Workshop Registration
8:00 a.m. - 12:00 noon  Concurrent Workshop 1 — Role of Human Error in Dam Incidents and Failures

Organized by the USSD Committee on Dam Safety and Dam Security
Points of Contact — Catrin van Donkelaar, McMillen-LLC; and Kim de Rubertis, Consulting Engineer

8:00 a.m. - 12:00 noon  Concurrent Workshop 2 — Next Generation Attenuation Relationships and the Estimation of Ground Motions for Dams

Organized by the USSD Committee on Earthquakes
Points of Contact — Ross W. Boulanger, University of California, Davis; Joseph L. Ehasz, URS Energy & Construction, Inc.; and Yousef Bozorgnia, Pacific Earthquake Engineering Research Center

8:00 a.m. - 5:00 p.m.  Concurrent Workshop 3 — Case Histories in Dam Safety Risk Assessment

Organized by the USSD Committee on Dam Safety and Dam Security, Risk Subgroup
Points of Contact — David S. Bowles, RAC Engineers & Economists and Utah State University; and Elena Sossenkina, HDR Engineering, Inc.

8:00 a.m. - 5:00 p.m.  Concurrent Workshop 4 — Seismic Design of Tailings Dams

Organized by the USSD Committee on Tailings Dams
Points of Contact — José L.M. Clemente, Bechtel Power Corporation; and Christina Winckler, URS Corporation

12:00 noon - 1:00 p.m.  Lunch
1:00 p.m. - 5:00 p.m.  Field Tour — Lower Crystal Springs Dam
5:30 p.m. - 11:30 p.m.  Motorcoach Shuttle Service from Hotel to City of San Francisco

Friday, April 11

7:30 a.m. - 6:00 p.m.  Field Tour and Lunch — Calaveras Dam and Los Vaqueros Dam

This tour will also feature wine tasting at a local vineyard.

(Revised January 31, 2014)