

**USCID Water Management Conference**

***Emerging Issues in  
Water Management Governance***



**USCID**

*The U.S. society for irrigation and drainage professionals*

**November 17-20, 2015  
Albuquerque, New Mexico**

## Program

### Tuesday, November 17

7:00 a.m. - 5:30 p.m. **Registration**

8:00 a.m. - 11:30 a.m. **Field Tour**

This half-day field trip will feature facilities in the Albuquerque area.

12:00 noon - 1:15 p.m. **Lunch with Speaker**

Moderator — **Brian T. Wahlin**, WEST Consultants, Inc., and President, USCID

Speaker — **Tom Blaine**, New Mexico State Engineer, Santa Fe, NM

1:30 p.m. - 3:00 p.m. **Opening Plenary Session**

Moderator — **Gerald A. Gibbens**, Northern Colorado Water Conservancy District, Berthoud, CO

*Keynote Address*

**Estevan López**, Commissioner, Bureau of Reclamation, Washington, DC

*A Road Map Towards Securing the Future of Western Irrigated Agriculture*

**Dan Keppen**, Executive Director, Family Farm Alliance, Klamath Falls, OR

*Development of a Native American Water Users Association on the Navajo Nation*

**Michael Isaacson**, Keller-Bliesner Engineering, LLC, Logan, UT; and **Martin Duncan**, San Juan River Dineh Water Users, Inc., Shiprock, NM

3:00 p.m. - 3:30 p.m. **Break**

3:30 p.m. - 4:30 p.m. **Opening Plenary Session, (continued)**

*Existing and Emerging Issues of Water Administration in Colorado*

**Dick Wolfe**, State Engineer, Colorado Division of Water Resources, Denver, CO

*TBA*

**Paula Garcia**, Executive Director, New Mexico Acequia Association, Santa Fe, NM

4:30 p.m. - 5:00 p.m. **USCID Members Meeting**

5:00 p.m. - 5:30 p.m. **Meet the Exhibitors**

5:30 p.m. - 7:30 p.m. **Networking Reception and Exhibition**

### Wednesday, November 18

7:00 a.m. - 5:00 p.m. **Registration**

7:00 a.m. - 8:00 a.m. **Continental Breakfast in Exhibit Hall**

8:00 a.m. - 9:30 a.m. **Plenary Session — Panel Discussion: Contemporary Issues on the Colorado River**

Moderator — **Reed R. Murray**, U.S. Department of the Interior, Provo, UT

**Don Ostler**, Upper Colorado River Commission, Salt Lake City, UT

**Patrick Dent**, Colorado River Salinity Workgroup, Phoenix, AZ

**Chris Harris**, Colorado River Board of California, Glendale, CA

**Jennifer McCloskey**, Bureau of Reclamation, Las Vegas, NV

9:30 a.m. - 10:30 a.m. **Break in Exhibit Hall**

10:30 a.m. - 12:00 noon **Plenary Session — Panel Discussion (continued)**

12:00 noon - 1:15 p.m. **Lunch with Speaker**

Moderator — **Brian T. Wahlin**

Speaker — **Bruce Thomson**, Director, Water Resources Program, University of New Mexico, Albuquerque, NM, invited

1:30 p.m. - 3:00 p.m. **Workshop on Water Balances for Irrigation Districts**

Moderator — **Albert J. Clemmens**, WEST Consultants, Inc.

1:30 p.m. - 3:00 p.m. **Technical Session 1A — Environmental Issues and Addressing the Water-Energy Nexus**

Moderators — **Blair L. Stringam**, New Mexico State University, Las Cruces, NM; and **Aron Balok**, Pecos Valley Artesian Conservancy District, Roswell, NM

*Water Conservation Sharing — A Novel Approach to Provide Instream Flow for Endangered Species Recovery*

**Lee Baxter**, U.S. Department of the Interior, Provo, UT; **Rich Tullis**, Central Utah Water Conservancy District, Orem, UT; and **Walter Findlay**, U.S. Department of the Interior, Provo, UT

*Lewiston Orchards Project Water Exchange*

**Ted Day**, Bureau of Reclamation, Boise, ID

*Provo River Delta Restoration Project*

**W. Russ Findlay**, U.S. Department of the Interior, Provo, UT; and **Mark Holden**, Utah Reclamation Mitigation and Conservation Commission, Salt Lake City, UT

3:00 p.m. - 3:30 p.m.     **Break in Exhibit Hall**

3:30 p.m. - 5:30 p.m.     **Workshop on Water Balances for Irrigation Districts (continued)**

Moderator — **Albert J. Clemmens**

3:30 p.m. - 5:30 p.m.     **Technical Session 1A — Environmental Issues and Addressing the Water-Energy Nexus (continued)**

Moderators — **Blair L. Stringam** and **Aron Balok**

*Innovative Water-Habitat-Energy-Nexus Projects within the Elephant Butte Irrigation District*

**Zachary Libbin**, Elephant Butte Irrigation District, Las Cruces, NM; **James Phillip King**, King Engineering, Las Cruces, NM; and **Gary Esslinger**, Elephant Butte Irrigation District, Las Cruces, NM

*Olmsted Hydroelectric Power Plant Replacement Project*

**Reed Murray**, U.S. Department of the Interior, Provo, UT; and **David Pitcher**, Central Utah Water Conservancy District, Orem, UT

*Hydrology of the Recent California Drought and Comparison with Past Droughts*

**Maurice Roos**, California Department of Water Resources, Sacramento, CA

*Water for Environmental Restoration: Elephant Butte Irrigation District's Water Transfer Program*

**James Phillip King**, King Engineering, Las Cruces, NM

6:30 p.m. - 7:00 p.m.     **Reception**

7:00 p.m. - 9:30 p.m.     **Dinner with Speaker**

Moderator — **Brian T. Wahlin**

Speaker — **Charles T. DuMars**, Professor Emeritus of Law, University of New Mexico School of Law, Albuquerque, NM

**Thursday, November 19**

7:00 a.m. - 5:00 p.m     **Registration**

7:00 a.m. - 8:00 a.m.     **Continental Breakfast and Poster Session**

*Mutually Beneficial and Sustainable Management of Ethiopian and Egyptian Dams in the Nile Basin*

**Befekadu G. Habteyes**, New Mexico State University, Las Cruces, NM; **Harb A. E. Hasseen El-bardisy**, Al-Azhar University at Assiut, Egypt; **Saud A. Amer** and **Verne R. Schneider**, U.S. Geological Survey, Reston, VA; and **Frank A. Ward**, New Mexico State University, Las Cruces, NM

*Estimating Soil Water Content (SWC) and Crop Water Requirements with Unmanned Aircraft System (UAS) Remote Sensing*

**Jeffrey C. Hathaway**, Colorado State University, Fort Collins, CO

*An Analysis of Urban Agriculture and Small Farm Water Use and Irrigation Efficiency*

**A. Tyler Pratt** and **Neil Allen**, Utah State University, Logan, UT

*The National Science Foundation and Broader Impact: Seeking Diversity in Science*

**Margie Vela**, New Mexico State University, Las Cruces, NM

8:00 a.m. - 10:00 a.m.     **Concurrent Session 2A — Irrigation System Reliability**

Moderators — **Al Blair**, AWBlair Engineering, Austin, TX; and **Abhinaya Subedi**, Colorado State University, Fort Collins, CO

*On-Farm Irrigation Efficiency Related to the Evolution of Irrigation Systems Changes and Management: A Case Study of the Navajo Agriculture Products Industry*

**Aaron Beutler**, Keller-Bliesner Engineering, LLC, Logan, UT; and **Lionel Haskie**, Navajo Agriculture Products Industry, Farmington, NM

*Farmer Adoption of Irrigation in Rehabilitated Former Soviet Republic Irrigation Projects – Challenges and Opportunities*

**Ron D. Bliesner**, Keller-Bliesner Engineering, LLC; Logan, UT; and **Kelsey Walters**, KB-Walkoma, LLC, Logan, UT

*Bringing Irrigation System Modernization to New Areas*

**Charles M. Burt**, California Polytechnic State University, San Luis Obispo, CA

*Local Farmer Participation in Planning, Designing, and Implementation of Irrigation District Construction Projects*

**Michael Isaacson**, and **Andy Keller**, Keller-Bliesner Engineering, LLC, Logan, UT

8:00 a.m. - 10:00 a.m.     **Concurrent Session 2B — Technological Advancements**

Moderators — **Eduardo Bautista**, Agricultural Research Service, USDA, Maricopa, AZ; and **David L. Jordan**, INTERA Incorporated, Albuquerque, NM

*Demonstration Flow Monitoring and Data Recording System for the Yuma Project Reservation Division*

**Tom Gill** and **Kent Walker**, Bureau of Reclamation, Denver, CO

*Sluice Gate Measurement for Transition, Submerged or Free Flow*

**Jack Goldwasser**, Watch Technologies, Grants Pass, OR; and **John A. Replogle**, Consultant, Phoenix AZ

*Identification of Agricultural Land Use in California through Remote Sensing: Preliminary Results*

**Todd Robinson** and **Daniel J. Howes**, California Polytechnic State University, San Luis Obispo, CA

*Using the TI 84 for Irrigation Scheduling Training*

**Blair L. Stringam**, **David Berg**, **Manoj Shukla** and **Kulbhushan Grover**, New Mexico State University, Las Cruces, NM

10:00 a.m. - 10:30 a.m. **Break**

10:30 a.m. - 12:00 noon **Concurrent Session 2A — Irrigation System Reliability** (continued)

Moderators — **Al Blair** and **Abhinaya Subedi**

*Development of Elephant Butte Irrigation District Storm Water Management System*

**Patrick M. Lopez**, Elephant Butte Irrigation District, Las Cruces, NM

*In Situ Rehabilitation of Aging Large Diameter Conduits*

**Russell C. Reed**, DOWL, Billings, MT; and **Jeffrey K. Olsson**, DOWL, Helena, MT

*Truckee Canal Failure: Forensic Analysis and Lessons Learned*

**Rob Lyons**, JE Fuller Hydrology and Geomorphology, Tempe, AZ; and **Walter Winder**, Truckee Carson Irrigation District, Fallon, NV

10:30 a.m. - 12:00 noon **Concurrent Session 2B — Technological Advancements** (continued)

Moderators — **Eduardo Bautista** and **David L. Jordan**

*Remotely Sensed Canopy Temperature: A Tool to Detect Crop Water Stress*

**José L. Chavez**, Colorado State University, Fort Collins, CO

*Using ET Flux Tower and Remote Sensing to Evaluate Alfalfa Water Use in Middle Rio Grande*

**Zohrab Samani**, **A. Salim Bawazir** and **Rhonda Skaggs**, New Mexico State University, Las Cruces, NM

*Spatial Analysis of Evapotranspiration within the Fort Sumner Underground Water Basin, Pecos River Basin, New Mexico*

**Guillermo Martinez** and **David Jordan**, INTERA Incorporated, Albuquerque, NM; **Richard Allen**, Evapotranspiration, Plus, Kimberley, ID; and **F. Emile Sawyer** and **Greg Lewis**, New Mexico Interstate Stream Commission, Santa Fe, NM

12:00 noon - 1:15 p.m. **Lunch with Speaker**

Moderator — **Brian T. Wahlin**

Speaker — **Wayne Pullan**, Bureau of Reclamation, Provo, UT

1:30 p.m. - 3:00 p.m. **Workshop on Communications for SCADA**

Moderator — **Charles M. Burt**, California Polytechnic State University, San Luis Obispo, CA

1:30 p.m. - 3:00 p.m. **Technical Session 3A — Irrigation District Management and History**

Moderators — **Brian T. Wahlin**, WEST Consultants, Inc., Tempe, AZ; and **Daniel J. Howes**, California Polytechnic State University, San Luis Obispo, CA

*Recent Year-End Groundwater Elevation and Storage Changes in the Mesilla Shallow Alluvium Aquifer within the Elephant Butte Irrigation District*

**Erek H. Fuchs**, Elephant Butte Irrigation District, Las Cruces, NM

*Saving Land, Soil, Water and Farm Families: Partnerships Needed Now*

**John D. Wiener**, University of Colorado, Boulder, CO

*Carlsbad Irrigation District History*

**Woods Houghton**, New Mexico State University, Eddy County Extension Office, Carlsbad, NM

3:00 p.m. - 3:30 p.m. **Break**

3:30 p.m. - 5:30 p.m. **Workshop on Communications for SCADA** (continued)

Moderator — **Charles M. Burt**

3:30 p.m. - 5:30 p.m. **Technical Session 3A — Irrigation District Management and History** (continued)

Moderators — **Brian T. Wahlin** and **Daniel J. Howes**

*A Glance at the Rio Grande Project History*

**Gary Esslinger**, Elephant Butte Irrigation District, Las Cruces, NM

*History of the Colorado-Big Thompson Project*

**Brian Werner**, Northern Colorado Water Conservancy District, Berthoud, CO

*History of the Central Utah Project*

**Ross Peterson**, Utah State University, Logan, UT

*History (TBA)*

(TBA)

6:00 p.m. - 10:00 p.m. **Shuttle to Old Town Albuquerque**

**Friday, November 20**

8:00 a.m. - 5:30 p.m. **Field Tour**

This day-long tour will visit Elephant Butte Dam and Caballo Dam.

(Updated September 14, 2015)