

**Announcement
and
Call for Papers**

**Water Reuse and Non-Traditional Water
Sources for Irrigated Agriculture**

11th International Conference on Irrigation and Drainage



USCID

The U.S. society for irrigation and drainage professionals

**Cooperating Organization
The Water Research Foundation**

**October 16-19, 2018
Phoenix, Arizona**

Introduction

Treated effluent is extensively used for agricultural and municipal irrigation in the United States and has been regulated by statutes at the state and federal level since the 1970s. When treated effluent cannot be used for irrigation, it is often used for artificial groundwater recharge or as a supply for natural or artificial wetlands. As competition for scarce water resources increases, as well as increased production of treated effluent with increasing population, we can expect even greater use of treated effluent for irrigation, recharge, and environmental uses. While the current experience with the use of treated effluent has been positive, there are short- and long-term concerns about its use, and thus about the sustainability of these practices.

This Conference aims to present and discuss various concerns regarding water reuse and non-traditional sources of water for irrigated agriculture. Implications for groundwater recharge and environmental concerns will also be explored.

The Theme of the Conference is **Water Reuse and Non-Traditional Water Sources for Irrigated Agriculture**.

Who Should Attend?

This USCID Conference will provide a forum for water district staff, irrigation and drainage specialists, consultants, equipment suppliers and academics to share innovative solutions and learn from each other's experiences. **Water resources professionals from around the world** are also encouraged to attend.

The Water Research Foundation is a Cooperating Organization of the Conference. Foundation staff and participants are encouraged to attend the Conference as authors and/or as participants.

Conference Format

A half-day study tour on Tuesday morning will be followed by lunch and a Plenary Session featuring presentations of broad interest to irrigation managers. Focused oral presentations during **Technical Sessions** and a **Poster Session** will occur on Wednesday and Thursday. Invited speakers will offer their perspectives during meals. The Conference will conclude with a Friday study tour. Receptions, meals, breaks and tours will provide excellent networking opportunities.

Exhibition

An **Exhibition** will feature organizations providing products and services related to water resources. The latest technologies and products will be showcased.

Call for Papers

Abstracts of proposed papers addressing the **Conference Topics** are invited. Abstracts will be accepted for either a 20-minute oral presentation, or for the Poster Session. Conference Topics are listed on the following page.

Accepted authors will be invited to prepare an electronic version of their paper for the **Proceedings**, which will be distributed during the Conference. Authors are asked to submit a draft manuscript for a peer review. Preparing a paper for the Proceedings is the preferred method of participation, to capture the information presented during the Conference. However, **authors may choose to not prepare a paper for the Proceedings**. If a paper is not prepared for the Proceedings, an abstract with author and co-author information will be included.

Submission of an abstract will constitute an agreement that the author will register for the Conference at the reduced author registration fee, attend the Conference, and make an oral or poster presentation in person.

USCID will not provide funding, nor seek funding from donors or other sources, for authors or other participants to attend the Conference. Please do not submit an abstract if funding for your participation is unlikely.

Please submit a 250-300 word abstract by **March 30, 2018**, with this information at the top of the page:

- the paper title
- author and co-author names and affiliations
- address, phone, fax and e-mail for each author

Your abstract should be submitted as an attached .doc or .docx file to uscid@aol.com. Use the senior author surname as the file name, e.g., jones.doc. This Call is also available at www.uscid.org/18azconf.html.

Conference Schedule

Abstracts Due	March 30, 2018
Notify Authors	April 13, 2018
Draft Papers Due	June 15, 2018
Comments to Authors	August 3, 2018
Final Papers Due	September 1, 2018
Conference	October 16-19, 2018

Conference Topics and Sub-Topics

Water Reuse in Irrigated Agriculture

- ◆ *Sustainability*
- ◆ *Salinity management*
- ◆ *Benefits*
- ◆ *Barriers*
- ◆ *Environmental impacts*
- ◆ *Socioeconomic impacts*
- ◆ *Groundwater recharge*
- ◆ *Pathogens*
- ◆ *Transport and fate of contaminants and pharmaceuticals*
- ◆ *Water quality*
- ◆ *Fit for purpose reuse*
- ◆ *State-of-the-art technology*
- ◆ *Economic benefits*
- ◆ *Opportunities and strategies*
- ◆ *Water supply limitations*
- ◆ *Climate change*
- ◆ *Case studies*

Non-Traditional Sources of Water

- ◆ *Municipal recycled*
- ◆ *Banked water*
- ◆ *Water trading*
- ◆ *Water wheeling*
- ◆ *Leasing of agricultural water to municipalities*
- ◆ *Desalination and brackish water*
- ◆ *Produced water from oil and gas production*
- ◆ *Mining*
- ◆ *Agricultural return flows (drainage water, surface water, etc.)*
- ◆ *Agricultural process water*
- ◆ *State-of-the-art technology*
- ◆ *Case studies*

Infrastructure Issues

- ◆ *New infrastructure needed for reclaimed water*
- ◆ *On-site vs. centralized systems*
- ◆ *Recharge ponds*
- ◆ *New treatment procedures*
- ◆ *Infrastructure O&M*
- ◆ *Infrastructure rehabilitation*
- ◆ *Offsite water storage facilities*
- ◆ *Converting unlined ditches to piped ditches*
- ◆ *Electronic monitoring and control of infrastructure*
- ◆ *Leak detection*
- ◆ *Large pipe systems*
- ◆ *Case studies*

Regulatory Issues and Public Perception

- ◆ *Public perception*
- ◆ *Education*
- ◆ *Legislation*
- ◆ *Regulatory barriers*
- ◆ *Water rights implications*
- ◆ *Case studies*

Groundwater

- ◆ *Nitrogen contamination*
- ◆ *Nitrogen management*
- ◆ *Groundwater pumping*
- ◆ *Regulatory barriers*
- ◆ *Legislation*
- ◆ *Case studies*

Planning Committee Members

Brian T. Wahlin, Co-Chair, WEST Consultants, Inc., Tempe, Arizona

Eduardo Bautista, Co-Chair, ARS, U.S. Department of Agriculture, Maricopa, Arizona

Taylor Ahrensdorf, Stantec Consulting Services Inc., Phoenix, Arizona

James E. Ayars, ARS, U.S. Department of Agriculture, Parlier, California

David E. Bradshaw, Imperial Irrigation District, Imperial, California

Hassan A. Elsaad, Salt River Project, Phoenix, Arizona

Erling A. Juel, Greenfields Irrigation District, Fairfield, Montana

Sara Harper, Dewberry, Sacramento, California

Peggy B. Graham, Advanced Drainage Systems, Longmont, Colorado

Aung K. Hla, Bureau of Reclamation, McCook, Nebraska

Randy Hopkins, Provost & Pritchard Consulting Group, Clovis, CA

Reed R. Murray, U.S. Department of the Interior, Provo, Utah

Nelson W. Plummer, Water Resources Consultant, Scottsdale, Arizona

W. Martin Roche, Consulting Engineer, Grass Valley, California

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April Victorino, Stantec Consulting Services Inc., Phoenix, Arizona

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USCID

The Mission of the United States Committee on Irrigation and Drainage is to promote progressive and sustainable irrigation, drainage and flood control practices in support of food and fiber production and public safety, recognizing that sustainability embodies economic, social and environmental goals.

USCID is a nonprofit professional society whose members share an interest in the planning, design, construction, operation and maintenance of irrigation, drainage and flood control works; agricultural economics; water law; and environmental and social issues affecting irrigated agriculture.

USCID is the United States member of the **International Commission on Irrigation and Drainage (ICID)**, an association of more than 70 countries. Founded in 1950, ICID is a non-governmental organization dedicated to the sound and responsible management of water resources. Its central purpose is to promote the development and application of the sciences and techniques of irrigation, drainage, flood control and river channel stabilization.

USCID publishes the *USCID Newsletter*, proceedings of USCID meetings and special reports; organizes and sponsors periodic technical meetings and conferences; and distributes ICID publications. Since 1986, USCID has organized more than 50 regional, national and international meetings throughout the U.S. These meetings address contemporary issues affecting irrigated agriculture, offering a multi-disciplinary evaluation of problems and solutions.