

National Water Research Institute

September 25, 2008 E-Newsletter

“Salinity Management Guide” Now Online

The Salinity Management Guide, a new tool showing how recycled water can be safely used for landscape irrigation and that salinity can be addressed through proper management strategies, is now online at www.salinitymanagement.org.

Designed for landscape designers, park managers, and others using recycled water for landscape irrigation, the Salinity Management Guide is an interactive, user-friendly database that provides information varying from the basics of salinity to the design or redesign of landscape systems based on water needs, soil conditions, and the salt-tolerance of plants. It is the only database of its kind that provides information on the effects of water quality on plants, soils, and water application systems.

In addition to the Salinity Management Guide, the website also includes:

- 4-page brochure on "Managing Salinity of Recycled Water for Landscape Irrigation: The Link between Plants, Soils, Salts and Recycled Water."
- 320-page report titled "A Comprehensive Literature Review on Salt Management Guide for Landscape Irrigation with Recycled Water in Coastal California."

Sponsors of the Salinity Management Guide include:

- California Department of Water Resources
- Central Basin Municipal Water District
- City of Cerritos (California)
- Los Angeles Department of Water and Power
- National Water Research Institute
- Southern California Salinity Coalition
- Water Replenishment District
- WaterReuse Foundation
- West Basin Municipal Water District

The Salinity Management Guide is also available on CD-ROM. To receive a complimentary copy of the CD-ROM, please contact Tammy Russo at trusso@nwri-usa.org.

Support NWRI Fellowships for U.S. Graduate Students

Join NWRI in supporting graduate students conducting innovative research in water science, engineering, technology, or policy at universities nationwide.

Federal funding for scientific research is diminishing, and few programs exist that will support graduate students conducting water research. Without intervention, many of these gifted and creative students may be forced to abandon their water research or seek an alternative study or career. In response to this need, NWRI has created a Graduate Fellowship Program to support deserving students whose research will ensure adequate and ongoing supplies of clean, available water now and for future generations.

Applications for fellowships are accepted until March 1 of each year and are judged by a 12-member Fellowship Committee, consisting of leading experts in water and wastewater issues from academia, consulting firms, and federal agencies. On average, 5-10 students are awarded fellowships of \$10,000

each year, for up to 3 years, to support their research. Results of the research are disseminated nationwide through our Annual Graduate Fellowship Research Conference. At present, NWRI is supporting 15 students with fellowships.

Your support is needed to increase the number of fellowships awarded each year by NWRI so that additional qualified students are provided with the funds needed to continue their promising water research. One-hundred percent of funds raised for NWRI fellowships are awarded to students; none of the funding is used for administrative expenses.

Current supporters of the fellowship program include:

- American Membrane Technology Association
- Cargill, Inc
- Carollo Engineers
- CDM
- CH2M Hill
- Kennedy/Jenks Consultants
- MWH
- Malcolm Pirnie, Inc.
- Southern California Salinity Coalition

For more information about the fellowship program, please visit www.nwri-usa.org/Fellowship. If you are interested in supporting the program, please contact Jeff Mosher at jmosher@nwri-usa.org.

Dan Okun Memorial Symposium to Be Held November 7, 2008

A memorial symposium honoring Dr. Daniel A. Okun will be held on Friday, November 7, 2008, at the University of North Carolina at Chapel Hill (UNC) to celebrate his life and achievements. The Kenan Professor of Environmental Sciences and Engineering at UNC, Okun was renowned for his pioneering work in water resources management, including water supply, pollution control, reclamation and reuse, and watershed protection, among others.

Symposium speakers include:

- Philip Singer, Dan Okun Distinguished Professor of Environmental Engineering, UNC
- M. Gordon Wolman, Johns Hopkins University
- Pete Kolsky, The World Bank
- James Crook, Environmental Engineering Consultant
- And more

For more information, please visit www.sph.unc.edu/envr.

Advanced Membrane Technologies Seminar Presentations Available Online

Speaker presentations from a one-day seminar on "Advanced Membrane Technologies for Treating Brackish Groundwater, Seawater and Reclaimed Water" held on May 7, 2008, at Stanford University, are now available online at <http://rows.stanford.edu>.

Presentations include:

- “Membrane Separation ... Basics” by Harry Ridgway
- “Membranes for water treatment: Properties and characterization” by Ingo Pinnau
- “Membrane types and factors affecting membrane performance” by Mark Wilf
- “Seawater reverse osmosis design and optimization” by Nikolay Voutchkov
- “Bay water SWRO desalination: challenges and solutions” by Val Frenkel
- “Membrane technology: a key component in water reuse systems” by Mehul Patel
- “Nanotechnology-based membranes for desalination” by Eric Hoek
- “Organic contaminant removal and membrane fouling” by Martin Reinhard
- “Water-carbon-energy nexus and your membrane plant” by Alan Zelenka

The seminar was sponsored by the Dept. of Civil & Environmental Engineering at Stanford University, Kennedy/Jenks Consultants, and NWRI.

Call for Papers for First International Conference on Microbial Transport and Survival in Porous Media

Many outbreaks of waterborne illness caused by viral and bacterial agents, such as *E. coli*, *Campylobacter*, hepatitis A, and Noroviruses, can be attributed to subsurface contamination. However, satisfactory mitigation strategies to reduce the likelihood of subsurface contamination by pathogens are still lacking in part because their transport and survival must be better understood.

The Canadian Water Network and National Water Research Institute (U.S.) will hold the First International Conference on Microbial Transport and Survival in Porous Media to advance our understanding of the transport and survival of microorganisms and, particularly, pathogens in subsurface environments and the associated risk of pathogen contamination in groundwater. The Conference will be held on May 10-13, 2009, at Niagara-on-the-Lake in Ontario, Canada.

Abstracts are welcome on the following conference themes:

- Pathogen and Surrogate Transport, Retention, and Survival in Granular Porous Media
- Transport and Fate of Pathogens and Surrogates in Fractured Media
- Riverbank Filtration as a Means to Control Water Quality
- Assessing Groundwater Under the Direct Influence of Surface Water
- Regulatory Issues Related to Pathogen Transport and Survival in the Subsurface
- Quantitative Microbial Risk Assessment (QMRA)
- Bioremediation, Conventional/Engineered Filtration, and Aquifer Storage & Recovery
- Contamination Risks Associated with Artificial Recharge

Abstracts are due November 1, 2008.

For more information about the conference or to download the “Call for Papers” flyer and abstract guidelines, please visit the conference website at www.regonline.com/microbialtransport.