WateReuse Releases New Case Studies Report

Under pressure from such factors as population growth, climate change, depletion of groundwater resources, and impacts from salt, many communities are struggling to find enough water to meet their needs. A new publication from the WateReuse Association, “Innovative Applications in Water Reuse and Desalination: Case Studies Two” profiles ten communities that have faced such problems and found innovative solutions that combine conservation, water reuse, and sometimes desalination. The case studies demonstrate how communities have found success by examining a range of options for alternative water supplies.

Highlighted projects and sites include Cary, North Carolina; Denver Water Recycling Project; Dunedin, Florida; El Paso, Texas; Inland Empire Utilities Agency; Las Vegas, Nevada; Long Beach, California; Santa Rosa Subregional Recycled Water Program; Singapore NE Water Project; and Scottsdale, Arizona.

The report costs $10 for members, $20 for nonmembers and is available at www.watereuse.org/publications.htm.

New Guidebooks Offer Help for NM Water Systems

The New Mexico Rural Water Association, New Mexico Environmental Finance Center, Rural Community Assistance Corporation, and the State of New Mexico have teamed up to develop three guidebooks to help water and wastewater systems better manage their water resources and plan for their future. The guidebooks address core issues regarding water system sustainability, auditing water use to reduce water losses and increase system efficiency, financial planning and management to ensure sufficient revenues to sustain operations, and asset management. They are designed for water and wastewater system owners, operators, managers, and board members to assess the current status of their operations and develop strategic plans for sustainable water and wastewater service.

“Water Use Auditing: A Guide to Accurately Measure Water Use and Water Loss” is a 26-page document intended to provide a broad overview of water-use auditing concepts and a specific method for categorizing all water use into a standard water balance.

The 56-page “Financial Planning and Rate Setting Guidebook” is designed to help system owners ensure sufficient revenues to sustain operations.

“Asset Management: A Guide for Water and Wastewater Systems” is a 91-page document published in 2006 with the assistance of New Mexico Tech. It aims to help operators determine how to operate their systems to provide a sustained level of service at the lowest life cycle cost.

The guidebooks are intended to be used together as integrated tools for efficient management to enable water systems to meet future service demands and regulatory requirements and to provide long-term sustainability. Asset management, for example, is a fundamental step in determining financial resources needed to operate the system and pay for improvements, expansions, or replacements. The water auditing program can tie to asset management by providing information about the condition of the buried assets. In turn, the auditing process also relates to water conservation and rate setting.

The three documents are available at www.nmrwa.org/wateraudit.php.

CA Groundwater Meeting

Nearly 350 people met in Sacramento last September for the joint 16th Groundwater Resources Association (GRA) of California Annual Meeting and 26th Biennial Groundwater Conference sponsored by the University of California Center for Water Resources. While the theme of the meeting related to expanding the role of groundwater in the state, issues concerning management and operation of the Sacramento-San Joaquin Delta were hot topics as well. Featured topics included desalination, groundwater recharge, assessing California’s water quality, salt water intrusion, preparing for climate change, groundwater

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management and land use planning, data management, and infrastructure.

GRA presented two awards at the meeting. The Kevin J. Neese Award was given to the University of California Groundwater Cooperative Extension Program for its investigation of groundwater quality in cooperation with the dairy community. Thomas Harter of the University of California at Davis, the program leader, accepted the award. It recognizes significant accomplishment by a person or entity within the most recent 12-month period that fosters the understanding, development, protection and management of groundwater.

The Lifetime Achievement Award was presented to Herman Bouwer (see photo), now retired from a 42-year career at the U.S. Water Conservation Laboratory in Phoenix, where he made many advances in the fields of artificial recharge, soil aquifer treatment, and surface water-groundwater interactions. Bouwer was unable to accept the award in person, but it was presented to him on behalf of GRA at the Sixth Biennial International Symposium on Managed Aquifer Recharge (ISMAR) conference on Managed Underground Storage of Recoverable Water. His talk focused on his committee’s recent report on the biogeochemical, engineering, and institutional factors that may affect the performance of managed aquifer recharge technology.

Technical sessions at ISMAR covered the role of artificial recharge in integrated water management, groundwater hydraulics and storage, regulations and economics, geochemistry, the fate of pathogens and other organics, regional and Arizona-specific issues, basin recharge, subsurface water quality changes, operations and management.


ISMAR is Marvelous

Hosted by the Arizona Hydrological Society, the 6th Biennial International Symposium on Managed Aquifer Recharge (ISMAR) was held in Phoenix Oct. 28-Nov. 2. The event drew a crowd of nearly 300 people representing 26 countries (all continents but Antarctica!) and 27 U.S. states, with more than half the attendees from outside Arizona. The program included three days of technical and poster sessions, four workshops, and field trips to aquifer storage and recovery sites both near (the East Salt River Valley in Phoenix) and far (the Las Vegas Valley).

Edward J. Bouwer of Johns Hopkins University presented the keynote address. Bouwer is recognized for his research in microbial process engineering and bioremediation processes, and as chairman of the National Research Council Committee on Managed Underground Storage of Recoverable Water. His talk focused on his committee’s recent report on the biogeochemical, engineering, and institutional factors that may affect the performance of managed aquifer recharge technology.