

RECLAMATION

Managing Water in the West

October 2005
Lower Colorado Region
Yuma Area Office

WATER CONSERVATION UPDATE

Water 2025 Challenge Grant Program- Grant Presentation by Commissioner Keys to Coachella Valley Water District

On October 14th Commissioner Keys presented the Coachella Valley Water District (CVWD) with a ceremonial check for their fiscal year 2005 Water 2025 Challenge Grant. This grant will contribute funding for a demonstration project that will show how state-of-the-art irrigation water management can save water in agriculture, and how those savings can be quantified. The demonstration project will apply conservation practices such as conversion from furrow to drip irrigation and scientific irrigation scheduling. Water savings will be quantified using geographic information systems (GIS) and statistical techniques to quantify current and historic water use. This demonstration project will be a critical part of CVWD's Water Conservation Plan. CVWD's plan sets a goal of saving seven percent of their agricultural deliveries by on-farm water conservation. That would result in saving 23,100 acre-feet of water per year. The total project cost is \$910,000. The funding sources are: CVWD which is contributing \$410,000, area growers and irrigation suppliers who will contribute \$200,000 and the Water 2025 Challenge Grant cover the remaining \$300,000.

Fiscal year 2004, the first year of the Water 2025 Challenge Grant program, was a resounding success. Reclamation awarded 19 grants to projects in 10 states for a total of \$4 Million. These projects will return almost \$30 million in on-the-ground water delivery system improvements. This fiscal year, 2005, Reclamation awarded 43 grants in 13 states throughout the West. Combined funding of all projects totals more than \$27 Million.

More information on "Water 2025," including Frequently Asked Questions and a

description of projects awarded in Fiscal Year 2004 and 2005, can be found at www.doi.gov/water2025.



Fiscal Year 2005 Water 2025 Challenge Grant Award Recognition Ceremony field tour in the Coachella Valley Water District. From left: Bob Johnson, Regional Director, Lower Colorado Region, Reclamation; Peter Nelson President of the Board of Directors, C VWD; John Keys, Commissioner, Reclamation; and Steve Robbins General Manager/Chief Engineer, C VWD.

Annual Water Conservation Workshops Presented by the Bureau of Reclamation

For the ninth year in a row, the Water Resources Research Laboratory (WRRL) in Denver, Colorado, is offering their water conservation workshops.

"Basic Principles and Developments in Flow Measurement" is offered January 10-12, 2006. The tuition for this 3-day workshop is \$700 per person. This workshop deals specifically with flow measurement concepts, devices, instrumentation, and the WinFlume program to design long-throated flumes. This course covers open channel and closed pipe measurement methods and instrumentation. A lab workshop session involves



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each student with hands-on flow measurement using different techniques and various types of water measurement equipment. A computer laboratory is also included in the class with in-depth coverage and application of a Windows-based program to design long-throated flumes.

“Modern Methods in Canal Operation and Control,” can be taken as a follow-up to the Flow Measurement workshop, or by itself. This 5-day class is offered January 23-27, 2006. Tuition is \$1000 per person. This class covers modern methods to upgrade the operations of existing canals, including canal automation techniques and equipment. The class targets an audience of canal operators, watermasters, engineers, and other technical staff.

For more information on these classes, please visit the Water Resources Research Laboratory Internet site at: http://www.usbr.gov/pmts/hydraulics_lab/ Then click on the “Events and Activities” and “Workshops.”



The outdoor irrigation laboratory is part of Cal Poly ITRC's training facilities that provide a "hands-on" learning experience to their courses.

The Annual Irrigation District School of Irrigation through ITRC at Cal-Poly, San Luis Obispo

The Irrigation Training and Research Center (ITRC) at Cal-Poly San Luis Obispo, California, is offering a series of irrigation-related courses in 2006. This year's series include courses flow measurement, canal modernization, and canal operation

Classes for irrigation district water operators are offered January 24-26. These courses cover three main topics: general flow measurement in open channel and pipelines, flow measurement in canals, and canal modernization. The general flow measurement class covers flow measurement principles and devices including pipelines. The canal flow measurement section covers weirs and flumes, corrections for common problems, acoustic meters, and current metering. The canal modernization class covers the service concept; purpose of different check structures; water level vs. flow rate control; minimizing tail-end problems while still achieving good service; introduction to SCADA; and the interaction between canals and turnouts. The fee for the class is \$30 per person per day or \$90 for all three days.

The class series for engineers, managers, and board members is offered March 27-30. These classes cover general flow measurement, flow measurement for canals, and canal modernization. The general flow measurement class covers principles of open and closed systems and common measurement devices. The classes for flow measurement for canals (2-days) cover weirs and flumes, computer-aided design for Replogle flumes, and acoustic velocity devices. The final class on canal modernization covers how to automate gates, determining reservoir capacity and location, control structure design, capacity requirements, and flow control versus level control. Class fees are \$30 per person per day or \$120 for all four days.

For more information on these and other classes offered by ITRC, please visit their website at <http://www.itrc.org>. Then click on “Short Courses.”



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