

## Conservation Connection

### Sunset Magazine Highlights Water Efficiency

In May 2005, Sunset Magazine featured an article titled "Backyards from the Ground Up," to help people design beautiful, water efficient landscapes. Considering that 50% of residential water is used for landscape purposes, designing water efficient landscapes is a crucial step in water conservation. Sunset's design and efficiency tips are summarized as follows:

- Choose plants that are appropriate to your climate.
- Minimize turf areas as it's a high water user.
- Select pervious materials for walkways and patios to allow rain waters to recharge.
- Test your soil and add organic compounds as needed for moisture retention and optimal plant growth.
- Group plants with similar water and sunlight needs.
- Install efficient irrigation systems.
- Use drip irrigation for shrubs and plant beds, and use overhead irrigation with rotary nozzles for turf.
- Use a "Smart" irrigation controller to schedule irrigation based on the plant's actual needs and weather.
- Set "clock type" irrigation controllers for individual plant zones to match the plant's water needs. Adjust controllers to water less in the fall and winter.
- Maintain your irrigation

system so it works efficiently. Broken or misaligned sprinkler heads are HUGE water wasters.

- Place organic mulch around plants to minimize evaporation and reduce weeds.

Copies of the complete article will be available soon. To receive a copy, please contact your area office's Water Conservation Specialist or call Leslie Barbre, Regional Office, at 916-978-5232.

### Is Your Landscape Water Wise?

True or False? Most urban water waste comes from inside the home. False! Inventions such as ultra-low-flush toilets and low-flow showerheads/faucets have dramatically improved in-home water use efficiency. Our beautiful landscapes are actually the leading offenders of urban water waste. California's population is rapidly growing and landscape water use has been overlooked even though approximately 50 percent of residential water is used for landscape purposes. To address the growing concerns of California's water challenges, the California Urban Water Conservation Council (CUWCC) assembled the AB 2717 Landscape Task Force.

The Task Force estimates that California's population will be approximately 48 million in 2030. An increase of 600,000 people per year will further strain our limited water supply; therefore, it is crucial that Californians remain diligent in conservation efforts. Although the Model Water Efficient Landscape Ordinance

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became law in 1991, landscape water efficiency still needs improvement. According to the Pacific Institute (Waste Not, Want Not, 2003), landscape water use can be reduced by approximately 580,000 acre-feet/year (AF/yr) through plant selection, better management practices and implementation of available hardware technologies. Given that an average family of four will use approximately 0.44 AF/yr, a savings of 580,000 AF/yr would supply an additional 1.3 million families with water for one year.

To assist in conservation efforts, the Task Force proposed 12 recommendations to help Californians conserve and reduce water use in our landscapes. Landscapes are a vital part of society, providing a sanctuary for people and wildlife alike. As well, landscapes promote cleaner air, moderate temperatures, and reduce water runoff. The Task Force understands this significance; therefore, the recommendations focus on better

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### Kudos to the Regional Water Authority



From left to right, Mike Cobb, Water Conservation Coordinator, Fair Oaks Water District, Lisa Maddaus, Regional Water Efficiency Manager, Charlie Pike, former Regional Water Efficiency Manager, Pauline Roccucci, Director, Placer County Water Agency and RWA Chair, John Davis of USBR, and Ed Winkler, Executive Director, Regional Water Authority

The Bureau of Reclamation (Reclamation) awarded the prestigious 2004 Commissioner's Water Conservation Award for excellence in water use efficiency to the Regional Water Authority (RWA). The RWA is a joint powers authority of 18 water suppliers located in Sacramento, El Dorado, and Placer Counties. One of RWA's objectives is to implement the Water Forum Agreement, which provides strategies for regional water supply reliability and Lower American River water qualities through 2030. Water use efficiency best management practices (BMPs) are an integral element of the Water Forum Agreement and a major program of the RWA. The RWA's Efficiency Program is designed to directly implement measures to satisfy urban water conservation BMPs and to assist local water suppliers.

Now in its fourth year, the RWA Water Efficiency Program has shown success based on solid leadership, water efficiency expertise, and support by its member agencies.

The following are projects implemented by the RWA with the assistance of the Mid-Pacific Regional and Folsom Area Offices.

- Performed irrigation audits of 20 schools and parks in eastern Sacramento County for the San Juan Water District.
- Utilized the irrigation audit results to successfully obtain \$1.15 million in State funds for irrigation equipment upgrades. With 15 participating water suppliers, including all local Central Valley Project contractors, the project will include approximately 175 sites of 1 acre and larger, and will save approximately 545 acre-feet per year.
- Provided and/or co-sponsored irrigation efficiency workshops for homeowners and green industry professionals.
- Marketed the Cooperative Point of Sale Irrigation Efficiency Project to promote attractive, healthy, and water efficient landscapes. This cooperative project included the U.C. Cooperative Extension, Reclamation, six water suppliers, and growers and retailers of landscape plants in Sacramento and Placer Counties. The objective was to educate homeowners to use landscape designs that group plants with similar water requirements into hydrozones (specific hydrologic regions according to area).
- Initiated pilot project for school education programs using a Reclamation grant. Subsequently partnered with the Sacramento Stormwater Management Program to cosponsor presentations on water efficiency and surface water pollution prevention to 15,000 students per year for 3 years.
- Sponsored water education lessons through the Sacramento Bee newspapers to 6,000 students annually. Revised and updated materials to meet Sacramento Valley conditions.
- Implemented a toilet replacement rebate project with eight water suppliers, which was co-funded by the Sacramento Regional County Sanitation District (SRCSD).
- Provided a variety of outreach messages through radio advertising, public events, TV news interviews, radio feature programs, California Life newspaper contributions, press releases, internet site, and newspaper advertising.
- Leveraged outreach through cooperative mailings with the Sacramento Municipal Utility District and the SRCSD.
- Installed through the "Rinse and Save Program" 475 water efficient spray nozzles and surveyed water appliances at 350 restaurants. Project savings were estimated to be 135 million gallons (414 acre-feet) of water and 144,300 therms of natural gas. The spray valves were free to the customers of the 17 participating water

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suppliers. The next phase, which is intended to install 600 additional valves for 460 customers to save an additional 170 million gallons (521 acre-feet) of water and 146,000 therms of natural gas, has already begun.

- Presented water savings workshop for building operators at Sacramento Municipal Utilities District.
- Supported local water efficiency efforts through frequent advice to conservation coordinators and by engaging experts from California and other parts of the United States.
- Sponsored a 2-day Water Loss Control Workshop featuring the new International Water Association methodology to estimate actual water losses and to pinpoint the location of leaks. Obtained State grants and implemented projects with participating water agencies and the City of Folsom to identify and repair leaks on 66 miles of pipeline, resulting in savings of 750 acre-feet per year.

For further information on the RWA, please contact Lisa Maddaus, Regional Water Efficiency Manager, at 916-967-7692 or check out the RWA's web site at <http://www.rwah2o.org/rwa/>.

*(Landscape Cont'd from Page 1)*

management practices rather than the reduction of trees, bushes, and shrubs planted. The 12 recommendations are:

1. Adopt water conserving rate structures for urban water suppliers as defined by the Task Force.
2. Reduce the Evapotranspiration (ET) Adjustment Factor in the Model Ordinance and review the ET Adjustment Factor every 10 years for further reduction.
3. Enforce and monitor

compliance with local ordinances and the State Model Ordinance including an enforcement mechanism to insure effective irrigation system installation and efficiency.

4. Require dedicated landscape meters.
5. Promote the use of recycled water in urban landscapes.
6. Require the local ordinances be at least as effective as the State Model Ordinance.
7. Increase the public's awareness of the importance of landscape water use efficiency and inspire them to action.
8. Require "Smart" controllers that adjust irrigation time based on weather conditions.
9. Adopt and enforce statewide prohibitions on overspray and runoff.
10. Have the Irrigation Association work with the California Landscape Contractors' Association and the CUWCC to create a state-wide certificate program, including a continuing education component, for landscape irrigation managers to include landscape water management, water budgets, and irrigation systems by 2008.
11. Support upgrading the California Irrigation Management Information System weather network.
12. Adopt performance standards for irrigation equipment.

The CUWCC hosted a public workshop to announce the Task Force's recommendations, and numerous industry representatives, including private water companies, professional landscapers, engineers, and State and Federal water agencies attended. Financial concerns were expressed regarding the



implementation and complex management of these recommendations. Public representatives also stated that information regarding water rebate programs was dismal and requested improvements. Others wondered why the Task Force didn't address alternative irrigation methods such as subsurface watering.

Regardless of the concerns, everyone agreed that landscape water use efficiency needs improvement. Implementing the 12 recommendations will not only save water but will decrease numerous impacts such as runoff, overspray, soil erosion, green waste, energy use, and the cost of water treatment. Who can argue with that?

For further information regarding the Task Force's recommendations, please visit <http://www.cuwcc.org>.

**Natural Resources Conservation Service Dubs Conservation a Commodity**

Think conservation. Are you picturing tranquil lands and preservation for future generations or are you thinking income? Conservation and personal income are rarely linked; however, due to the Farm Security and Rural Investment Act of 2002, conservation now has monetary value. The Farm Security and Rural Investment Act of 2002 amended The Food Security Act of 1985 to authorize the Conservation Security Program (CSP), a program administered by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS). The CSP pays agricultural producers who actively practice environmental stewardship of natural resources such as water, soil, air, plants, and animal life. The CSP focuses





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on farms and ranches in designated watersheds throughout the United States.

The CSP watersheds are selected according to NRCS criteria,

including the variety of land uses, high priority resource issues, proven historical land stewardship, and the availability of the technical tools



necessary to streamline conservation programs.<sup>1</sup> In 2004, 18 watersheds were chosen throughout 22 states, which included 27,300 farms or ranches encompassing 14 million acres. A total of \$41 million was budgeted, which allowed 3,000-5,000 producers to participate in CSP during the first year.<sup>1</sup>

Unlike the NRCS's Environmental Quality Incentive Program, the CSP does not provide financial assistance to establish conservation efforts, but pays farmers and ranchers for conservation measures already in place. Measures include crop rotations, cover crops, prescribed grazing, conservation tillage, filter strips, and grassed waterways. Based on conservation activities, eligible applicants are ranked and categorized into three tiers. Tier 1 addresses soil or water quality on parts of the agricultural operation. Tier 2 addresses soil or water quality for the entire agricultural operation and participant agrees to address one additional resource. Tier 3 addresses all resource concerns to a management level that meets the NRCS field office technical guide standards for the entire operation.<sup>1</sup>

The CSP payments are dependent on tier assignment, the number of acres enrolled, and the conservation actions completed. Tier 1 offers a 5-year contract with an annual maximum payment of \$20,000. Tier 2 provides a 5-10 year contract with an annual maximum payment of \$35,000. Tier 3 allows a 5-10 year contract with \$45,000 paid annually.

Annual payments help producers maintain conservation efforts while encouraging others to meet the same conservation standards.<sup>1</sup> Although conservation can pay, creating and maintaining sustainable lands is priceless!

For more CSP information, please visit NRCS's website at <http://www.nrcs.usda.gov>.

<sup>1</sup>USDA, CSP Fact Sheet, 03/2005

### 2005 Conservation and Efficiency Criteria

The Bureau of Reclamation (Reclamation) has revised the Conservation and Efficiency Criteria (Criteria) for 2005. The Criteria was developed by Reclamation in response to the Central Valley Project Improvement Act of 1992 (CVPIA) and in accordance with the Reclamation Reform Act of 1982. The CVPIA required Reclamation to review the Criteria periodically, "but no less than every 3 years, with the purpose of promoting the highest level of water use efficiency reasonably achievable by project contractors using best available cost-effective technology and best management practices." The initial Criteria was developed in 1993, and have been revised in 1996, 1999, and 2002.

A Water Management Plan (Plan) submitted to Reclamation as required by applicable water service contracts, settlement contracts, or any other contracts that specifically invokes the Criteria, will be reviewed based on requirements in the Criteria.

Reclamation presented the 2005 Criteria draft at a series of workshops held in August 2005, giving the public an opportunity to comment. Changes in the Criteria include the option to submit a Plan in an electronic format and clarification of the urban best management practices (BMPs) exemption process. Starting with the 2005 Criteria, a water supply contractor required to submit a Plan can now submit the Plan to the Area Office in an electronic format. However, a hard copy of the Plan will still be acceptable. For the urban BMP exemption process, Reclamation will still follow the guidelines in the California Urban Water Conservation Council's Memorandum of Understanding. Any exemption request submitted per the Criteria will be reviewed by Reclamation staff.

For more information regarding the Criteria, please contact Jerry Townsend, Water Conservation Specialist, at (916) 978-5223. If you would like a copy of the 2005 Criteria, please contact Leslie Barbre at (916) 978-5232 (TDD 978-5608) or check out WaterShare at <http://www.usbr.gov/mp/watershare/>.



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**FYI . . .**

<p><b>2006 Environmental Quality Incentive Program Deadline</b></p> <p>The U.S. Department of Agriculture's Natural Resources Conservation Service provides unique services through the Environmental Incentive Program (EQIP). The EQIP is a cost share/incentive program for agricultural landowners to install water conservation systems. During 2005, the EQIP obligated millions of dollars to approximately 48,000 conservation contracts. Agricultural producers wishing to participate in the EQIP 2006 must file applications with their local NRCS office by December 2, 2005. For more information, visit the NRCS's website at <a href="http://www.nrcs.usda.gov/programs/eqip">http://www.nrcs.usda.gov/programs/eqip</a>.</p>	<p><b>Water Conservation Assistance</b></p> <p>The Water Conservation Team has made arrangements for a meeting room at the Mid-Pacific Region Water Users Conference to provide assistance with Water Management Plans, Annual Updates, and information on financial assistance programs available. The Team will be available January 18-19, 2006; 10:00 am – 12:00 noon and 2:00 pm – 4:00 pm.</p>	<p><b>Stay Tuned!</b></p> <p>The Bureau of Reclamation water conservation grant proposals for Fiscal Year 2006 Water Conservation Field Service Program will be advertised soon on <a href="http://www.grants.gov">www.grants.gov</a>. All interested parties should register to receive an automatic email notification. Advance registration will also speed up the grant application process.</p> <p>For more information about this program, please contact your Area Office Water Conservation Specialist.</p>
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<b>Calendar of Events</b>	
<p><b>December 13-14, 2005</b>                      Landscape Irrigation Auditor Class                      Santa Clara Valley Water District                      San Jose, California                      For more information, contact the California Polytechnic State University at 805-756-2434 or <a href="http://www.itrc.org">www.itrc.org</a>.</p>	<p><b>January 18-20, 2006</b>  <b>Mid-Pacific Region Water Users Conference</b>                      El Dorado Resort                      Reno, Nevada</p>
<p><b>January 26-27, 2006</b>  <b>Water Conservation: Truth or Consequences</b>                      California Irrigation Institute Conference                      Radisson Hotel                      Sacramento, California                      For more information, contact Jeanne Duncan at 916-366-9376 or <a href="http://www.caii.org">www.caii.org</a>.</p>	<p><b>February 14-16, 2006</b>  <b>World Ag Expo</b>                      Tulare, California                      For more information, contact the Center for Irrigation Technology at <a href="http://cati.csufresno.edu/even/">http://cati.csufresno.edu/even/</a>.</p>
<p><b>Flow Measurement-General: March 27, 2006</b>  <b>Flow Measurement-Canals: March 28-29, 2006</b>  <b>2006 Canal Modernization: March 30, 2006</b>                      Irrigation Training and Research Center                      Cal Poly, San Luis Obispo, California                      For more information, contact Cal Poly at 805-756-2434 or <a href="http://www.itrc.org">www.itrc.org</a>.</p>	

**Conservation Connection**

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Address Correction Requested

