Case Study 17

Conserve2Enhance[™]

University of Arizona, Arizona

Program Overview

Conserve2EnhanceTM (C2E) connects voluntary water conservation to community action by linking participant donations, based on their water savings, to funding for environmental enhancement projects. Participating homes and businesses create accounts on the free C2E Water Use Dashboard (www.conserve2enhance.org) to track their water use, learn conservation tips, and donate to the C2E program of their choice. The Dashboard provides a suggested donation, but C2E participants are able to donate more or less than the suggested donation or set up a recurring donation. Projects funded through C2E are based on community priorities and can range from securing instream flows to green infrastructure development to riparian restoration. Working with utilities, nongovernmental organizations, and businesses, C2E directly engages residential and commercial water users to save water.

The University of Arizona Water Resources Research Center (WRRC) developed and currently manages the C2E program. WRRC offers use of a C2E Program Development Toolkit, the C2E Water Use Dashboard, and technical assistance to communities and organizations interested in crafting their own program. C2E has been helping make conservation count since 2011, when a pilot program was launched in Tucson, Arizona through collaboration between the WRRC, the local water utility Tucson Water, and nonprofits Sonoran Institute and Watershed Management Group (WMG). Since that time, formal C2E programs have developed in Tucson and four other communities throughout the Southwest. This case study focuses on information from the Tucson C2E pilot (2011-2013); visit www.conserve2enhance.org to learn about all active C2E programs.

Main Program Elements

Costs

Funding for the WRRC's C2E program has been provided by Reclamation and the Walton Family Foundation to develop the program concept, marketing materials, and the C2E Water Use Dashboard. An initial program investment of \$650,000 allowed C2E to develop a C2E Program Development Toolkit and the

Entities

University of Arizona Water Resources Research Center, Tucson Water, Sonoran Institute and Watershed Management Group

Project Status

2011 - Ongoing; Tucson C2E Pilot: 2011-2013

Targeted Use Sectors

Residential, Commercial, Industrial, & Institutional, Residential Irrigation, Commercial & Industrial Irrigation

Estimated Annual Savings

8.2 acre-feet in 2014 by 100 residential and commercial C2E participants

Estimated Annual Cost

Varies by community; about 15 percent FTE staff time

Key Program Elements

- Voluntary water efficiency program that links municipal water conservation with environmental benefits
- Well received by locals as the program ensures water savings benefit the community
- Provides funding for local and regional enhancement projects



C2E Water Use Dashboard, as well as offer technical assistance to communities. The Tucson C2E pilot program benefited from these resources, which were made available to the community at no cost.

During the pilot phase of the Tucson C2E program, community project funding was raised from an "Open Space and Riparian Enhancement" check box on the Tucson Water bill as well as direct C2E participant donations made to WMG. Combined check box and participant donations between 2011-2013 raised nearly \$40,000 for Tucson C2E and supported an annual grant program. The average annual water savings achieved by Tucson C2E pilot participants (residential users only) was 21,000 gallons per household. This led to participants achieving an annual water bill savings of \$47.40 per household, which they were then encouraged to donate to the Tucson C2E program. Moderate staffing was needed for operation of the pilot program; this continues to be true for the fully implemented Tucson C2E program, which presently utilizes the Tucson Water check box as well as the C2E Dashboard's integrated donation portal to raise funds. The annual cost of developing a C2E program will vary depending on the organizational structure established, existing partnerships, and identified priority projects.

Implementation Resources

Laying the foundation for a C2E Program takes approximately six months to one year; program development involves establishing a local program manager, a fiscal agent, and priority projects. Once the program is in place using the C2E Water Use Dashboard, a program requires staff time to message participants, run data queries, and, if partnering with a local utility, upload water use data. Staff time may be needed to market the program to water customers and can vary depending on existing partnership and project opportunities. The Tucson C2E pilot program development was resource intensive, but new C2E programs can expedite the process by utilizing the C2E Program Development Toolkit. This newly developed resource allows programs to achieve a much lower estimated unit water cost than the Tucson C2E program.

Level of Participation

The Tucson C2E pilot program has been well received, and a growing number of communities throughout the Colorado River Basin have begun to develop their own C2E programs to encourage conservation. For the Tucson pilot program, around 850 participants donated to the local C2E fund through the Tucson Water bill check box or as active C2E participants to WMG.

Program Outcomes

Water Savings

Since the development of the Tucson C2E pilot program, C2E participants employing conservation strategies ranging from behavioral changes to rainwater harvesting installations have conserved 20 acre-feet of water and supported seven community-led environmental enhancement projects.

Program Challenges

- Water customer messaging to build the connection between water conservation and enhancements that benefit the community.
- Gaining endorsement by municipalities.
- Identifying opportunities for local environmental enhancement.

Sources

- Brittany Xiu and Kelly Mott Lacroix, University of Arizona, Water Resources Research Center
- Conserve2Enhance, retrieved from: www.conserve2enhance.org