

LANDSCAPE PROGRAM FINDINGS

We looked at 8 cases from 3 separate utilities for a total of 1,003 residential landscape conversion rebates. The conversions took place between 1997 and 2002.

The conversions we examined were offered by 2 large utilities (serving over 200,000 customers) and one mid-size utility (100,000 to 199,999 customers).

Utility L-1 provided an incentive of \$0.40 per square foot, with a minimum conversion of 500 square feet.

LANDSCAPE CONVERSION PROGRAMS	
Total Participants:	1,003
Participating Utilities:	3
Cases Analyzed:	8
Customers Analyzed:	SF
Years Analyzed:	1997 - 2002

Utility L-2 offered a rebate of \$200. The minimum conversion was 1,000 square feet, and both the front and back yards must have been converted.

Utility L-3 offered a rebate of \$100, with no minimum conversion. However, both the front and back yards must have been converted.

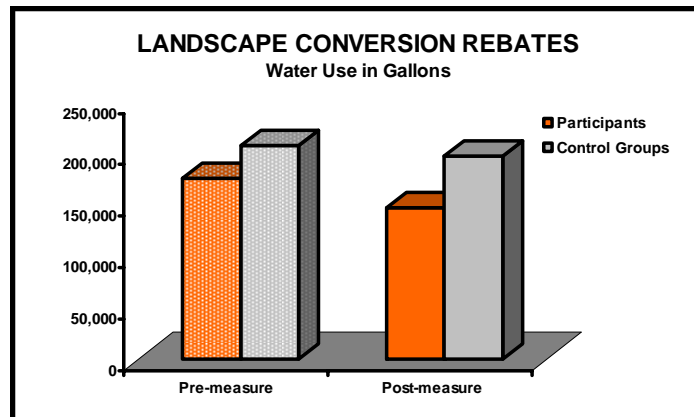
All programs studied were untargeted, other than the criteria to qualify for the rebate.

WATER SAVINGS

Some analyses show "negative" water savings, where control group water use decreased more (or increased less) than participant water use.

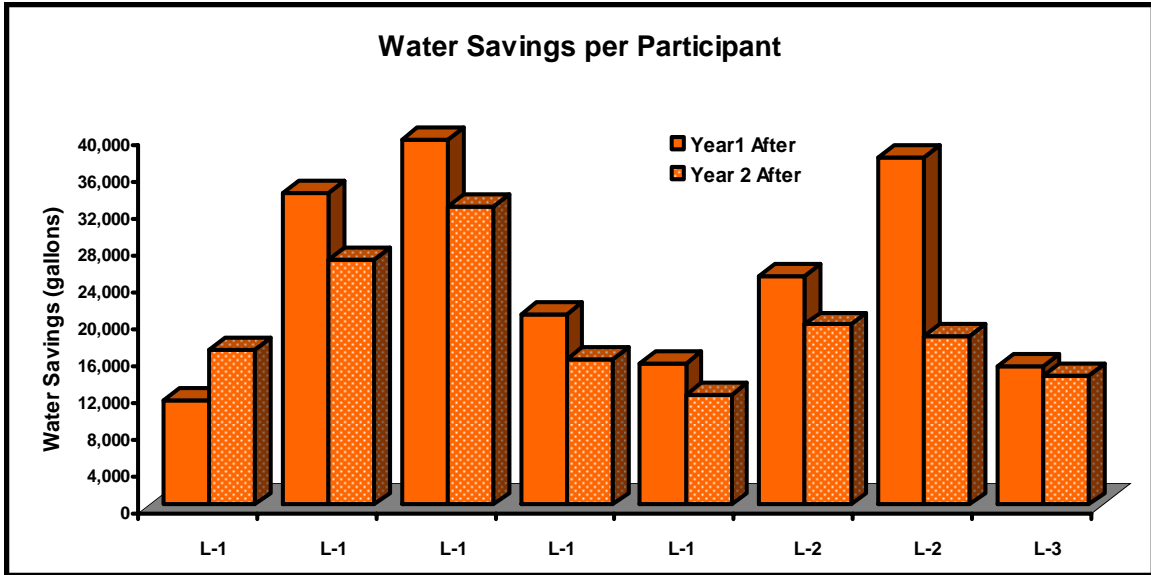
PRE- & POST-MEASURE RELATIVE WATER USE

The overall water use of participants in these conversion programs ranged from 63% of the control group to 109%, with an average of 87% of the control group before the conversion to 77% of control group after the conversion.



RANGE, AVERAGE, MEDIAN SAVINGS

Annual water savings per participant varied from 11,387 gallons to 39,665 gallons per participant. **The average water savings per participant per year was 21,897.**



PERSISTENCE OF SAVINGS

The average water savings per participant for these programs was 24,121 gallons the first year after the programs and 19,673 gallons the second year after, which shows a 18% decrease in water savings from the first year to the second year after the programs.

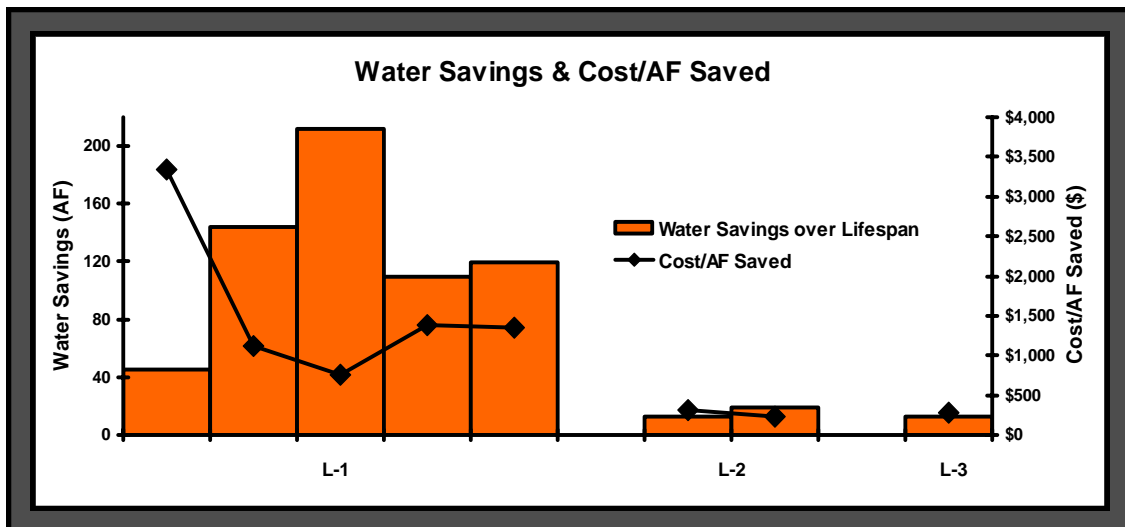
OVERALL LIFESPAN SAVINGS

The water savings over the entire 10-year lifespan varied from 12.2 AF to 212.1 AF, with an average savings of 84.3 AF and a median savings of 77.4 AF.

ECONOMIC ANALYSIS

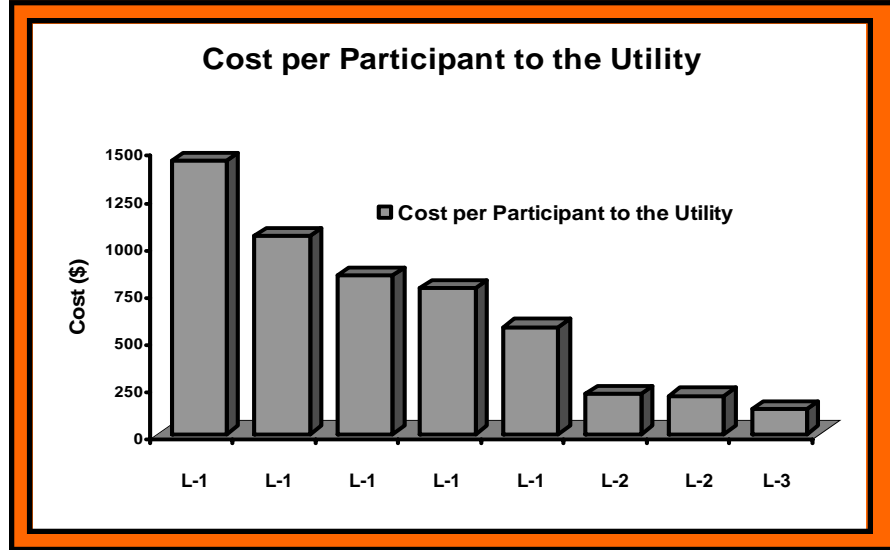
COST PER ACRE FOOT SAVED

The cost to the utility to save an AF of water for the landscape conversion programs we studied varied from a low of \$236 per AF to a high of \$3,338 per AF. **The average cost was \$1,099 and the median was \$942.**



COST TO THE UTILITY PER PARTICIPANT

The direct costs to the utility to administer these programs and provide the rebates ranged from \$129 per participant to a high of \$1,442 per participant. The average cost to the utility was \$650 per participant and the median was \$667.



COST TO PARTICIPANTS

The cost to the participants to actually get their new landscapes in the ground ranged from \$1,181 to \$5,258 per participant. The average cost to the participants was \$2,401 per participant, and the median cost per participant was \$2,051.

NET PRESENT VALUE

The Net Present Value to the utilities ranged from **-\$3,593** to **-\$162,046**, with an average of **-\$99,722**. The Net Present Value to the participants ranged from **-\$34,730** to **-\$369,233**, with an average of **-\$166,532**. The overall Net Present Value ranged from **-\$38,323** to **-\$529,778**, with an average of **-\$289,593**.

Thoughts on LANDSCAPE CONVERSION REBATE Programs

- ◆ **Results showed an 18% fall-off in water savings from year one after the conversion to year two. We might have expected the opposite, as the amount of water needed to establish landscaping is higher the first year after installation than for the second year, when irrigation can be cut back some.**
- ◆ **This result brings to mind the findings in the AWWA REUW Study that discovered households with automatic timers and drip irrigation systems use more water than those without. Are customers who received these conversion incentives letting up on seasonal adjustments to their irrigation systems as time goes by?**

