

DEVICE GIVEAWAY FINDINGS

We were able to study eight device giveaway programs from five separate utilities. These giveaway programs took place between 1995 and 2003.

Four of the five utilities studied were classified as small (less than 100,000 customers) and one was mid-sized (100,000 to 199,999 customers).

Utility D-5 put a relatively larger investment, in both staff time and advertising, into their giveaway program with little to show for that additional effort.

Utilities D-1, D-3 and D-4 each spent next to nothing and achieved water savings that are not statistically meaningful.

Utility D-2 did not have a method to confirm that devices were actually installed which may account for at least a portion of the increase in water usage.

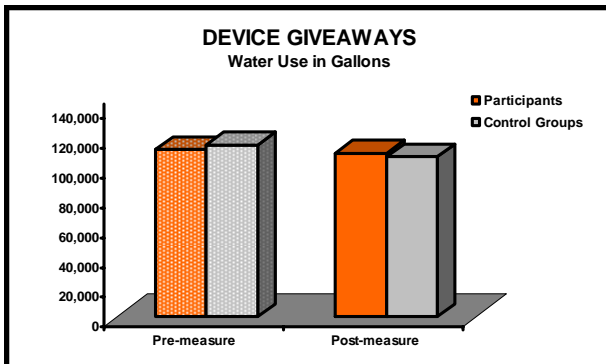
DEVICE GIVEAWAY PROGRAMS	
Total Participants:	533
Participating Utilities:	5
Cases Analyzed:	8
Customers Analyzed:	SF
Years Analyzed:	1995 - 2003

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 participant's overall water use varied from 92% of the control group to 115% of the control group. **The average water use of the**



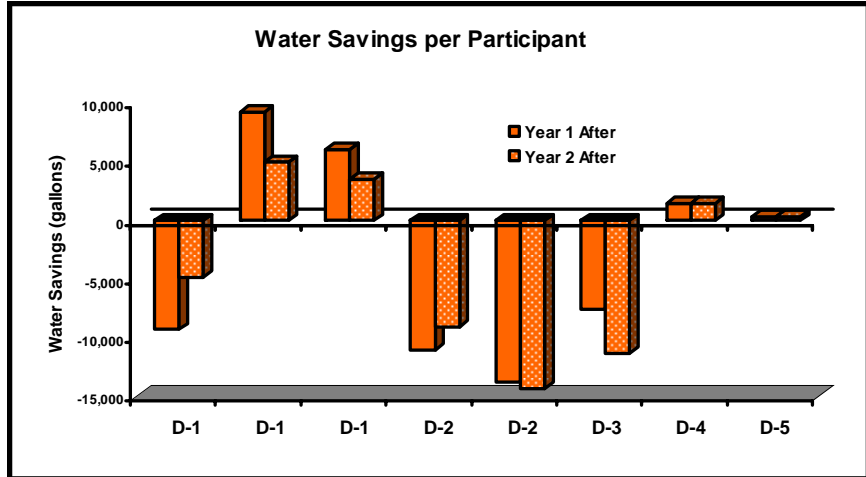
participants was 97% of control group water use prior to receiving the devices and 101% of control after receiving the devices.

RANGE, AVERAGE, MEDIAN SAVINGS

Water savings per participant varied from 9,229 gallons per year to **-14,341** gallons per year (a relative increase in water use). **The average water savings per participant per year was -6,692 gallons (a relative increase in water use).**

PERSISTENCE OF SAVINGS

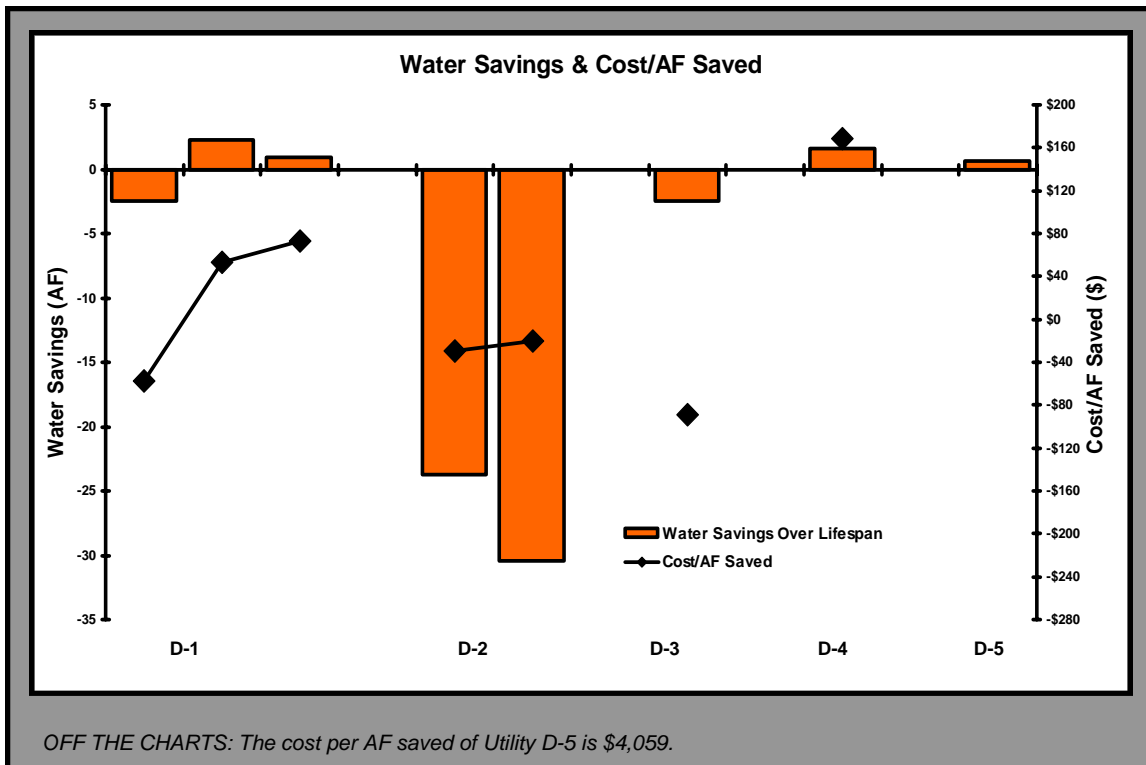
The average water savings per participant for these programs was -6,846 gallons the first year after the programs and -6,538 gallons the second year after (relative increases in water use), which shows a 3% increase in water savings from the first year after to the second year after the programs.



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OVERALL LIFESPAN SAVINGS

The water savings over the entire 5 year lifespan varied from 2.3 AF, with an average savings of -54.2 AF and a median savings of -6.7 AF (relative increases in water use).

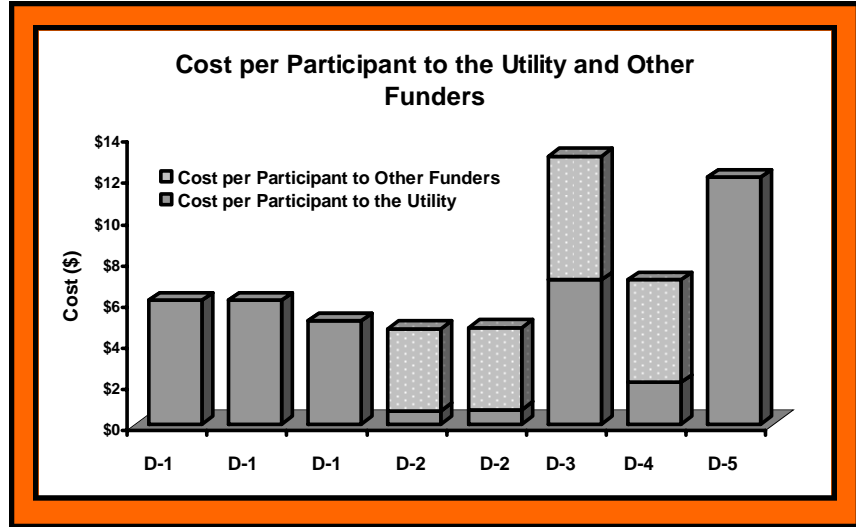


OFF THE CHARTS: The cost per AF saved of Utility D-5 is \$4,059.

ECONOMIC ANALYSIS

COST PER ACRE FOOT SAVED

The cost to the utility to save an acre foot of water with device giveaway programs studied ranged from a high of \$4,059 to a low of **-\$57**. This wide range highlights the variability and unpredictability of this type of program. The negative cost to save an acre foot of water reflects “negative” water savings. The magnitude of negative costs per acre foot of water saved are meaningless, and could be thought of as infinitely high positive values. **The average cost to save an acre foot of water was \$515 and the median cost was \$21.**



Two of the five utilities examined had outside funders of their device giveaway programs. **When the costs to the utilities and these outside funders are aggregated, the average cost to save an acre foot of water increased to \$520 and the median cost decreased to \$17.**

COST TO UTILITY AND OTHERS PER PARTICIPANT

The cost to the utilities to administer the programs and distribute the devices ranged from \$1 to \$12 per participant. The range jumps to between \$5 and \$12 per participant when the cost to both the utilities and outside funders is considered.

The average cost to the utilities offering the rebates was \$5 per participant. The total cost to the utilities and outside funders was \$7, on average. The median cost per participant was \$6 to the utility, with a median of \$6 of combined costs.

COST TO PARTICIPANTS

There were no quantified costs to the participants of the device giveaway programs.

NET PRESENT VALUE

The Net Present Value to the utilities ranged from **-\$70** to **-\$1,546**, with an average of **-\$283**. The Net Present Value to the participants ranged from \$938 to **-\$9,480**, with an average of **-\$2,377**. The overall Net Present Value ranged from \$663 to **-\$10,076**, with an average of **-\$2,834**.

Thoughts on DEVICE GIVEAWAY Programs

- ◆ **From the standpoint of water savings alone, giving away conservation devices such as low-flow shower heads, faucet aerators, and shut-off valves for showers and faucets is not able to make a meaningful difference in overall water use. It does not appear to even be an effective bribe or have the ability to raise the conservation awareness of the customers to show any increased efficiency in their overall water use.**
- ◆ **These technologies may in fact be at their best as good customer service tools and good reminders to the water customers of the importance of conservation, but the actual savings is negligible or nonexistent.**
- ◆ **Is it possible that customers receiving these devices think that having them gives them license to use water somewhat more freely elsewhere?**
- ◆ **Since these giveaways were not targeted programs, it is a shotgun approach to water savings that doesn't prove cost-effective to the utility. While there is relatively little cost involved, the returns appear to match the inputs. It should be mentioned that for the purposes of this study we have not attempted to quantify the goodwill engendered by these types of freebies.**
- ◆ **As an aside, the water is so hard in Southern Arizona, that even a high-volume fixture quickly becomes low volume.**