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SAN MARCOS: Study's results show feedback helps water customers conserve

Monthlong pilot program's participants could see how day-to-day activities affected use totals

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Results from a monthlong study suggest a Cal State San Marcos professor was correct when he theorized that giving water customers quick feedback on their water use helps them conserve more.

Dr. P. Wesley Smith, who teaches psychology at the university, teamed with the Olivenhain Water District to conduct the pilot program that ended Sept. 10.

Twenty-five Carlsbad households in the program were given special devices and software that let them check their water use up to 14 times a day on their home computers.

Special computer displays enabled the participants to see how showers, laundry and other day-to-day activities affected their water use. They could also compare their water consumption to water totals in their neighborhood and with the same period in 2008.

Favorable comparisons earned "smiley" faces on the display, equivalent ones brought neutral faces, and unfavorable comparisons elicited frowning faces.

Some 100 other households did not get the virtual-time feedback but served as a control group, or the "neighbors" used for comparison.

Results released by the water district this week show that those who got the feedback used 20 percent less water compared with the same period the year before.

The control group reduced its water use by only 11 percent compared with the previous year.

The results also suggest that people who were already interested in reducing their water use before the study began conserved the most once they got the devices and software.

Schultz said Friday he's intrigued enough by the results to seek a larger, follow-up study that could pinpoint when the new approach is most likely to work.

"The prediction is that it's going to be even more effective for people who are environmentally motivated or financially motivated ---- that it's going to interact with the individual characteristics of the household," he said.

Based in Encinitas, Olivenhain Water District serves customers in a 45-square-mile area that runs from the coast east through 4S Ranch to Interstate 15.

The district joined other water agencies throughout the region in declaring Level 2 drought alerts earlier this summer. The alerts require customers to reduce their water use by at least 10 percent.

The devices used in the study are manufactured by Los Gatos-based Aquacue and are attached to customers' water meters. Known as Barnacles, the devices use wireless technology, the Internet and software to maintain constant water-use displays on users' computer screens.

Olivenhain General Manager Kimberly Thorner and Joseph Randall, a management analyst with the agency, said Friday that they were very pleased with the results.

"I think the study proves that instantaneous availability of information is effective in causing conservation," Thorner said.

Schultz is scheduled to present his findings to the district's board at its Oct. 14 meeting. He said other districts have expressed interest in the program as well.

"Vallecitos (Water District in San Marcos), in particular, has expressed an interest in exploring some of these ideas," he said.

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