

PLEASE DESCRIBE THE WATER CONSERVATION PROGRAM/ACTIVITIES BEING SUBMITTED FOR THE AWARD. PLEASE INCLUDE, WHERE POSSIBLE, MEASURED OR ESTIMATED SAVINGS THAT DEMONSTRATE THE SUCCESS OF THE PROGRAM, AND HOW THOSE VALUES WERE OBTAINED.*

**STANFORD UNIVERSITY
WATER CONSERVATION PROGRAM
FACT SHEET**

http://lbre.stanford.edu/sem/water_conservation

Background: In 2001, Stanford University developed the *Water Conservation, Reuse and Recycling Master Plan* to identify ways to keep water demand below the current San Francisco Public Utilities Commission (SFPUC) allocation of 3.033 million gallons per day (mgd). The success of Stanford's water conservation, reuse and recycling program is demonstrated by a steady decrease in domestic water use **from 2.7 mgd in 2001 to 2.3 mgd as of June 2008.**

FY 2001-FY2008 Key water conservation accomplishments:

- Water misers have been installed on almost all campus autoclaves and sterilizers.
- Replaced more than 10,000 academic and student housing bathroom fixtures with water-efficient ones, including low-flow showerheads, sink aerators, high efficiency toilets and urinals. Almost 95% of the academic and student housing inefficient toilets have been retrofitted.
- All once-through cooling for equipment has been replaced with re-circulating systems.
- Majority of campus academic grounds are on evapotranspiration (ET) controllers for irrigation.
- Installed a WaterWise Demonstration Garden. <http://bgm.stanford.edu/groups/grounds/special/waterwise>
- Developed a Water-efficient (WE) technology demonstration program.
- Water Efficiency Goals and Benchmark evaluations are used for new buildings.

http://lbre.stanford.edu/sem/sites/all/lbre-shared/files/docs_public/we_performance_goals_12.18.08.pdf

- In 2008, ongoing outreach for single-family on-campus homes included checking for irrigation runoff and providing door hangers notifying homeowners what they can do to avoid it.
- In 2009, Stanford re-designed the water billing statement format for campus residents, providing a graphic display to encourage customer review of their water use and consumption trends.
- Starting in 2008, Stanford's Water Conservation Program started including monthly flyers with water saving ideas for campus homeowners.
- In 2009, Stanford is providing additional rebate funding for turf removal and high efficiency toilet retrofits to encourage campus residents to replace turf with Mediterranean climate plantings and install high efficiency toilets.

Measuring Water Savings and Retrofits that Saved Stanford More than 90,000 Gallons Per Day

Stanford University was able to measure water savings because of the more than 1600 water meters on campus. From 2004 through 2007, Stanford installed 62 water misers on existing sterilizers in research labs in 14 buildings, that included the School of Medicine, Chemical Engineering, Biology, Chemistry, and Bioengineering. Water savings of close to 95,000 gallons per day (gpd) or about 35 million gallons of water per year resulted from the water miser retrofits. The School of Medicine has seen some of the most dramatic decreases in water use thanks to these water conservation efforts. The Beckman and Fairchild buildings in particular use **50 percent less water than before, saving over 22 million gallons of water annually.** The amount Stanford conserves with the water misers and other water-conserving measures allows the University to stretch its water supply to continue to have enough water for new academic facilities. See http://lbre.stanford.edu/sem/campus_community#school **for the graph illustrating drop in water use.**

Toilet retrofits throughout the campus have saved Stanford nearly 93,000 gpd or about 34 million gallons of water a year. These savings were achieved by replacing high water-using toilets with efficient new ones in Academic, Athletic, and Student Housing facilities.

