

# Fact Sheet – August 2015 California's and Stanford's Water Supply

http://lbre.stanford.edu/sem/Water Efficiency http://sustainable.stanford.edu/water

### Water Shortage in California

On May 18, 2015, additional items within the Mandatory Drought Regulations went into effect (administered by the <u>State Water Resources Control Board</u> (Water Board)). <u>Local drought regulations</u> were also passed by Santa Clara County.

### **EMERGENCY DROUGHT MEASURES**

All domestic water customers are required to reduce outdoor irrigation; a 2-day per week irrigation restriction applies to lawns and ornamental landscaping: Tuesday and Saturday nights for even numbered addresses, and Wednesday and Sunday nights for odd numbered addresses and areas without addresses, between the hours of 7 p.m. and 7 a.m. In addition, this year we are asking all users of Stanford's non-potable irrigation water to strive to reduce water use by 25 percent below 2013 same-month levels.

## ALL CUSTOMERS ARE REQUIRED TO STOP:

- 1. The application of potable water to landscapes in a manner that causes runoff to adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots or structures.
- 2. The use of a hose that dispenses potable water to wash a motor vehicle, unless the hose is fitted with a shut-off nozzle.
- 3. The application of potable water to any hard surface, including, but not limited to, driveways, sidewalks, and asphalt.
- 4. The use of potable water in a fountain or decorative water feature, unless the water is recirculated.
- 5. The application of potable water to outdoor landscapes during and within 48 hours after measurable rainfall.
- 6. Serving drinking water other than upon request by an eating or drinking establishment.
- 7. The irrigation with potable water of ornamental turf on public street medians.
- 8. The irrigation with potable water of landscapes outside newly constructed homes and buildings.

#### A Call for Action to the Stanford Community

Stanford University is categorized as an institutional water user under the Emergency Drought Regulations. As such, regulations require Stanford to either reduce potable water demand by 25% compared to the same months in 2013 OR impose a two-day per week potable water irrigation restriction on lawns and ornamental landscapes. The Stanford Energy System Innovations (SESI) project (a.k.a. Central Energy Facility) went online in April and is projected to contribute potable water savings of up to 15 percent. Even with the savings from SESI, many additional measures would be needed to achieve the 25% reduction to potable water use. The drought regulations do not take into account substantial water savings that Stanford has achieved prior to this drought. Therefore, Stanford will comply with the new emergency drought regulation by implementing the two-day per week irrigation restriction for all potable water irrigated areas rather than imposing severe conservation measures, as detailed in the June 15, 2015 letter from Provost Etchemendy.

- ⇒ If you see leaking taps, toilets, or showers, misaligned irrigation (not watering plants), broken irrigation sprinklers (water shooting in the air), excessive irrigation runoff (flowing in gutters) on campus, take action—report the problem to campus facilities 24-hour service #: 723-2281, with the time and location, so it can be repaired.
- ⇒ Students get involved! Help conserve water in your residence and on campus: report leaks, excessive irrigation, take shorter showers, use fewer dishes, and wash full loads of clothes.
- ⇒ Are you considering removing some of your lawn? Do you have excessive runoff; is your gutter full of water after irrigating? If so, visit our website for information about water efficiency rebates.
   Take advantage of BAWSCA's Landscape Education Classes.
- ⇒ Check the graph on your bill statements to determine how much water you use for irrigation. Need help figuring it out? **Call the Utilities Services water line: 650-725-8030.**
- ⇒ Everyone: Get Involved, help Stanford, the Bay Area, and California be efficient water users!

# Stanford University's Water Supply & Conservation Efforts

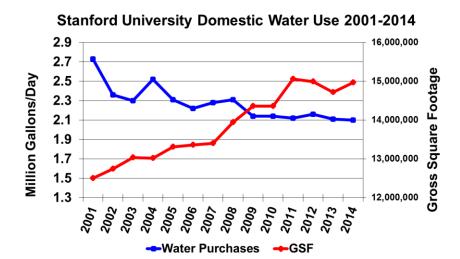
Stanford University purchases 100% of its domestic water from San Francisco Public Utilities Commission (SFPUC). Stanford is one of 26 Bay Area Water Supply and Conservation (BAWSCA) agencies who purchase water from SFPUC. Stanford uses about 1.5% of the total BAWSCA water use.

The sources of the SFPUC supply are the Hetch Hetchy reservoir in the Sierra Nevada Mountains and local watersheds. Stanford's irrigation water supply is mainly runoff from the local watershed and groundwater from our own back up potable water wells (collectively known as Stanford's non-potable "irrigation water" system). Domestic water use at Stanford comprises about 2/3 of our total water use. Irrigation use at Stanford comprises about 1/3 of our total water use (see graphs below).

Stanford's Water Conservation program has been aggressively pursuing water efficiency for 13 years. The program has saved more than half a million gallons per day or 21% of our domestic water, while campus has grown 2.5 million sq. ft.

Early in the program, we established <u>Water Efficiency Goals</u>. We have implemented a variety of efficiency measures on campus, including installing water-efficient technology for research equipment, installing >13,000 highly efficient fixtures in academic and student residential buildings, and testing new water-efficient technology for potential use on campus, such as real-time metering and weather-based smart irrigation systems. We also partner with other water agencies to provide <u>rebates</u> for our customers.

Most campus landscape is irrigated with non-potable water from the campus irrigation water system and is exempt from the mandatory emergency drought measures listed above (although users are being asked to reduce 25% compared to 2013 use). However private landscapes in the Faculty & Staff Housing (F&SH) subdivision are an exception, consuming 10% to 15% of the campus potable water supply.



Want more information on the water efficiency and supply at Stanford, and water supply in California? See:

Stanford University
Stanford's Water Efficiency Program
BAWSCA
SFPUC

**DWR California Water Conditions** 

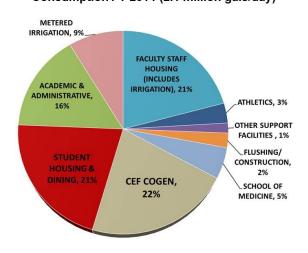
#### **Recent News Articles:**

"Record-low snowpack: Bad news for California, say Stanford experts"
Stanford Report on 4/2/2015

"Stanford's conservation efforts yield water savings" Stanford Report on 12/17/2014

"Tapped Out?" - Stanford Report on 7/11/14

# Stanford University Domestic Water Consumption FY 2014 (2.1 million gals/day)



# Stanford University Irrigation Water Consumption FY2014 (1.1 million gallons/day)

