



An easy and effective way to attain water savings is to install efficient fixtures and appliances that use less water each time they are turned on. Efficient fixtures amplify any savings from behavioral changes that are made (i.e. taking shorter showers, washing full loads of laundry/dishes, etc.) This fact sheet is a guide to assist your search for water efficient fixtures that will save you water and money.

A good way to start is by looking at [WaterSense](#) products sponsored by the EPA, which:



- Are at least 20 percent more water efficient than average products.
- Obtain independent, third-party certification and provide measurable water savings results.
- Offers a broad range of brands and models to achieve water efficiency.

Toilets and Urinals

Toilets are the largest source of residential indoor water use, accounting for about 24% of total indoor consumption in homes. Replacing older model toilets, which can use over 3.5 gallons per flush, with newer models of high efficiency toilets can reduce water used for toilets by up to 60%.

MaP (Maximum Performance):

- MaP is a 3rd party tester which ranks toilets and urinals based on performance and efficiency
- They supply a list of MaP *Premium* toilets which: are WaterSense certified, flush at least 600 grams in a single flush, and only use 1.06 gallons per flush
- Offers various options such as residential, commercial, single-/dual- flush, premium products, etc. to match your needs
- View and search for MaP tested toilets and urinals:
 - <http://www.map-testing.com/map-search/>
 - <http://www.map-testing.com/downloads.html>

WaterSense Labeled Toilets and Urinals:

- <https://www.epa.gov/watersense/residential-toilets>
- <https://lookforwatersense.epa.gov/>

Stanford goals:

- Toilets: < 1.28 gallons per flush; dual-plumb new buildings for non-potable water
- Urinals: ≤ 0.125 gallons per flush; dual-plumb new buildings for non-potable water

Showerheads

Showering accounts for 20% of residential indoor water use. Older showerheads use around 2.5-3.5 gallons per minute (gpm) while new, efficient showerheads can operate with a maximum flow rate of 2 gpm or less, saving an average family up to 2,700 gallons per year.

WaterSense Showerheads:

- Demonstrated to use less than 2.0 gpm
 - <https://www.epa.gov/watersense/showerheads>
 - <https://lookforwatersense.epa.gov/>

Stanford goals:

- ≤ 1.5 gpm (need to specify building water pressure before ordering; tamper resistant recommended/required)



Faucets

Replacing inefficient faucets can save an average family 700 gallons of water per year. Another option is to improve the efficiency of existing bathroom sink faucets with devices such as aerators or laminar flow devices.

WaterSense bathroom sink faucets and accessories:

- Use less than 1.5 gpm and reduce standard faucet flows by 30% or more
 - <https://www.epa.gov/watersense/bathroom-faucets>
 - <https://lookforwatersense.epa.gov/>
- Faucet accessories can improve existing faucet's efficiency

Stanford goals:

- *Public bathroom faucets:* ≤ 0.5 gpm (all metering faucets to be set at 10 seconds maximum per cycle. Required by SCC, CalGreen effective 1/1/14)
- *Residential faucets:* < 1.0 gpm
- *Kitchen faucets:* < 1.5 gpm (required by SCC, CalGreen effective 1/1/14)

Other fixtures/equipment

Food Service Fixtures/Equipment:

- Dish washers: EnergyStar certified dishwashers use less energy and save on average 3,870 gallons of water over its lifetime.
 - Consumers: <https://www.energystar.gov/products/appliances/dishwashers>
 - **Stanford goals:** Residential: Energy Star Qualified (≤ 3.5 gallons/load for standard, ≤ 3.1 gallons/load for compact); Commercial: Energy Star Qualified (see requirements online)
- Pre-rinse Spray valves: Low-flow spray valves remove food waste from dishes prior to dishwashing.
 - <https://www.epa.gov/watersense/pre-rinse-spray-valves>
 - **Stanford goals:** ≤ 1.15 gpm
- Ice machines
 - https://www.energystar.gov/products/commercial_food_service_equipment/commercial_ice_makers
 - **Stanford goals:** Use recirculating closed-loop chilled water or Energy Star Qualified air-cooled ice machines. Once-through domestic water cooling is prohibited
- More information on water-efficient kitchen equipment:
 - <https://www.epa.gov/watersense/best-management-practices#pane-3>
- Upcoming WaterSense Commercial and Institutional Sector:
 - <https://www.epa.gov/watersense/commercial-buildings>

Washing Machines:

- EnergyStar use about 25% less energy and 33% less water than regular washers
 - https://www.energystar.gov/products/appliances/clothes_washers
 - **Stanford goals:** Use Energy Star Qualified clothes washers (front-loading only)

Stanford residents can receive free water saving devices by contacting the Water Planning & Stewardship team at suwater.stanford.edu/wps