

## **Water Conservation for Water Conservationists: What more can I do?**

When the Governor Brown recently announced that we are in a drought, and that we should look to reduce our water consumption by 20%, I immediately assumed that this did not apply to me. I am an ecologist so I clearly already do my part; when asking for a 20% reduction, of course the governor is talking to the wasteful masses who don't live by my vaulted code of conservation ethics. I turn off the water when I brush my teeth, water plants only when necessary, put aerators on all of my faucets, and fix leaks already. What more could I possibly do? Squinting from my high horse however, I realized that my water consumption isn't nearly as low as it could be and that there are plenty of ways in which I could save water above and beyond the standard, "Turn off the water when you brush." In fact, there are plenty of ways that water savers can save even more. Here are some of them:

**Turn off the lights:** Wait, I thought that we were talking about water. Well, it turns out that more than half of water extractions from our rivers go to cooling electric generators. Shockingly, the biggest way that you can save water is to use less electricity, especially during peak periods. Run energy-intensive appliances (dishwasher, washing machine, etc.) at night after peak energy usage. Go the extra mile and plug all of your appliances/chargers into power strips and then turn those off when not in use.

**Let the grass die:** Watering the garden is the largest domestic use of water accounting for about 35% of the average household's water consumption. Lawns are nice, but they are certainly a luxury. Let it go brown, at least until we get out of this drought. Grass is very resilient and once the rains return, so will your grass. Better yet, tear it out and replace it with drought-tolerant landscaping. Are you renting? Perhaps it is time to talk your landlord into drought-tolerant landscaping. It is cheaper to maintain (no mowing!), uses almost no water and looks fabulous. Maybe you could volunteer to provide some sweat equity in the transition from water-hog landscaping. For all of your shrubs and veggies, install soaker hoses or drip irrigation to limit waste and be sure to water in the early morning when evaporation is low.

**Let it mellow:** We all know this one. The preventer of all things dysenteric is responsible for 20% of our household water use. If it's brown, flush it down—no one wants to see that, but I like a little color in my bathroom and why not yellow? But there is more that you can do. If you have an older toilet, it may use up to 3.4 gallons per flush (gpf). Post-1994 toilets use 1.6 gpf and high-efficiency toilets use 1.3 gpf or less. If you have a toilet that uses 1.6 gpf or more, you can turn your toilet into a high-efficiency toilet with the investment of 1 brick/large rock/concrete hunk. Just drop it into your tank, displacing that volume of water! Easy. If your toilet has an adjustable flap in the tank, you can also adjust the flap to reduce the amount of water used in each flush.

**Shower with a buddy:** It's fun and saves water! Showers account for 20% of our water consumption as well. We may not have a shower-buddy or our buddy may still be asleep, but there is still plenty that you can do. The first is to change that shower head. Not too long ago, shower heads used 5-8 gallons per minute (GPM). Current federal rules require new heads to not exceed 2.5 GPM, but that is still a veritable deluge. Water efficient heads use as low as 0.5 GPM while still delivering a pretty darn good shower. The Aqua Helix is the king of conservation at 0.5 GPM while Bricor makes a 1.0 GPM head.

Both are simple and cheap. Renting? No biggie. Hang on to the old shower head and put it back on when you move out, taking your low-guilt shower head with you. Do you take a 10 minute shower? I bet you could get by with 7. Do you take a 5 minute shower? 3 would do it. I bet most of the time in the shower, you are staring at your feet thinking about coffee anyway. Go the extra mile and turn the shower off while you are sudsing up. Bricor's shower head has a flow pause built into it for just that.

**Use the dishwasher:** WHAT?! Blasphemy! Assuming that your dishwasher isn't ancient, your dishwasher is *much* more efficient than you are bucking the idea that machines are soul-less wasters. Modern dishwashers use half the energy, one-sixth the water, and less soap than hand-washing when using light/efficiency cycles. Unless you can wash and rinse each dish with 9.5 ounces of water (you can't), you are less efficient than your dishwasher. Modern dishwashers use and heat only the water that it actually needs; hand-washing wastes a lot of energy heating your pipes and most of the water we use to rinse just goes down the drain. Make sure to use the light wash setting on your dishwasher and pack it full before running it. Hand-wash heavily soiled items and pots and pans that take too much dishwasher space. Make sure to turn off the heated drying and extra rinse options.

**Dirty cars are cool now:** The car can take a bit of dirt—it makes you look more like a legitimate ecologist anyway. That being said, a dirty car can significantly reduce mileage so a little cleaning is still a good idea. A lot of that dust will come right off without water. Use a dry or damp cloth to wipe it down. Could be better but it could be worse! If you must wash the ride, do it with a bucket and make sure you have a way to turn off the hose when you aren't actively using it. Of course, bikes take much less to clean—I'm just sayin'.

I am sure that there are many other ways to save water but these ideas target our largest household uses of water. If you own your home, of course it is easier to change fixtures, appliances, and landscaping. As a renter, perhaps the best thing that you can do to save water is to lobby your landlord to make those changes. Drought is everyone's mind right now and reminding your landlord of his/her civic and environmental duties in your pad are likely to fall on receptive ears.

This drought will end eventually, but California's water woes will not. Growing populations and climate change don't bode well for our water future in California. A good water shortage now is a great way to make us think about our consumption and to think creatively about how we can mitigate our impending water shortage. So, as conservation-minded folk already, let's take the extra step to conserve water. Changing landscaping and fixtures will not only benefit us in our current crisis but once the change is made, our post-drought consumption will be less. Serious water conservation ought not be a response to drought but a way of life—let's get started.

- Kitchen
  - use dishwasher if you have one, and only run when full
  - If you don't have a dishwasher, use the 2 tub/2 sink method. Fill one with hot soapy water and wash all your dirty dishes in that. Fill the other one up with hot not soapy water and rinse the recently washed dishes in that one.

- do not dump water you cooked with down the drain, use it to water your plants or flush your toilet (see below for instructions)
- Use the minimum amount of water necessary to boil/steam your food.
- For the Kitchen Ninjas among us: steam veggies on top of things you are boiling (ex. Pasta, potatos, rice)
- wash your veggies in a bowl of water instead of running the faucet over them
- clean dishes that are not dishwasher safe immediately, instead of letting them sit until they are dry and need to be soaked
- don't run your garbage disposal unless you absolutely have to (ex. The sink is no longer draining)
- Don't use water to defrost food, plan ahead and let it defrost in the refrigerator or on the counter
- Bathroom
  - If its yellow let it mellow AND/OR flush with “grey water” (water that you already used for something else such as cooking or doing dishes) See below for instructions
  - For those without low flow toilets, put a plastic bottle filled with water in your toilet tank, so not as much water gets flushed
  - Do not flush things down the toilet to dispose of them
  - turn the faucet off while you are brushing your teeth, shaving etc
  - Take a shower not a bath
  - Don't shower every day if you don't need to
  - Shower with a buddy AND/OR Turn the water off in the shower while you are soapign up AND/OR take shorter showers
  - Use hand sanitizer instead of washing your hands when using the bathroom
  - Fix leaky faucets
  - Catch the water that runs in the shower (or elsewhere) in a bucket while you are waiting for the water to warm up and use it to water your plants, flush your toilet etc.
  - If you have the money or are replacing broken ones invest in low flow faucets, showerheads and toilets
- Outside
  - Do not water your lawn
  - Do not wash your car
  - If you have plants that absolutely need water, water them with grey water (not water with soap in it though)
  - If you have a vegetable garden set up a drip irrigation system
  - Only water plants when they need water (i.e. the soil around them is dry)
  - Collect rain water (haha) and use it to water your plants
  - If you are redoing your yard consider xeriscaping

- Cover pools and hot tubes while not in use, and keep them at lower temperatures to avoid evaporation.
- Around the house
  - fix leaky faucets
  - only do full loads of laundry
  - Reduce your electricity usage especially at peak times (2-7pm)
  - dry your clothes on a drying rack or clothes line

How to flush your toilet with grey water: It requires about a gallon of water: Start slowly at first, then quickly add the rest of the water into the bowl. The shape of the toilet and the pressure from the water in the bucket pushes everything through the pipes.