

## **Ways for residents to conserve water:**

### **Familiarize yourself with the MCCSD's Water Shortage Contingency Plan Ordinance!**

Here's the link: <https://www.mccsd.com/2020-pdf/5/b/Ord-2020-2.pdf>

### **Designing and Building:**

The easiest and best way to conserve water is to incorporate water conservation into whatever you build, so you don't have to think about it. California has laws that encourage this (low-flow fixtures, etc.), but individuals can do more on their own, and the best, cheapest, and easiest time to make this happen is during construction.

Placing your water heater near your kitchen or bathroom can save both water and energy that would otherwise be wasted waiting for hot water and heating water that's going to sit in the pipes afterward. For construction of larger homes, it may make sense to put in more than one on-demand water heater, or to install a pump on a timer to circulate hot water. In any case, it's always smart to insulate all your hot-water piping, which reduces both water and energy wasted.

Appliances carry ratings and average statistics for the amount of energy and water used in their operation. People on well water save triply when they buy water-efficient appliances — they save water *and* the energy required to heat and pump that water.

Fixtures sold in California must be water efficient, but you can make them even more so. For instance, you can add a shut-off valve before the nozzle of a handheld shower for when you're washing the dog, or you can select fixtures that exceed California's requirements.

### **In your garden:**

**Design:** Put plants with similar moisture needs together, and don't fight the climate where you've chosen to live. If you love a water-hogging plant, maybe one or two would be sufficient. Consider drought-tolerant plants and natives, and design your garden around the siting of your house. For instance, plants that need shade or more water will be happier on the cooler, north side of the house, while drought-tolerant plants can survive just fine on the sunnier sides. Take prevailing winds into consideration, as they increase plants' need for water. Some plants use excessive amounts of water and just aren't suited to our Mediterranean climate.

**Mulching** helps keep moisture in the soil, where you want it. Drip irrigation, properly monitored and maintained, can put water just where your plants need it, leaving more water for household use. If you install or have an irrigation system, check it regularly to make sure it has no leaks, missing emitters, or other problems. Make sure the timer is running the system in the morning or late evening, and that you adjust the length and frequency of the watering cycles to the seasons and weather. (Some manufacturers offer systems that include weather stations to adjust timers automatically.) You can greatly reduce irrigation times or shut your irrigation system off altogether when your garden becomes dormant or when the rainy season starts. As plants become more established, they typically need less water. Well-amended soil also needs less frequent watering.

If you're doing a partial or whole new garden design, consider adding swales and other features that help slow the movement of rainwater across your property, to recharge the aquifer beneath it. Use permeable materials whenever possible to allow rainfall to percolate.

Per MCCSD rules, always water in the early morning or late evening and avoid watering when it's windy or hot. Instead of spraying plants (which can burn the leaves and cause other plant damage), use the soaker setting on your nozzle, and place it near the drip line of the plant.

Never ever leave a hose running — whether it's to take a call or chat over the fence with a neighbor, it'll probably take longer than you expect, and overwatering is just as bad as underwatering, from the plant's perspective. You may also forget the running hose altogether, unless you hear your well pump running or see water running down the street!

### **Literally saving water:**

Another way to save water for your garden is by putting in a catchment system. This can consist of rain barrels or a tank or tanks, and may be under or above ground. Check with County Building and Planning to see whether you need a permit for your plans. If you plan to use catchment water for drinking, it will need to be treated/purified to remove potential illness-causing pollutants. (Birds like roofs!)

### **Other outdoor uses:**

If MCCSD has declared a drought, check to see which of the four stages of drought have been declared, and what is allowed (or disallowed) under the current stage at <https://www.mccsd.com/2020-pdf/5/b/Ord-2020-2.pdf> . Under all drought stages, washing home exteriors is not allowed. Washing sidewalks or driveways or roads is not allowed. Washing vehicles is allowed, but only if you use a hose with a shut-off nozzle, or a bucket and sponge arrangement.

### **Before you buy or replace an appliance:**

The design and size of a water-using appliance determines how much water it will use. Often, but not always, appliances that use less water (and energy) are more costly, but they may save you money in the long run by reducing water-pumping and -heating costs on your energy bill. Before you buy a washing machine or a dishwasher, or purchase new plumbing fixtures for your kitchen or bath, research the water efficiency for the type of use you anticipate. For instance, if you live alone and don't generate much laundry, a low-capacity, top-load washing machine that allows for different level settings may use less water than a front-loader.

### **In your home — saving water (and reducing your impact on the ocean):**

Cooking and serving: Use just as much water as it takes to cover vegetables for boiling, or, better yet, steam them. Either way, that water is great for the garden, as it has nutrients in it. Think like a restaurant! — don't pour water for everyone without asking whether it's wanted. It's not just the wasted water in the glass, but the water it takes to wash and rinse the glass after.

There's no need to run water constantly while brushing teeth or washing hands. Wet your brush, turn off the faucet, and brush your teeth, turn it back on to rinse; wet your hands, turn the water off and suds them up, then rinse.

Shampoo, dishwashing detergent, hand soap, laundry detergent — none of these is good for the ocean, and all require water for rinsing. Try using 3/4 of the amount you usually use, and see whether it changes your end results. If you don't see any change in outcome, try using 1/2 as much as you once did. See if it takes half as long to wash the shampoo out of your hair or to rinse the dishes off. Also, eco-soaps and detergents typically take less water to rinse out, and they're formulated to reduce their environmental impact. Most of what washing machines do is

use the clothes to wash the clothes, meaning it's the abrasion of cloth on cloth that does most of the cleaning, not the detergent. One way to reduce detergent usage is to dilute the detergent in the bottle. Another tip is to pretreat stains and leave the detergent in the garment, then reduce the amount of soap you use in the load.

Bizarre bit of trivia: The average American changes sheets every 23 days! This seems extreme, but so seems the habit of people who change their sheets daily. If you have cleanliness habits you've never questioned, you could reexamine them and reduce the frequency with which you change linens and towels, wash jeans, and so forth.

A front-loader washing machine that is full generally uses less water than a similarly loaded top-loader. The settings you choose on your washer also determine how much water you use. Some front-loaders offer the option of two rinse cycles for one load, or "Power Wash" or the like, all of which use more water. Most top-loaders let you choose the size of your load, which determines the water level in the tub. Matching the water level to the load size saves water in both the wash and rinse cycles. Some newer washing machines can sense whether the soap has been rinsed out, and use more water if more rinsing is required; another reason to reduce soap usage.

A full dishwasher uses less water and less soap than washing dishes by hand.

If you're waiting for hot water, don't waste the flow — set it aside for drinking, watering indoor plants, filling pet bowls. Keep a bucket in the shower and use the water that collects for toilet flushing. Line your kitchen sink with a basin and reuse the water used for washing fruit and vegetables to water houseplants or garden ornamentals, or you can soak dishes and pots and pans in it before washing them or putting them in the dishwasher.

Talking toilets: Installing a low-flow toilet is one of the most cost-effective ways to reduce water usage. Early low-flow toilets didn't perform very well and didn't conserve nearly as much water as the newer ones. The new ones are so efficient that they work even in conjunction with that ever-important "flush only if you must" routine. Check your toilet regularly to make sure it isn't leaking through the flapper valve or the fill valve.

To check, first turn off the supply line on the wall behind the toilet, and open the tank lid. Toilet valve designs have grown more diverse in recent years, but some things are pretty consistent. First, check the water level. If it's too high, water will constantly be flowing over the top of the overflow tube. If it's too low, the flapper valve may be leaking; and the toilet won't flush well. When it gets low enough, the fill valve will open on its own, without the toilet being flushed; often that's the first sign you have of a problem. Often, the float valve surface(s) get dirty, which makes for a leaky seal. If, while you're checking into this, the tank level has dropped, you have a leak. Sprinkle a few drops of food dye into the tank and leave it for an hour or so. If the dye shows up in the bowl, you know you have a flapper valve leak. Sometimes, if you keep the supply line off, you can use a clean rag to clean the two valve surfaces and fix the leak. If the float is set for the wrong level, and the fill line is set too high or too low, the fill valve should be adjusted to change the shut off. There are lots of videos online showing various toilet valve types and do-it-yourself repairs.

Saving water benefits the whole town! You can do your part by using less.

