

Home Water Conservation



An Easy-to-Use Home Water Use Survey Kit

Welcome!

You are about to embark on an exploration of your home that will help you conserve water and save money. Most homes can be assessed in an hour or less.

Why save water?

California is in a state of perpetual drought. Even when we receive ample rainfall in the winter, the summer is always a time of little or no rain. Steps you take today will help you and your community prepare for the future.

Today, you will:

- ✓ Learn about your personal water use,
- ✓ Test your faucets and toilets to determine how much water they use,
- ✓ Read your household water meter to detect leaks, and
- ✓ Identify easy ways to conserve!

Water Fact:

If every home in California installed one low-flow bathroom faucet, it would save:

- **7 billion gallons of water annually**
- **\$70 million in heating costs**
- **Plus the energy and chemicals to supply, treat and retreat the wastewater.**

Let's start!

Home Water Use Survey, Step By Step

“The first step was to start believing that a great reduction (in water use) was really possible.”

G.P. from Oakland who reduced his household usage from 200 gallons per day to 37 gallons per day!

STEP 1: Get your tools together

- Faucet flow bag or a bucket and measuring cup
- Toilet dye tablets or dark food coloring
- Tools:
 - wrench
 - flashlight
 - screwdriver
 - a few rags
 - stop watch or timer
 - gloves



STEP 2: Measure flow rate from showerheads and faucets

Use the faucet flow bag to do a 5 second flow test on all showerheads and faucets. Turn on the water to full, hold the bag under the flow for 5 seconds, then remove and see what the reading is on the bag. Record on the table below.

If you don't have a faucet flow bag, use a bucket and measuring cup to determine flow:

5 sec	gpm
2 cups	1.5
3 cups	2.25
4 cups	3
5 cups	3.75

Location	Showerhead (gpm)	Faucet (gpm)	Leak? Yes/No	Comments

What am I aiming for?

Appliance	California Standard*
Toilet	1.28 gpf
Bathroom faucets	1.2 gpm
Kitchen faucets	1.8 gpm
Showerheads	2.0 gpm

gpf=gallons per flush; gpm=gallons per minute;

*Calif. Residential Water Conservation Stds. 2017

STEP 3: Check all toilets for leaks

Did you know that nearly **25% of household water use comes from the toilet**? Adjusting your toilet to use water efficiently can have a huge impact on your overall water budget.

- 1) **Listen** to your toilet. Do you hear a sound of running water? If so, you have a leak.
- 2) **Look**: Lift the tank lid and flush the toilet. Check if everything is working properly. Once refilled, check to see if water is flowing down the overflow tube. If so, the water level needs to be adjusted. The water should stop about one inch below the top of the overflow tube.
- 3) **Check for leaks**: Place the blue toilet dye into the tank. Wait 15 minutes. **Do Not Flush!!** If blue dye has leaked into the toilet bowl after 15 minutes, you have a slow leak, likely from an old or damaged flap mechanism.
- 4) **Record** what you found:

Toilet Location	Leak? Yes/No	Water Level Adjustment?	List Needed Repairs

STEP 4: Five Minute Whole House Leak Detection Test

Leaks may seem like a small problem, but even a slow leak of one drop per second wastes over 2,000 gallons of water every year!

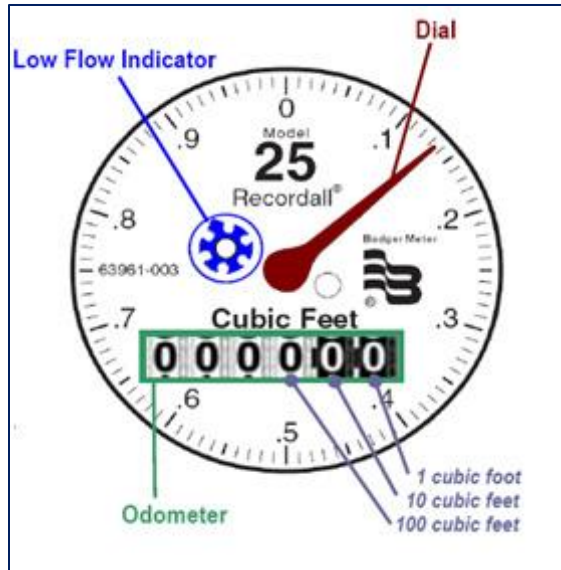
Finding Your Meter

Your water meter will be located somewhere close to your house or next to your sidewalk. Use a screwdriver or stick to lift the cover to find the meter below. In some cases, the water meter may be inaccessible.



Reading Your Meter

Some water meters are measured in gallons, others in cubic feet. This graphic shows one in cubic feet but the process is the same for gallons. Please note that the low flow indicator may be an arrow or another shape on some meters.



The odometer shows how many gallons or cubic feet have been used and the dial shows how many tenths of a gallon/cubic feet have been used. The reading for the meter above is 0.13 cubic feet. To check water usage, read your meter at two different times and subtract the numbers:

Second Reading – First Reading = Gallons/Cubic Feet Used
 Example: 369,200.67 – 368,200.07 = 1000.60 gallons used

The 5 Minute Leak Check

- 1) Turn off all faucets throughout the house (washing machines, etc.) to assure no water is running. Be sure to check that all automatic water users such as an irrigation system or an automatic ice maker are off.
- 2) Watch the low flow indicator dial on the water meter for five minutes. If it moves, you have a leak.
- 3) If you want a more accurate reading of a possible leak, read your meter overnight. This time, you will be reading the dial, not the low flow indicator. Check the dial before you go to bed (use a small piece of masking tape to mark the location) and then again when you wake up. Be sure not to use any water during the night. If the dial has moved, you have a leak.

Household Leak? **Yes** **No**

Estimated Water Loss Through Leaks	
Drips per Minute	Gallons Wasted/Year
10	526
60	3,153
300	15,768

STEP 5: Yard and Garden

Much of the water wasted in a typical household happens in the yard. Here are some outdoor tests to see if you can improve water efficiency in the yard or garden.

1) Check your yard.

Look for unusual wet spots that are greener than the rest of the landscape. These spots could be getting extra water due to a leak or a broken sprinkler.

Unusual wet spots in yard? Yes No

2) Check your irrigation system and outside hoses

Run your irrigation system and outside hoses and check if you have:

- Leaks
- Uneven pressure
- Broken pieces or blocked spray heads
- Uneven coverage
- Water hitting sidewalk or creating pools of water

If you have any of the above, repair or re-adjust your system.

3) Review your watering schedule

Your yard and garden do not need to be watered during the wet months. During the summer, use an automatic timer and water only during the early morning hours or late at night to increase plant absorption and reduce evaporation loss. Plant drought-tolerant vegetation.

Reviewed watering schedule? Yes No

STEP 6: Review Needed Repairs and Upgrades

Faucets and Showerheads

- Add or replace aerators. (Remove and take to hardware store to match part.)
- Replace showerheads.
- Call a plumber for more difficult leaks.

Toilets

- Replace leaky flappers. (Remove and take to hardware store to match part.)
- Adjust water level to fill to 1 inch below overflow tube.
- If you have a very old toilet, replace it with a newer, more efficient model.
- Call a plumber for more difficult leaks.

Whole House Leak

- Whole house leaks will require a plumber. However, your detective work in discovering a leak and possible location (wet spots in yard, etc.) will help the plumber solve the problem.

Yard and Garden

- Only water during the dry season.
- Revise your watering schedule for late evening or early morning.
- Adjust irrigation to water plants with no pooling or run-off to the street or sidewalk. Water infrequently and deeply.
- Repair broken valves and blocked spray heads.
- Use a shut-off valve for garden hoses.
- Convert turf to native plants and/or mulch.

STEP 7: Start Water Conserving Habits

Water saving habits can be done for free and help you save water right away! See the enclosed poster for ideas!

**Congratulations! You are finished
with the survey!
What's next?**

Now that you have an idea of your household water usage, be sure to

- ✓ fix any leaks you have found,
- ✓ adjust your toilet or replace the flapper if necessary,
- ✓ make a list of faucet aerators and/or showerheads that need replacing,
- ✓ set an irrigation schedule that uses water efficiently, and
- ✓ start conserving today!

**Thank you for
participating in this
important effort!**

This survey was developed by the Mendocino County Resource Conservation District (MCRCD) under a Proposition 84 Integrated Regional Water Management (IRWM) Implementation Grant. Portions of this survey were based on the East Bay Municipal Utility District's WaterSmart Home Survey Kit.

