

# KNOW YOUR

# H<sub>2</sub>



**Take a minute and save.**

Fun facts, freebies, tips and resources  
to help you save water and money.

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Tacoma Water Conservation  
(253) 502-8723 | [conservation@cityoftacoma.org](mailto:conservation@cityoftacoma.org)  
[tacomawater.com/smart](http://tacomawater.com/smart)

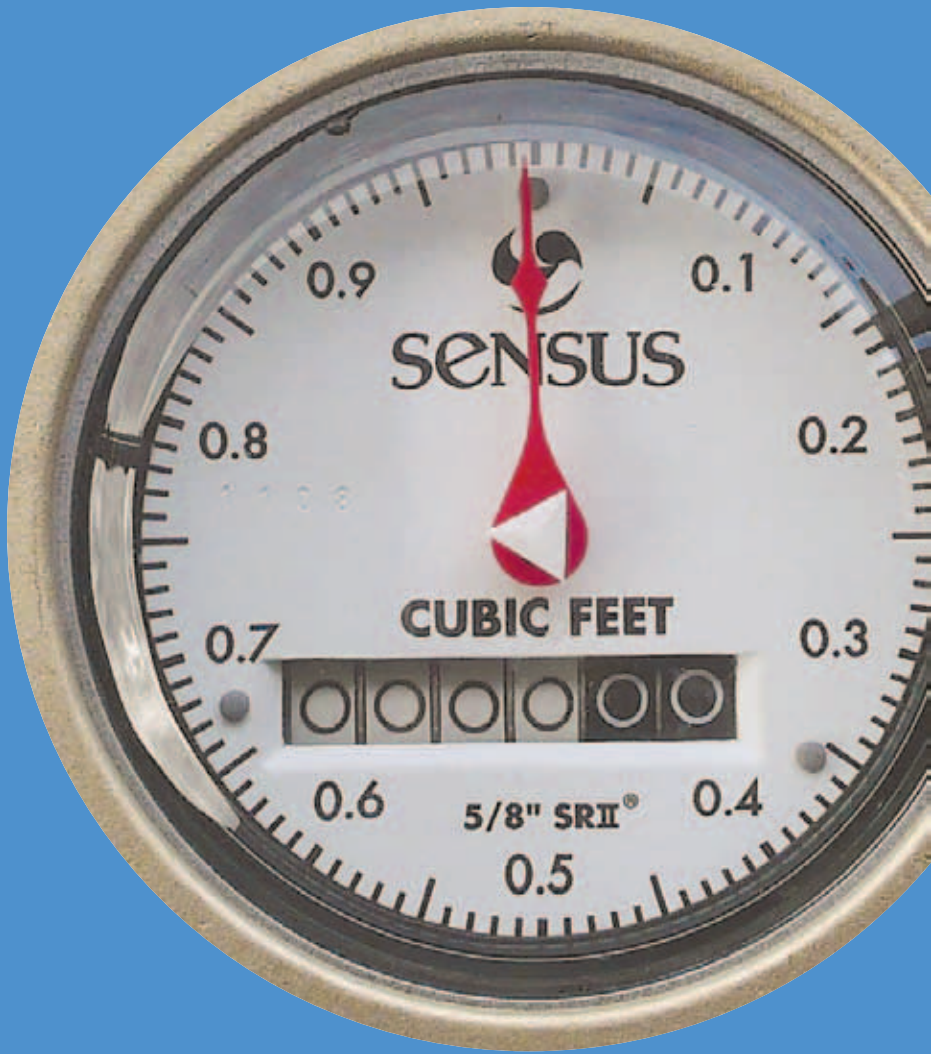


Printed with soy ink.

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# PERSONAL WATER USE

# How much do you use in your home every day?

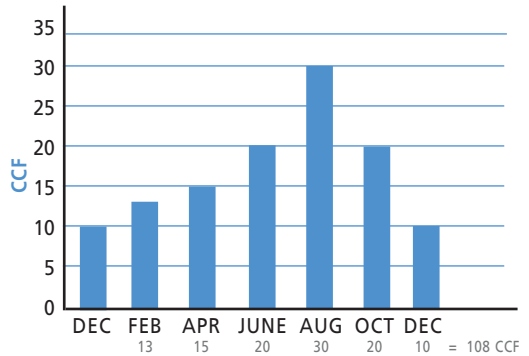
On average, our customers use 73 gallons of water per person per day inside and outside their homes. How much do you use?

## Calculate your household water use per year.

1. Find your most recent water bill.

- The chart shows your bimonthly use
- Add six billing periods (12 months) together
- That's your yearly use in CCFs (1 CCF = 100 Cubic feet of water)

CCF per year \_\_\_\_\_



WATER BILL CHART SAMPLE

2. Multiply your CCF per year by 748.  
(That's how many gallons are in 1 CCF.)

Gallons per year \_\_\_\_\_

3. Divide the result by 365 days.

Gallons per day \_\_\_\_\_

4. Divide the result by the number of people in your household.

People \_\_\_\_\_

Gallons per person per day \_\_\_\_\_

**resource:** Download the Daily Water Use Tracking Table at [tacomawater.com/smart](http://tacomawater.com/smart) and go to the "Your Use" section to learn how much water each person in your household uses per day or week.

# YOU MAY USE MORE THAN YOU KNOW

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*good to know...*

WaterSense-labeled bathroom faucets are tested to ensure they perform well and use 1.5 gallons or less of water per minute.

Many new bathroom faucets use 0.5 gallons per minute.

If you're shopping for a new faucet, look for the WaterSense label.

## TRACK YOUR FIXTURE AND APPLIANCE USE

The age of water fixtures and appliances has a big impact on your water use. Older models often use more water. How efficient are yours?

Look for the flow rate stamped on your showerheads and faucet aerators, and check the inside of your toilet tank to find out what year it was manufactured.

	Gallons per person per day	Household gallons per month*
<b>Toilets</b>		
<b>Efficient – 1.28 gallons or less per flush</b>	<b>6.5</b>	<b>526</b>
Standard – 1.6 gallons per flush	8	657
Pre-1994 – 3.5 to 7 gallons per flush	18-36	1,473
<b>Clothes washers</b>		
<b>Efficient – 10 to 21 gallons per load</b>	<b>3-7</b>	<b>278-584</b>
Standard – 41 gallons per load	14	1,141
<b>Showerheads</b>		
<b>Efficient – 2 gallons per minute 5 minute shower</b>	<b>7</b>	<b>544</b>
Pre-1994 – 3 to 5 gallons per minute 8.2 minute shower	17-28	1,337-2,228
<b>Faucets</b>		
<b>Efficient bathroom – 0.5 gallons per minute</b>	<b>1</b>	<b>111</b>
<b>Efficient kitchen – 1.5 gallons per minute</b>	<b>4</b>	<b>344</b>
Standard – 2.5 gallons per minute	7	557
Pre-1994 – 3 to 7 gallons per minute	8-19	669-1,560

\* Household use based on 2.64 people per household and average water use rates for American households.

**freebie:** Tacoma Water customers can receive a free flow meter bag to find out how much water you use with the showerheads and faucets in your home. Call (253) 502-8723.

## SEVEN WAYS TO LOCATE LEAKS

Nationwide, each home leaks an average of 10,000 gallons of water annually. That is enough to fill a swimming pool! You could save big on your water bill by finding and fixing leaks.

1. Listen for toilets that run when no one has flushed them. It's best to do that at night or when your house is quite.
2. Watch for faucets that drip from the tap.
3. Inspect pipes and gaskets for drips.
4. Look for soggy spots in your yard; they could indicate a leak in an underground pipe.
5. Check your irrigation system for broken sprinkler heads and pipes when you turn it on in the spring and once a month during the summer.
6. Check your bills for significant cost and use changes.
7. Use your water meter to help test for leaks. Make sure your faucets and water-using appliances like dishwashers and sprinklers are off and do not use any water during the test.

**Quick test:** With all water turned off, watch your meter. If the dial hand moves, you probably have a leak.

**Longer test:** Write down the number on your water meter at a time when you won't need water for at least an hour. After an hour, check your meter. If the numbers have changed, you probably have a leak.

**freebie:** Tacoma Water customers can receive free leak detector dye tablets for your toilets. Call (253) 502-8723.

**resource:** Find helpful links to online tutorials with instructions about how to fix leaks at [tacomawater.com/smart](http://tacomawater.com/smart). Visit [tacomawater.com/toiletleaks](http://tacomawater.com/toiletleaks) for information on identifying if your toilet is wasting water.

# WE'RE FLUSH WITH WATER SAVING IDEAS

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## good to know...

A toilet leak, often caused by a flapper that does not completely close, can waste 50 to 500 gallons of water per day.

A toilet leak that wastes 250 gallons of water per day would cost a Tacoma resident more than \$40 per month in water and sewer charges.

# DON'T LEAVE YOUR PIPES OUT IN THE COLD

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*good to know...*

Insulating your pipes in the winter costs very little  
and can prevent costly problems.

## PREVENT PIPES FROM FREEZING

1. Protect pipes, valves and outdoor faucets with pipe insulation, available at most hardware stores. This includes outdoor pipes, pipes in attics, crawl spaces, basements and garages.
2. Turn off and drain outdoor faucets. If your faucets have individual shutoff valves, turn off the water supply for each faucet and open the faucet to drain it. Remember to remove and drain hoses.
3. Drain outdoor water lines for irrigation systems and water features.
4. Circulate air inside your home. If the temperature drops below freezing for a day or more, keep the inside doors open to allow warm air to circulate. Don't set your thermostat lower than 55°F while away.
5. Open cabinet doors near sinks to expose pipes to warm air.

**definition:** wa·ter ham·mer – noun

A surge of water that results when moving water in a pipe suddenly stops by quick turn on or shut off of water faucets or valves. This can cause a banging noise in pipes and damage pipe joints and fittings.

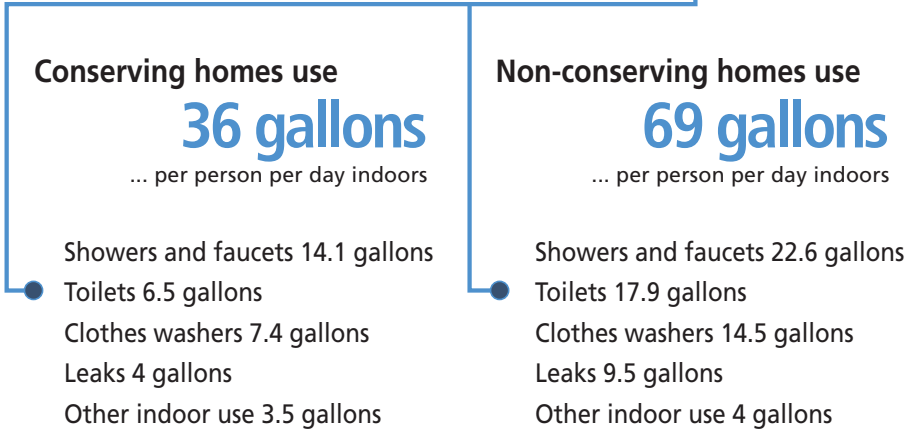
**tip:** If you've shut off your water, turn it back on slowly to prevent water hammer.

# **INDOOR WATER USE**



Each person in a home with water-efficient fixtures and appliances uses an average of 36 gallons of water per day indoors, compared to an average of 69 gallons in a non-conserving home.

Here's the breakdown of water use for each person:



choose  
water-efficient  
fixtures and appliances

# THERE'S NOTHING CORNY ABOUT BEING WATER SMART

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good to know...

A faucet aerator mixes air with water flow to deliver a strong stream while reducing water use.

## SAVE IN YOUR KITCHEN

- Install a high-efficiency kitchen faucet aerator. Kitchen faucets with aerators use 1.5 to 2.5 gallons of water per minute compared to older faucets or faucets without aerators that use up to 7 gallons.
- Don't let your water run. Turn off the tap when not in use.
- Fill your sink with soap and water instead of running water when washing dishes by hand.
- Keep a pitcher of water in the fridge to prevent running your faucet until water is cold.
- Install an Energy Star dishwasher. They use 4.5 gallons of water per cycle compared to standard dishwashers, which can use up to 14 gallons.
- Scrape dishes instead of rinsing before putting them in the dishwasher.
- Fill your dishwasher to capacity before running it.

**freebie:** Tacoma Water customers should call (253) 502-8723 to find out how to get an efficient kitchen faucet aerator.

**resource:** Visit [energystar.gov](http://energystar.gov) to learn more about efficient dishwashers and other appliances.

## SAVE IN YOUR BATHROOM

- Install efficient toilets, showerheads and faucets with the WaterSense label.
- Replace old, high-use showerheads with WaterSense-labeled showerheads that use 2 gallons or less per minute. You can save up to 550 gallons of water per month. You'll also save money on the gas or electricity it takes to heat your water.
- A typical family could cut their bathroom water use in half by switching from wasteful to WaterSense-labeled fixtures.
- Turn off the tap while brushing your teeth and shaving.
- Install a high-efficiency faucet aerator that uses 0.5 gallons per minute. Faucets with aerators save up to 6.5 gallons per minute.
- Toilets made before 1994 use three to five times more water than new WaterSense-labeled toilets, which use less than 1.3 gallons per flush. The water and sewer bill savings can pay for the cost of replacing a toilet in two to three years.

**freebie:** Tacoma Water customers should call (253) 502-8723 to find out how to get free efficient showerheads, aerators and shower timers.

**resource:** Visit [epa.gov/watersense](http://epa.gov/watersense) to learn more about efficient bathroom fixtures and to use a calculator that shows how much money you can save by installing WaterSense-labeled fixtures.



**TAKE FIVE  
SAVE \$SIXTY**

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*good to know...*

Taking a five-minute shower instead of a 15 to 20 minute shower can save you up to \$60 per year.

# LEARN LOADS OF WAYS TO SAVE

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good to know...

Clothes washers are the second largest source of indoor water use, accounting for about 22% of water use in an average home.

## SAVE IN YOUR LAUNDRY ROOM

- Efficient clothes washers use about 10 to 21 gallons of water per cycle compared to standard top-loading washers, which use an average of 41 gallons.
- Purchase a qualifying high-efficiency clothes washer and you may qualify to receive a rebate from Tacoma Water or Tacoma Power.
- Run your washing machine with a full load.
- Use the lowest practical water level selection.

**tip:** Front loading washers use less water and reduce wear and tear on your clothes.

**resource:** Visit [energystar.gov](https://www.energystar.gov) to learn more about Energy Star clothes washers and other appliances.



**OUTDOOR  
WATER USE**

# Many people use more water on their landscape than in any other area around their home.

Average residential water demand increases by about 60% during summer, mostly due to outdoor water use.

Many people use more water on their landscape than in any other area around their home. The EPA estimates that up to 50% of water from irrigation becomes waste due to evaporation, wind or runoff caused by over-watering. Watering smart is better for your landscape.

# TIMING IS EVERYTHING. HOW'S YOURS?

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good to know...

A typical garden hose uses 6 to 8 gallons of water per minute. A hose nozzle automatically shuts off the flow of water when not in use so you can get water where you want it, the way you want it.

Turn off your faucet and remove the hose nozzle when it's not in use.

## HOW TO WATER WISELY

Grass needs about 1 inch of water per week (including rainfall) to stay green in mid-summer. Follow the steps below to determine how long to water your lawn.

**Step 1:** Set tuna cans or rain gauges in your yard and turn sprinklers on for 15 minutes.

**Step 2:** Calculate the average water depth after watering.

**Step 3:** Use the chart below to calculate how long to water. The more slowly your sprinklers water (and the less water there is in your cans after 15 minutes), the longer you need to water. Sprinklers that apply water slowly and in larger drops or streams are more efficient.

Average water depth in tuna cans or rain gauges after 15 minutes	3/4"	1/2"	1/4"
Water twice per week	11 minutes	15 minutes	30 minutes

If you have clay or sandy soil, you may need to change this schedule. Check [tacomawater.com/smart](http://tacomawater.com/smart) for more details.

**freebie:** Tacoma Water customers can get a free rain gauge for your lawn. Call (253) 502-8723.

**resource:** City of Tacoma EnviroHouse is a model home that shows green building and natural landscape ideas, materials and techniques. Visit EnviroHouse at 3510 S. Mullen St., Tacoma, WA 98409.

## FIVE STEPS TO NATURAL YARD CARE

Help create safe, healthy and beautiful outdoor spaces that will save water.

- 1. Build healthy soil and use mulch.** Feed your soil, lawn and plants with compost and natural organic or slow-release fertilizers. Use 1 to 3 inches of mulch to reduce evaporation and limit weed growth.
- 2. Plant right for your site.** Select native plants that are right for your yard conditions and group them according to their needs.
- 3. Water smart.** Water early in the morning, let the top 2 inches of soil dry out between watering, and follow the watering tips on page 21.
- 4. Think twice before using pesticides.** Use the least toxic approach to control weeds and insects.
- 5. Practice natural lawn care.** Mow your grass to 2 inches high, water smart and leave clippings on the lawn.

**freebie:** Tacoma Water customers can get a helpful free Plant Right for Your Site poster upon request. Call (253) 502-8723.

**resource:** Get our 5 Steps to Natural Yard Care brochures at [tacomawater.com/smart](http://tacomawater.com/smart) or pick up hard copies in the Tacoma Public Utilities Administration Building.

We offer workshops March through October. Visit [mytpu.org/calendar](http://mytpu.org/calendar) for dates.

# LET NATURE DO YOUR DIRTY WORK

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good to know...

Many native, adapted and drought-tolerant plants don't need watering after they are established – as long as they have been planted in the right site. Plants usually become established in two to three years.

# Resources

## WATER CONSERVATION RESOURCES

Alliance for Water Efficiency  
[www.allianceforwaterefficiency.org](http://www.allianceforwaterefficiency.org)

Drip calculator  
[www.awwa.org/awwa/waterwiser/dripcalc.cfm](http://www.awwa.org/awwa/waterwiser/dripcalc.cfm)

Energy Star Products  
[www.energystar.gov](http://www.energystar.gov)

Games for kids  
[www.epa.gov/watersense/kids/games.html](http://www.epa.gov/watersense/kids/games.html)  
[www.savingwater.org/kids](http://www.savingwater.org/kids)

H<sub>2</sub>OUSE home tour  
[www.h2ouse.org](http://www.h2ouse.org)

Irrigation system design  
[www.irrigation.org](http://www.irrigation.org)  
[www.irrigationtutorials.com](http://www.irrigationtutorials.com)

Partnership for Water Conservation  
[www.partners4water.org](http://www.partners4water.org)

WaterSense products  
[www.epa.gov/watersense](http://www.epa.gov/watersense)

Water use in the U.S.  
[www.water.usgs.gov/watuse](http://www.water.usgs.gov/watuse)

## OTHER WATER RESOURCES

Call before you dig  
[www.callbeforeyoudig.org](http://www.callbeforeyoudig.org) or dial 811

Water pollution hotline.....(253) 383-2429

## LOCATIONS TO LEARN MORE

Tacoma Public Utilities Administration Building  
3628 S. 35th St., Tacoma  
mytpu.org

City of Tacoma EnviroHouse  
City of Tacoma Landfill  
3510 S. Mullen St., Tacoma  
cityoftacoma.org/envirohouse

Native Plant Garden  
Pt. Defiance  
5400 N. Pearl St., Tacoma  
metroparkstacoma.org

## TACOMA WATER PHONE NUMBERS

Leaks, outages, low pressure.....	(253) 502-8384
Water conservation.....	(253) 502-8723
Water permit counter .....	(253) 502-8426
Water quality.....	(253) 502-8207

JOIN US...





[tacomawater.com/smart](http://tacomawater.com/smart) | (253) 502-8723