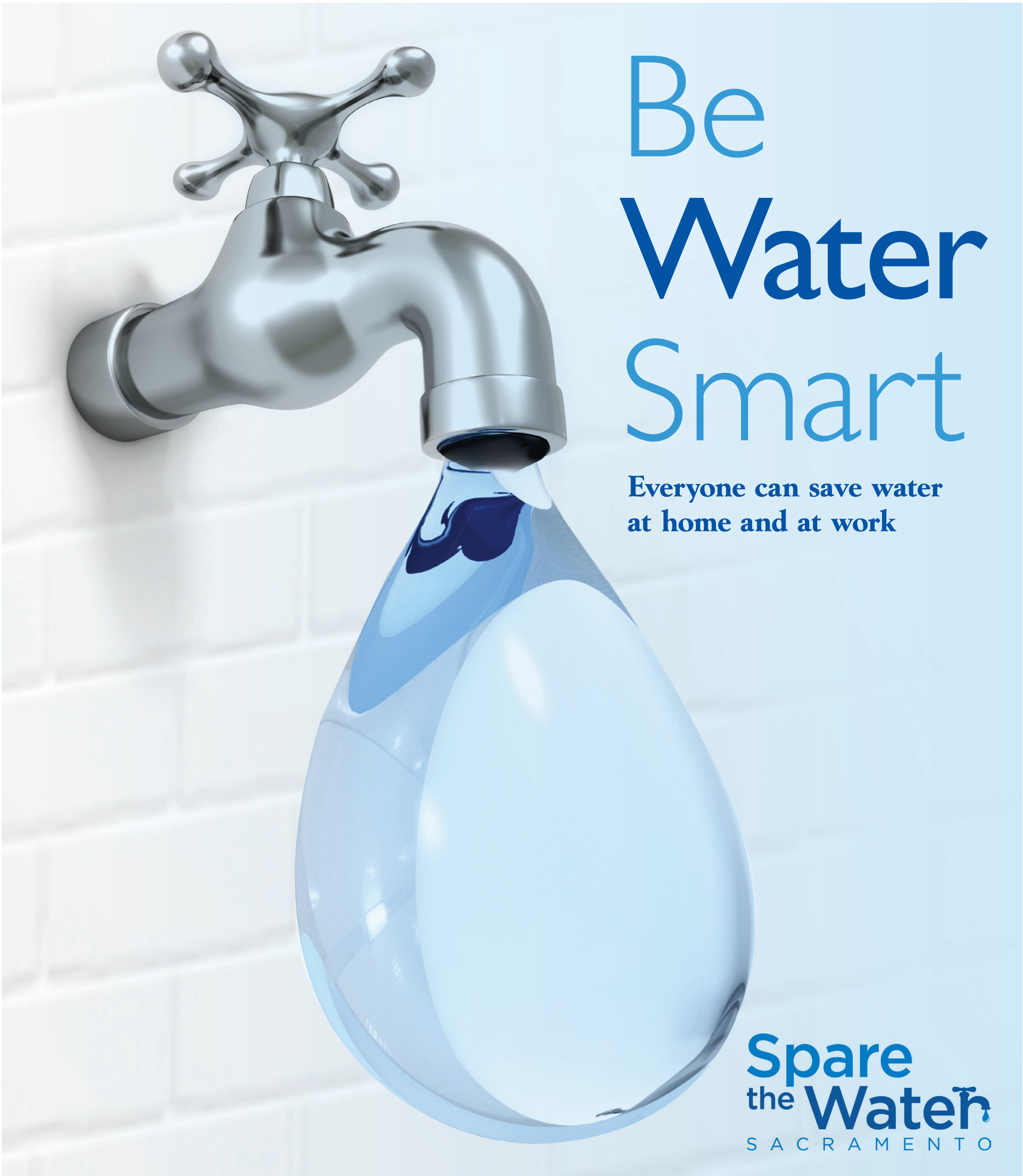




Be Water Smart

**Everyone can save water
at home and at work**

**Spare
the Water**
S A C R A M E N T O

It All Adds Up

City, homeowners and businesses
can use water more wisely

by Evan Tuchinsky

“Water is precious.” Ask William Granger, water conservation administrator for the City of Sacramento, why it’s important to save, and these are the first words you’ll likely hear. The message may seem obvious amid California’s third straight year of shortages, but many Sacramentans don’t consider limits to our local supply.

“There are so many ways we can use it more wisely and more efficiently that people don’t even think about,” Granger says. “They turn on the water when they’re filling up their glass or washing dishes and kind of take it for granted.”

The City of Sacramento’s Department of Utilities procures water from three main sources: the American River (which flows into Folsom Reservoir), the Sacramento River and groundwater wells. Folsom Reservoir’s level is only at 40 percent of capacity, an indication of “the very serious drought” tapping supplies statewide.

“Water use adds up very quickly,” Granger says. “People think of tips such as turning off the sink when you’re brushing your teeth, and you’re saving one or two gallons, but when you see water running down the street from your neighbor’s landscape, that’s 15 gallons a minute.

“It’s all relative, but it’s all about helping extend our water supply and keep it in our reservoirs longer.”

Recently, conservation efforts have shifted from indoors to outdoors. Plumbing fixtures and household appliances have represented what Granger calls “the low-hanging fruit.” So the city has turned its attention to landscaping and irrigation, which absorb 60 percent of a typical household’s water usage.

Excessive watering stems from thirsty plant species, such as grass, and overactive sprinklers. The latter, Granger says, represents “a big challenge — people set their sprinkler system and forget it, or a lot of times they have somebody else program their controller and don’t realize exactly when it comes on. There’s lots of mystery to overcome, and we’re working to overcome that.”

The city has designed two programs to combat outdoor water waste.

The River-Friendly Landscape Rebate Program, also known as Cash 4 Grass, reimburses homeowners who

replace front-yard turf with native, drought-resistant plants and add smart controllers for watering. It launched in May.

Irrigation Upgrade, launching soon, will provide incentives for homeowners to replace older, less-efficient sprinklers and leaky valves, and to convert to drip irrigation.

The city continues to offer incentives to businesses and developers who install water-saving fixtures and equipment. Moreover, anyone — homeowner or businessowner — can request a Water Wise House Call, in which a conservation expert from the utilities department will perform an inspection and recommend measures for saving water. City crews are also doing their part by checking the 150-year-old municipal infrastructure for leaks.

“We take water conservation seriously,” Granger says. “We want to make sure we lead by example.”

**“It’s all about
helping extend our
water supply.”**

William Granger
City of Sacramento
water conservation administrator

William Granger, City of Sacramento water conservation administrator, says his department offers many resources and incentives for homeowners and businesses to be water wise.

PHOTO BY LOUISE MITCHELL

WATER FACTS



Even though **70%** of the Earth is covered by water, less than **1%** is available for human use



The average Sacramento household uses ...

= 417
GALLONS
PER DAY



Outdoor watering typically accounts for **60%** of household use



The average person uses ...

= 116
GALLONS PER
DAY AT HOME



Outdated, inefficient toilets use **3.5 to 5 gallons per flush**

Bath or shower? A full tub takes 36 gallons; low-flow showerheads emit 2 gallons per minute



Around **10%** of homes have leaks that drip away at least **90 gallons** per day

“I’ve had strangers walking by, or even driving by, stop and compliment me on it. So I think it turned out well.”

Gary Miller
Homeowner/participant in River-Friendly Landscape Rebate Program



Homeowner Gary Miller is proud to have a beautiful front yard that saves water. He submitted his plans to the city’s River-Friendly Landscape Rebate Program.
PHOTO BY LOUISE MITCHELL

Goodbye Grass

Homeowner turns lawn into a water-saving landscape

by Evan Tuchinsky

Gary Miller is a Sacramento homeowner with a pragmatic view of environmental conservation. For the last 15 years of work as a Web developer, he commuted by bicycle, and that’s how he still likes to get around — but he’s kept a car for trips to Home Depot and Costco.

“I’m not exactly a hug-the-tree guy, but I do what I can,” Miller says. “An ugly front yard helped.”

An unsightly patch of gold grass was enough motivation for him to ditch his lawn altogether. Benefiting from a rebate through the City of Sacramento’s River-Friendly Landscape Rebate Program, Miller transformed the front of his home with plant-life and paving features that are not only aesthetically pleasing but also water-wise.

“It’s a very attractive design,” says Julie Friedman, environmental services manager for the Department of Utilities, which administers the program. “Before it was just basic grass that he let turn gold. Now it’s a beautiful, more efficient design.”

The River-Friendly Landscape Rebate Program, also known as Cash 4 Grass, reimburses city residents for replacing turf with native, water-saving plants and installing smart controller irrigation. The program launched in May, and Miller was among the first wave of participants.

Concerned about water conservation, plus aware that his “wasn’t one of the best lawns in the neighborhood,” Miller already had planned to revamp his front yard. He’d started to kill off the grass — “better living through chemistry,” he quips — and hired a landscaping

architectural firm, The Garden Tutors, which he also commissioned to do the work.

In applying for the River-Friendly Landscape rebate, he submitted the design plans, which included drought-resistant landscaping, a path and a drip-irrigation system with a smart controller. The city asked him to replace a few plants with other species, which his architect did, and the revision received final approval.

“That was a painless process, fine-tuning it to their requirements,” Miller says.

The city promptly performed a pre-inspection of the yard. Soon after the project was completed came the post-inspection, and then Miller received his rebate check.

“Probably the most impressive thing about it was how they responded in a very timely basis,” Miller says. “I appreciate how responsive and cooperative the city was.”

He also appreciates the final result.

“All my neighbors have complimented me on the design, which I take credit for,” Gary says with a chuckle. “I’ve had strangers walking by, or even driving by, stop and compliment me on it. So I think it turned out well.”

He’s also pleased with the thought of conserving water, with savings that will become even more significant once the new plants get established and the weather cools down.

“I had poor soil, and I’d always get run-off no matter how I’d water,” Miller says. “Truly I know I’m saving water.”

READY TO TRADE IN YOUR GRASS?

Through the River-Friendly Landscape Rebate Program, the City of Sacramento reimburses homeowners 50 cents per square foot, up to \$1,000, for replacing front-yard turf with native, drought-tolerant plants, and up to \$250 for an irrigation smart controller. (Homeowner associations and apartments can receive up to \$2,500 for turf replacement and \$350 for smart controllers.)

“Customers shouldn’t be put off by the application packet,” says Julie Friedman, environmental services manager for the Department of Utilities. “It’s really very easy to complete, and we’re here to help.”

Here’s how to get started:

- 1 Call (916) 808-1337, email waterconservation@cityofsacramento.org or visit www.SpareSacWater.org for an application
- 2 Submit the rebate agreement, work plans and “before” photo
- 3 Upon approval, receive a pre-inspection
- 4 Complete the project
- 5 Provide receipts
- 6 Receive a post-inspection
- 7 Get your check

The H₂O Detective

Helping residents and business owners conserve water

by Mike Blount

Dripping faucets. Errant sprinklers. Bad pipes. It's all in a typical day for Water Conservation Specialist Ryan Geach.

As part of the Water Wise program for the City of Sacramento's Department of Utilities, Geach's job is to track down the source of wasted water and help homeowners and business owners put a stop to it. In the midst of the current drought, his job is more crucial than ever. But it's not always easy to locate the leak. That's where Geach has to use his detective skills.

Geach says a leak can originate from many places, including the main line from the meter to a home or business, water heaters, toilets, washers, sinks and irrigation systems.

"Lots of times, leaks are out of people's hands," Geach says. "The money we're saving them and the water we're saving can be significant if we can solve that problem for them. It could be anywhere from 100 gallons a day to 19,000 gallons of water a day."

When a meter registers 24 hours of continuous water use over five consecutive days, a letter is sent to the property owner to alert them that there may be a potential leak. The owner will then reach out to the city for help. For one of his recent

house visits, Geach says an unusual spike in water use across a couple of days prompted a call from the owner of a rental property. The home was built in 1935, so Geach says there were many potential places where there could be a leak. Once he was certain there was no water running in the house, he went to check the meter to see if it was still running.

"The meter wasn't going at all, which told me it had to be something inside the house," Geach says. "It could be a toilet or something like that where the chain is loose."

Geach's intuition was right. Once he checked all the faucets inside the house, he narrowed in on the toilet. On closer

inspection, he was able to see that the handle was broken, which caused the chain to hang below the flapper and get caught. For this particular call, he estimated the homeowner was losing 52 gallons of water a day — a \$20 fix that would save hundreds of dollars over time.

The woman living in the home, 59-year-old Gwen Winchell, says she was happy Geach was able to find the problem. She, too, was concerned about the leak —

especially with the current drought.

"What he's doing is so important," Winchell says. "We've all got to do everything we can to help out during the drought for our lakes and rivers."

"The money we're saving them and the water we're saving can be significant."

Ryan Geach
Water conservation specialist



Ryan Geach checks a water meter for clues to why a homeowner is seeing a spike in usage during a recent Water Wise House Call.

PHOTO BY LOUISE MITCHELL

SCHEDULE YOUR FREE WATER WISE HOUSE CALL

Think you have a leak? Want to use your water more efficiently around the home? Schedule your free Water Wise House Call today. Conserving water not only saves you money, it's the responsible thing to do. A professional water use technician will come to your home or business and help you identify areas where you could be more water efficient, including indoor plumbing, irrigation systems and water leaks. **To schedule a Water Wise House Call, call 311 Monday - Saturday from 8 a.m. - 5 p.m.**

General Manager Kelly Vytlačil says the Sacramento Airport/Natomas Courtyard Marriott is committed to conserving water. The hotel has converted its landscaping to use less water.
PHOTO BY LOUISE MITCHELL

Making the Change

Renovations help hotel conserve water by Mike Blount

Hotels use a lot of water. From the guests showering and flushing toilets, to the employees washing bed linens every day, water consumption is a major part of a hotel's operation. Kelly Vytlačil, general manager of the 140-room Sacramento Airport/Natomas Courtyard Marriott, knows this firsthand. He keeps an eye on the hotel's water usage each month as part of a company-wide goal to reduce overall use.

"From 2013 to 2014, our reduction in water was already about 19 percent," Vytlačil says. "But we are always thinking about what else we can do," Vytlačil says.

That led Vytlačil to the City of Sacramento Department of Utilities website to search for ways the hotel could conserve even more water. He realized the hotel still had the same toilets installed from when it was originally built in 1990. Since that time, more efficient toilets have been designed that use up to two-thirds less water per flush. The city would also give rebates for retrofitting the toilets.

"To me, it was a win-win," Vytlačil says. "The new toilets use substantially less water and they're designed not to clog. We're demonstrating to our customers that we're committed to saving water, and if we save a little money along the way, that's good, too."

In August 2014, the hotel changed out the original toilets for dual-flush models, which use only one gallon per flush. In

just five days, 151 toilets were replaced. The hotel is in the process of replacing four more toilets, which will bring the total to 155. Though it's still too early to tell exactly how much water the renovations are saving, Vytlačil says he anticipates a significant reduction. The new toilets also meant the business earned more than \$23,000 in rebates from the City of Sacramento.

Vytlačil identified another area where the Courtyard Marriott could save water — its landscaping design. The hotel is working with a landscape company to convert turf areas to ones that do not require as much watering.

"The landscape company we're working with is very adept at design," Vytlačil says. "We've taken out a lot of the grass and replaced it with bark for the environment around the hotel. It's a good look for us."

Vytlačil says he hopes that more businesses take the initiative to find ways to conserve water.

"Marriott Corporation already has reduction goals in place, so we're always looking for opportunities to reach those goals," Vytlačil says. "But I think that everyone has a responsibility to do their part to save water and environmental resources. We're very excited about these changes. We're getting a lot of positive feedback and it's just the right thing to do. We'll continue to work to save even more."

"We're demonstrating to our customers that we're committed to saving water, and if we save a little money along the way, that's good, too."

Kelly Vytlačil
General manager at Sacramento Airport/
Natomas Courtyard Marriott

THE BUSINESS OF SAVING WATER

During the drought, it's important that everyone does their part to conserve water — including businesses. The City of Sacramento will even help with rebates for businesses that pay for upgrades to reduce water usage. Replacing old equipment with newer models that use water more efficiently not only saves water, it saves money. To have a water conservation specialist help you identify areas where your business can use water more efficiently, **call 311 or 916-264-5011 to schedule a Water Wise Business Call today.**

REBATES AVAILABLE FOR UPGRADES INCLUDE ...

- Up to \$150 to replace toilets (inspection required)
- Up to \$150 to replace urinals (inspection required)
- Up to \$75 for new pre-rinse spray valves
- Up to \$165 for clothes washers
- Up to \$300 for new ice machines

Think of What You Could Save

The following measures can add up to big water savings:



To wash your car, use a hose nozzle and turn off the water when not rinsing to save:

Switch to drip irrigation for trees, shrubs and flowers to save:

Use a broom instead of a hose to clean driveways and sidewalks to save:

Turn off the water while washing your hair or shaving to save:

Replace an inefficient clothes washer with a high-efficiency one to save:

Use a low-flow showerhead to save up to:

Turn off the water while you brush your teeth to save up to:

1,200 GALLONS PER MONTH

1,000 GALLONS PER MONTH
960 GALLONS PER MONTH

750 GALLONS PER MONTH

500 GALLONS PER MONTH

300 GALLONS PER MONTH
PER 1,000 SQUARE FEET

180 GALLONS PER MONTH

150 GALLONS PER MONTH

60 GALLONS PER MONTH

Install a smart controller for the irrigation system to save up to:



Run your clothes washer and dishwasher only when they're full to save up to:

Install a high-efficiency toilet to save up to:

Fix broken sprinkler heads and system leaks, plus correct overspray to save up to:

Put a layer of mulch around trees and plants to reduce evaporation, keep the soil cool to save up to:



Reduce your shower time by 1 minute to save:

DOING OUR PART

GOAL:

20%

reduction in water consumption by 2020

AS OF AUGUST 2014

37%

City's reduction in water usage from year-to-date water use in 2013

How the City of Sacramento has helped save water

HOW IT'S BEEN DONE:

- Reduce irrigation at parks and recreation facilities (except high-use sports fields)
- Reduce watering of landscaped medians on streets and roadways
- Wash city's vehicle fleet less frequently
- Place signage in restrooms and other areas of City buildings to remind of the urgent need to save water
- Monitor water use in mechanical cooling systems and coil cleaning
- Install low water use fixtures at city facilities

WATER METER RETROFIT PROGRAM:

- 50% of customers have received water meter installation
- Enables customers to monitor their use
- By 2025, the city plans to install water meters for all customers

A Beautiful Garden with Less Water?

Landscape designer Cheryl Buckwalter says it's possible by Tinka Davi

Many homeowners think having a beautiful garden calls for lots of water. And with Sacramento's severe drought and the mandatory cutbacks on water usage, they may think their plants, trees and lawns are suffering with nary a drop to drink. So can people cut back on watering and still have an attractive garden? Cheryl Buckwalter, Certified Landscape Irrigation Auditor, designer, and executive director of EcoLandscape California, says it can be done, with some mulch, strategic planting and efficient irrigation.

Is watering just two days a week enough?

Historically and traditionally we have overwatered our landscape by watering five days a week, whether our plants need it or not. By overwatering, we are creating an unhealthy environment for roots. We are not allowing air to get back into the soil, and roots need the movement of air and water. The two-days-a-week schedule is a good opportunity for us to learn to use water more efficiently.

Why should I replace my lawn?

There are benefits for not having a lawn. You can have a lovelier and healthier landscape by using a palette of plants appropriate for our climate and conditions — long hot summers and, historically, cool wet winters. A lawn is OK if it has a purpose, such as a place where children play or for pets. Also, there are many beautiful parks where people can go and enjoy the lawns, so why not use them!

Should I use a soaker hose?

While soaker hoses have been popular, they just ooze water and you can't tell how much water is being applied. An efficient method of watering trees is to use dripperlines (tubes with emitters), placing them in circles within the drip line (the edge of the canopy) for the entire diameter of trees and about a foot beyond the drip line. The dripperlines are placed underneath mulch. It's a very efficient way of applying water, reducing evaporation and retaining soil moisture.

What watering schedule do you recommend for sprinklers?

It's best to use the cycle-and-soak method. Break up your schedule into short periods of time with an hour or so between each cycle. To be really efficient, install rotary nozzles in your sprinkler bodies. These nozzles apply water more slowly with larger droplets of water, so the water can soak into the ground. Another important water-saver is to turn your system on periodically to make sure the system is working properly and quickly repair leaks, cracks or broken parts and adjust sprinklers so they are not spraying anything other than the intended target — the lawn!



Cheryl Buckwalter is a Certified Landscape Irrigation Auditor, designer, and executive director of EcoLandscape California.
PHOTO BY LOUISE MITCHELL

What watering schedule do you recommend for drip systems?

For low-volume drip systems used on plants, you'll have to think about the size of the nursery container when you purchased the plant. That's going to be the size of the root zone the plant currently has in the ground, so you want to make sure the entire root zone receives water. Turn on the irrigation dripperline for 30 to 45 minutes, for example, then let the water soak in for an hour or so. Next, use a trowel and dig outside the root ball into the soil. The soil should be moist nearly as deep as the roots in that container. If not, then water for another cycle. This helps you determine your schedule for your plants.

Why should I use mulch?

Mulch has many benefits: It helps to retain soil moisture, moderates soil temperature, reduces weed growth and prevents erosion. Apply 3 to 4 inches of organic mulch (for example, wood chips) to the soil surface and replenish it as it breaks down over time. Before applying new mulch, rake back the existing mulch, put 1/4 - to 1/2-inch of well-processed compost on the soil surface to help "feed the soil" and its organisms, spray it to moisten, and cover the compost with the mulch.

What trees and shrubs do you recommend?

We are fortunate to be able to use a wide range of drought-tolerant and California native trees and plants. Select trees and plants that are appropriate for the climate, the region, sun exposure and type of soil. To efficiently irrigate them, group plants with similar needs together.

For help, call upon professionals. Many licensed landscape contractors, designers, irrigation experts and maintenance workers can be found online (see sidebar). Having a design can also serve as your road map for planning and installing your garden — whether you do it all at once or in phases. If you're not able to hire a professional to help with your entire project, consider hiring a professional for a consultation. They can help you avoid many costly mistakes.

You can have a lot of fun and be empowered to go from wasting water to an enjoyable garden that's beautiful and uses less water year-round.

ONLINE RESOURCES FOR WATER SMART LANDSCAPES

Drought-tolerant plants

EcoLandscape California:
www.ecolandscape.org

Water-wise Gardening in the Gold Country: www.BeWaterSmart.info

California Native Plant Society:
www.sacvalleycnps.org

UC Davis Arboretum All-Stars:
www.arboretum.ucdavis.edu

Landscaping professionals

Qualified Green Gardener Professionals List: www.ecolandscape.org

California Landscape Contractors Association: www.clca.org

“Historically and traditionally we have overwatered our landscape by watering five days a week, whether our plants need it or not.”

Cheryl Buckwalter
EcoLandscape California executive director,
Certified Landscape Irrigation
Auditor and Designer

Helping Everyone Save Water

City of Sacramento Department of Utilities

Saving water needs to be in our thoughts every day — when we turn on our sprinklers, brush our teeth and wash our clothes. When we all pitch in, we all win. City of Sacramento Department of Utilities is helping you do your part through these programs:

RIVER-FRIENDLY LANDSCAPE REBATE PROGRAM

Trade in your front-yard grass and get a rebate of up to \$1,000.

Call: (916) 808-1337

Email: waterconservation@cityofsacramento.org

Visit: www.SpareSacWater.org for an application

WATER-WISE HOUSE CALL

Business and residential customers can get a FREE visit from a water conservation professional and find out how to save water around the home or workplace.

Call: 311, Monday - Saturday from 8 a.m. - 5 p.m.

BUSINESS SERVICES

Rebates are available for commercial customers to reduce their water use.

Call: (916) 264-5011 to schedule a Water-Wise Business Call

Visit: www.SpareSacWater.org for full list of rebates

WATER METER RETROFIT

City of Sacramento Department of Utilities is progressing on its project to retrofit most water connections with water meters, allowing some customers to track their water use more closely.

Visit: www.SpareSacWater.org

**Spare
the Water**
S A C R A M E N T O



10 THINGS EVERYONE CAN DO TO SAVE

It takes awhile to change habits, but there's one we all need to adopt: saving water. Clip this article and hang it on the fridge, the bathroom mirror or any place where you and others in your household can cut back and conserve water.

- 1 Turn off the faucet while brushing your teeth, washing your face or shaving.
- 2 Collect water in a bucket in the shower and in small plastic containers placed in the kitchen and bathroom sinks. Recycle the water for other uses, such as watering plants. Use a rain barrel in the backyard to collect even more water.
- 3 Install a low-flow shower head and take shorter showers of five minutes or less. Or skip a day (depending on work requirements and family requests).
- 4 Install low-flow toilets and save at least 8,000 gallons a year.
- 5 Follow the watering schedule: Odd numbered addresses are permitted to water only on Tuesdays and Saturdays. Even numbered addresses are permitted to water only on Wednesdays and Sundays. No watering is allowed on Mondays, Thursdays or Fridays. Watering must occur before 10 a.m. or after 7 p.m. The schedule changes in November, so visit www.SpareSacWater.org for updated guidelines.
- 6 Scrape food from plates into the trash or compost bin; use the garbage disposal as little as possible.
- 7 Wash full loads of dishes and laundry.
- 8 Embrace the slogan: "Gold is the New Green" and forego watering your lawn. Tell your friends what you're doing by displaying a sign in your yard (pick one up at the Customer Service Offices, 1395 35th Ave., Monday- Thursday, 8 a.m.-4 p.m. and Friday 8 a.m.-11:30 a.m.)
- 9 Watch for leaking or broken faucets, pipes and sprinkler heads and repair them immediately.
- 10 Become a water conservation ambassador. Tell others what you are doing to save water and encourage them to do the same. Learn more at www.SpareSacWater.org.