



Drought

Resource Guide



Water
saving tips
inside!

The Situation

City of Roseville Drought Resource Guide | Page 2

When does a dry spell become a drought?

Unlike natural disasters that strike suddenly, a drought presents a very different kind of emergency. There are no warning sirens. And though prolonged water shortages can devastate vast areas, droughts have unusual characteristics that make them difficult to define:

What's normal for one area equals drought in another. Unlike a Category 5 hurricane that everyone agrees is dangerous, there's no standard for normal precipitation. In Placer County alone, normal ranges from about 25 inches in Roseville to more than 70 inches in the high Sierra.

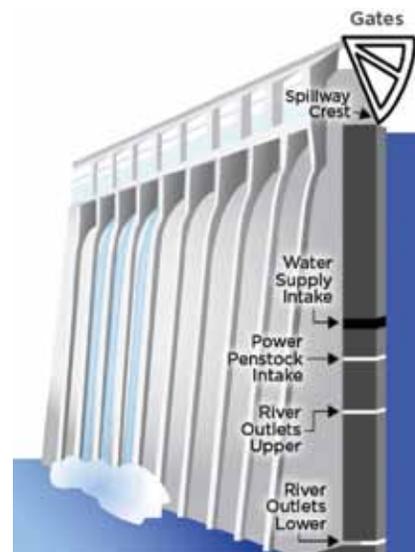
Demands on water vary. Areas with few users and little demand may have enough water in dry years. Regions like ours that must balance competing demands from a growing population, agriculture, power generation, and environmental measures have much narrower margins, making drought's impact more severe.

The beginning of a drought is only seen in retrospect. Droughts creep in over months and years. While the record-setting dry weather of 2013 turned a spotlight on the current drought, below normal precipitation in 2011 and 2012 set the stage.

Much of drought's impact remains out of sight. We can watch Folsom Lake rise and fall, but we can't see what's happening to underground aquifers. We can't look at a yard and tell if soil is saturated two inches or two feet below the surface. And we can't view a moving water table (the meeting point between water-saturated and unsaturated ground).

Droughts end as slowly as they start. At best, the end of a severe drought comes after several very wet months. More often, droughts end after a few years of average or better rainfall.

There's no way to predict when a drought will end. The best science can only provide predictive models, so it's wise to stay informed and take steps now to reduce future water needs.



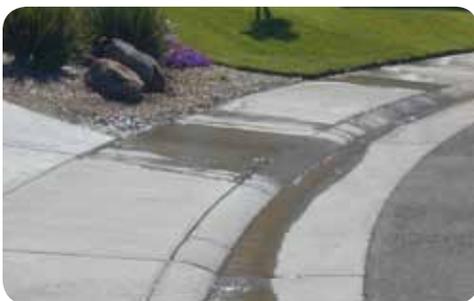
Roseville's water supply and Folsom Lake

Roseville's water supply comes from a long-term water contract with the United States Bureau of Reclamation, a federal agency. Each year in the spring, based on precipitation, snow pack and other factors, the Bureau of Reclamation provides Roseville its water allocation for the year. In normal or wet years, that is typically 100 percent of our contracted amount; however, in drought years, that water allocation can be cut. As a back-up, Roseville has additional water contacts with Placer County Water Agency. Additionally, the City of Roseville has a series of back-up groundwater wells that can be activated as an emergency water supply, if needed.



Drought Stages

Drought Stage Levels	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Overall water use reduction target.	10%	20%	30%	40%	50%
No washing of hardscapes (ex. Sidewalks/driveways); unless for health or sanitary purposes.	X	X	X	X	X
No irrigation of landscaping during rainfall.	X	X	X	X	X
Water only served upon request at restaurants.	X	X	X	X	X
Wash boats/cars with closed nozzle or in car wash.		X	X		
Commercial landscape irrigation reduced.	10%	30%	50%	75%	100%
Decorative fountains and decorative pools made dry (except ponds containing fish).			X	X	X
No watering of lawns.					X
New landscaping limited to drought-tolerant trees, shrubs and groundcovers.			X		
New landscape prohibited (unless irrigated with recycled water).				X	X
Trees, shrubs and ornamental grasses only irrigated with low volume drip or closed hose nozzle.					X
Wash cars in car wash that recycles water.				X	X
Emptied pools cannot be filled; can refill active pools for evaporation loss.				X	X
Pool covers required for new pools.			X	X	X
Filling of new pools and spas prohibited; alternate sources of water are allowed.					X



Report Water Waste

Drought or no drought, the City is looking for water waste and works proactively to help our water customers identify and fix problems that waste water. Reports of potential water waste in the community can be provided online at www.roseville.ca.us/waterwaste or by calling (916) 774-5761.

City of Roseville can help residents reduce water use

Water Wise House Call free, available on weekdays

By Sena Christian, Roseville Press Tribune

If you haven't already reduced your water usage, there's no time to wait.

The city can provide some assistance with reducing your water usage through its free Water Wise House Call. A water-use specialist will go to your house on a weekday to analyze indoor and outdoor water use.

To schedule a Water Wise House Call, contact the city of Roseville at (916) 774-5761.

That includes pressure testing; checking toilets and other plumbing fixtures for leaks; developing proper water irrigation schedules based on the time of year; assessing sprinklers and water runoff; and analyzing drainage systems and providing recommendations for repair or replacement.

The city conducts about 1,300 house calls annually, said Water Efficiency Administrator Lisa Brown. Roseville's three employees who handle house calls currently do about 12 a day because of increased interest in saving water among residents.

"They're concerned," Brown said. "They don't all have problems. They just want to verify they're doing the best they can."

The Roseville City Council approved hiring additional workers to accommodate the current demand, which is anticipated to grow as California continues to deal with a drought.

Less grass = more water savings!

You can expect to save 44 gallons of water per year for every square foot of turf removed and replaced with low-water use plants on a drip irrigation system.

For a typical lawn of 700 square feet, this could mean a savings of 30,800 gallons of water per year. The water saved could completely fill an average swimming pool twice.





Backup wells and Aquifer Storage and Recovery help add reliability to Roseville's water supply

Roseville has four groundwater wells to maintain our water supply reliability during droughts. Areas that would receive well water are primarily in western and southern parts of Roseville but based on demands and the highly networked distribution system it may expand beyond these areas.

Aquifer Storage and Recovery, or ASR, is a progressive water technology that allows Roseville to deal with the water challenges of the future.

The concept of ASR is simple. It is like a savings account for water. You take surface water during times of plentiful supply, treat it and inject it several hundred feet into the ground in the water aquifer. During dry years, we can recover the water from the ground to provide reliable water service for our residents and businesses.



Drought-proof: Recycling water in Roseville for irrigation

In west Roseville, parks, golf courses and road medians are irrigated with recycled water, a treated non-potable water supply from our city's wastewater treatment plants. Recycled water use helps save potable drinking water for use by humans, rather than for landscapes.

What this means to you

City of Roseville Drought Resource Guide | Page 6



Discover How Your Water Use Measures Up

If you're like most people, you start a diet by finding out how much you weigh, setting a goal, and coming up with a weight-loss strategy. Now you can do the same to lighten up on water-use.

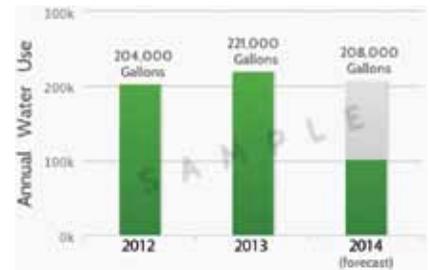
WaterInsight (www.roseville.ca.us/waterinsight) lets you discover how many gallons your home uses each day and how that compares to your neigh-

bors. Use the tool to find out where you stand, what steps you can take to reduce use, and how well you're doing toward meeting your water-reduction goal.

1. Go to www.roseville.ca.us/waterinsight and type in your account number (found in the top left corner of your utility bill).

2. Enter your email address and create a password so you can log in anytime to check your progress.

3. Complete your household water use profile. The system uses property records to determine your lot size for comparison with other Roseville homes,



See how your overall usage has dropped.

Understand the impact of the actions you've taken.

Claim your spot amongst the most water efficient homes in your community.

but you'll need to complete a quick multiple-choice survey to help tailor your analysis and suggested actions.

Instead of a list of generic water-saving tips, WaterInsight uses your property and profile information to create a personalized action plan that includes how much water each action will save per day and how much money those savings could subtract from your water bill each year.

For example, you may have heard you should water at dawn or dusk, now you can see how many gallons and how much money you can save by making that change. Every time you complete a suggested action, log in to check it off the list, view your water use, and find out what you actions you can take next.



HOW CAN YOU REDUCE YOUR USE

The average resident uses 453 gallons a day, with lower than average use in the winter and higher than average use in the summer. To find out your exact use, visit your WaterInsight page. Below are tips to help you reduce your use.

INDOORS



FILL BATHTUB 1/2 WAY OR LESS

SAVES 12 GALLONS
a bath



FIX A LEAKY FAUCET

SAVES 15-20 GALLONS
a day



REDUCE SHOWER TIMES FROM 10 TO 5 MINUTES

SAVES 12.5 GALLONS
per person/day



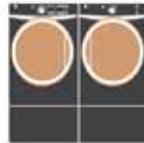
TURN OFF THE WATER WHILE BRUSHING TEETH

SAVES 10 GALLONS
a day



FIX A LEAKY TOILET

SAVES 30-50 GALLONS
a day



WASH ONLY FULL LOADS OF LAUNDRY

SAVES 15-45 GALLONS
per load

OUTDOORS



USE A BROOM INSTEAD OF A HOSE TO CLEAN HARDSCAPES

SAVES 8-18 GALLONS
a minute



QUICKLY REPAIR LEAKS AND BROKEN SPRINKLER HEADS

SAVES 20 GALLONS
a day



ELIMINATE 1 IRRIGATION CYCLE OR REDUCE EACH BY 2 MINUTES

SAVES 2,240 GALLONS
a month



WATER YOUR LANDSCAPE IN THE EARLY MORNING OR LATE AT NIGHT

SAVES 25 GALLONS
per cycle



INSTALL DRIP IRRIGATION FOR TREES, SHRUBS AND FLOWERS

SAVES 15 GALLONS
each time you water



ADD 2 TO 3 INCHES OF MULCH AROUND TREES AND PLANTS

SAVES 30 GALLONS
for every 1,000 sq. feet

Graywater

Graywater is wastewater from baths, bathroom sinks and washing machines that do not contain body or food waste. While your bath or shower water heats up, capture the excess water in a bucket and use it where clean water is otherwise used. This is a very easy way to repurpose unused water. You can also capture the graywater (soapy water) from showers/bathtubs for use in outdoor landscape. The City does not need to be contacted for these type of uses.



The City does need to be contacted for any proposed modification to a structure's plumbing where the intent is to capture and direct graywater from washing machines, and tubs/showers. Those interested in exploring graywater systems or modifications to use graywater should call the city's Building Division at (916) 774-5332 before any work is started.

Keep all graywater runoff on your property and allow it to soak into porous areas. Do not let it run off into the stormwater system, gutters, drains and into our creeks.

If used correctly, graywater can save hundreds of gallons of water a month and be an effective replacement or supplement to your outdoor irrigation needs.

The Utility Exploration Center: Offering classes to help you become more water efficient

Visit www.roseville.ca.us/explore to see the wide range of gardening classes, events and programs that can help you become water efficient.



Water Efficiency Contacts

Lisa Brown
Water Efficiency Administrator
lbrown@roseville.ca.us

Jen Sbaffi
Water Efficiency
jsbaffi@roseville.ca.us

2005 Hilltop Circle
Roseville, CA 95747
(916) 774-5761

Utility Billing Contacts

311 Vernon Street
Roseville, CA 95678

Utility bill questions or payments
(916) 774-5300 - local
(800) 767-3142 - toll free

Office Hours
Monday - Thursday
8 a.m. - 5:30 p.m.
Friday: 8 a.m. - 5 p.m.

Drought Resources

For the latest updates on the current drought situation, visit the websites below:

www.roseville.ca.us/drought
www.roseville.ca.us/savewater
www.roseville.ca.us/waterinsight
www.dryfolsomlake.com