WHEN YOU THINK AHEAD OF THE CURVE
OUR EFFORTS TO BE PREPARED
GO WELL BELOW
THE SURFACE

For over 100 years, Phoenix Water has delivered safe, reliable tap water to homes and businesses in our community. And during this time, we’ve literally been putting water in the bank. Phoenix Water delivers renewable surface water supplies to our customers so that groundwater can be saved for the future.

We’ve worked hard to protect local groundwater supplies so that they are available to protect against drought and a changing climate. Our efforts help ensure that our underground reservoir of groundwater — our water in the bank — is there when we really need it.

WE HAVE A HISTORY OF
PRESERVING OUR FUTURE

Phoenix officially incorporated in 1881 and as its population and economy grew, so did the need for reliable water supplies. Phoenix began municipal water utility operations in 1907, serving water to a rapidly expanding community. For years, the city received surface water from the Verde River through a 30-mile long, 38-inch diameter redwood pipeline. In 1949, Phoenix constructed Arizona’s first surface water treatment plant, located on the banks of the Verde River. Along the way, Phoenix completed its sewer system and began municipal wastewater operations. Today, Phoenix Water is one of the largest utilities in the country. Our vast infrastructure includes 7,000 miles of water lines, 5,000 miles of sewer lines, eight treatment plants, dozens of pump stations, reservoirs and wells, 50,000 fire hydrants, and 90,000 manholes over a 540 square-mile service area.

DEER VALLEY
WATER TREATMENT PLANT

NATHAN AND ALLISON, PHOENIX WATER CHEMISTS. Phoenix Water employees perform more than five million tests and measurements each year to ensure the highest quality drinking water to our customers.
We are acutely aware of the challenges posed by drought and climate change. To prepare, we have developed a diverse portfolio of water supplies that includes Salt, Verde, and Colorado River water, groundwater reserves, and reclaimed wastewater for non-potable purposes.

Thanks to our customers’ willingness to conserve, Phoenix currently uses only around half of its Salt & Verde River water supplies, and around 2/3 of its Colorado River water supplies. This creates a buffer between supplies and demand that Phoenix can rely on during times of drought and surface water shortage.

For over 100 years, Phoenix Water has delivered safe and clean drinking water to Phoenix residents. Today, we provide water to more than 1.5 million customers. Due to our efforts to develop a sustainable water supply, Phoenix has been designated by the State as having a 100-year assured water supply. Through planned construction of infrastructure to treat and deliver renewable surface water supplies, we have reduced our reliance on groundwater to a minimum, creating a reserve we can call on during times of drought. We’re working hard to provide reliable water supplies for public health and safety, recreation, industry, and quality of life for generations to come.

The Salt and Verde River watersheds encompass 13,000 square miles in the eastern and north central portions of Arizona, and the Colorado River watershed encompasses all or portions of seven states (Wyoming, Colorado, Utah, New Mexico, Nevada, California, and Arizona).
BECAUSE WE’RE NOT LACKING IN PLANNING, WE’RE NOT LACKING IN WATER

Phoenix has invested millions of dollars in projects to increase storage at reservoirs on the Salt and Verde Rivers. This allows us to capture and use storm and flood waters that otherwise would flow unused out of the Phoenix area. Our city also has one of the most aggressive leak repair programs in the country, usually repairing distribution system leaks within two to five days, which is no small feat, considering we maintain more than 7,000 miles of water lines within our 540 square mile service area.

KEVIN, PHOENIX WATER DEPUTY WATER PRODUCTION DIRECTOR.

Our Deer Valley Water Treatment Plant was built in 1964 along the Arizona Canal. In its early years, the plant was producing 80 million gallons of water daily. Today, Deer Valley has expanded and grown with Phoenix, providing up to 150 million gallons of water daily.

DEER VALLEY WATER TREATMENT PLANT

PLANNING HAS ITS BENEFITS

Arizona is a leader in water banking, meaning that we store water underground to be used at a later date. Arizona has banked millions of acre-feet of water through the Arizona Water Banking Authority. Our commitment to our future began in 1980, when the State of Arizona enacted the Groundwater Management Act. It was designed to reduce groundwater use in central Arizona. Later, in 1995, the state adopted Assured and Adequate Water Supply Rules that require all new development within Phoenix, and the other most populous areas of the state, to prove the availability of a 100-year water supply.

Phoenix's residential gallons per capita per day (GPCD) use of water has fallen roughly 30% over the last twenty years. Phoenix customers are using less water in 2014 than in 1996, despite adding 360,000 residents to our population.
PHOENIX IS A PIONEER IN THE USE OF RECLAIMED WASTEWATER. WE’VE BEEN RECLAIMING WASTEWATER AND REUSING THIS PRECIOUS SUPPLY SINCE THE 1960’S, LONG BEFORE OTHER COMMUNITIES IN THE ARID WEST. Nearly all of the reclaimed water generated in Phoenix is treated and reused for agricultural irrigation, local power generation, groundwater recharge, and wetland restoration. A large amount is also exchanged for Salt River water through a partnership with local Indian communities. Tres Rios is a constructed wetland complex for wastewater treatment located where the Salt, Gila, and Agua Fria rivers connect. Millions of gallons of reclaimed water from Phoenix’s wastewater treatment plant are pumped into the 440 acres of wetlands daily. The water ultimately flows into the river bottom where it becomes a wildlife paradise for the hundreds of species of waterfowl, mammals, and amphibians that call the wetlands their home.
PREPARING IN EVERY SEASON

When it comes to water conservation, Phoenix plays the long game. Rather than focusing on short-term, reactive strategies during drought conditions, Phoenix focuses on long-term culture change. We encourage our residents to embrace a desert lifestyle, because some day the drought will end, but it will still be hot and dry here, and water will still be scarce. This strategy has paid off in dividends. Phoenix’s residential gallons per capita per day (GPCD) use of water has fallen roughly 30% over the last twenty years. Phoenix customers are using less water in 2014 than in 1996, despite adding 360,000 residents to our population.

PHOENIX POPULATION & WATER USAGE

SMART DROUGHT RESPONSE REQUIRES A DEEP COMMITMENT

We are deeply committed to water conservation. Phoenix was a founding member of the regional Water Use It Wisely conservation program, one of the longest-running and most successful conservation campaigns in the country. The city has numerous conservation programs and initiatives available to Phoenix residents. We offer free landscape irrigation and planting workshops to residents year-round, and teach free conservation classes to schools, HOAs, organizations, and businesses. Residents can also order helpful conservation literature and media online at no cost (phoenix.gov/water).

ARIZONA FALLS

KEYERA, PHOENIX WATER UTILITIES SERVICE SPECIALIST, CUSTOMER SERVICES DIVISION. Arizona Falls, formed by a natural 20-foot drop along the Arizona Canal between what is now 56th and 58th streets, reopened in June 2003 as a restored hydroelectric plant and neighborhood gathering place where visitors can learn, interact, and reflect. The new Arizona Falls combines art, history, and technology to generate clean electricity from the canal’s waterfall.

WE ENCOURAGE OUR RESIDENTS TO EMBRACE A DESERT LIFESTYLE.
WHEN YOUR COMMITMENT ENDURES, WATER DOES TOO

Phoenix has taken proactive steps to ensure sustainable water supplies; we are built for drought. In an era of climate change, we must continue to innovate to ensure a high quality of life for future generations.

PHOENIX/TUCSON WATER EXCHANGE
What brought the two largest cities in Arizona together? Water. To help protect against potential Colorado River shortages, Phoenix entered into unprecedented partnerships in 2014 with the City of Tucson and Metro Water. These partnerships aim to increase the reliability of Phoenix’s Colorado River water supply over the long term, while providing near-term benefits to aquifers in Pima County through increased groundwater levels. Under the partnerships, Phoenix will store some of its unused Colorado River water in Tucson aquifers – water that Phoenix would otherwise lose to another water user. During future shortages on the Colorado, Phoenix’s stored water will be pumped and delivered to the City of Tucson and Metro Water for delivery to their customers. In exchange, both Tucson water providers will order an equivalent part of their Colorado River water for delivery to Phoenix water treatment plants, and ultimately, Phoenix customers.

WATERSHED PROTECTION
We share our watersheds with farmers, ranchers, towns, businesses, and Indian communities across the State. Without healthy and productive watersheds, we all suffer. Phoenix entered into a three-year partnership with the National Forest Foundation (NFF) to help protect Phoenix’s water supply. The NFF’s work will consist of watershed improvement projects on National Forest lands in northern Arizona that reduce wildfire risk, improve streams and wetlands, enhance wildlife habitat, restore native plants, and limit erosion and transportation of sediment into Arizona streams, rivers, and reservoirs. Through the partnership, the City of Phoenix will invest in the Northern Arizona Forest Fund that is designed to improve forest health and water quality in the Salt and Verde River watersheds. The National Forests in northern Arizona provide most of the water to the Salt and Verde Rivers, which are vital surface water supplies to downstream users in the greater Phoenix metropolitan area.

COLORADO RIVER RESILIENCY
In 2014, the City established a Colorado River Resiliency Fund as part of the Water Services Department’s capital improvement program, at an average level of around $6 million a year. The new resiliency fund is an innovative plan that will act as a kind of insurance policy against shortages. It will protect Phoenix against future shortages on the Colorado River and help ensure that the city remains a leader in the sustainable management of its water supplies. It will be used for such things as enhancing existing water infrastructure, purchasing additional water for underground storage, developing new wells that both recharge and pump from local aquifers, partnering on watershed management projects, and implementing Colorado River system conservation programs. Shortage on the Colorado River is coming. We’re doing everything we can to ensure we continue to deliver the reliable water supplies that underlie our public health, economic opportunity, and quality of life in this desert city.

LAKE PLEASANT WATER TREATMENT PLANT

PHOENIX MAYOR GREG STANTON: “Securing our water future is one of our highest priorities – for Phoenix residents and our economy. These innovative agreements are examples of how cities can find creative ways to protect our future water supply and safeguard against continued drought and climate change.”

PHOENIX WATER SERVICES PROJECT COORDINATOR, Simon: “Phoenix Water employees work tirelessly every day to run and maintain the city’s vast water infrastructure. The maintenance and upkeep of the city’s water system is vital in providing residents clean, reliable water delivery.”
PHOENIX
A COMMUNITY THAT
LOVES THE DESERT

PHOENIX RESIDENTIAL
LANDSCAPING (SINGLE-FAMILY UNITS)

WATER CONSERVATION: FIVE EASY WAYS TO GET STARTED

1. GO DESERT.
   Choose to surround your home with beautiful, low-water use plants. Visit www.amwua.org/plants for a free landscaping guide.

2. WATER ACCORDING TO PLANT NEEDS AND THE WEATHER.
   phoenix.gov/wrc

3. STOP WATERING AT SUNRISE TO REDUCE EVAPORATION.

4. CHASE DOWN TOILET LEAKS.
   Download a free guide here: www.smarthomewaterguide.org

5. USE YOUR EYES.
   Pay attention to your water consumption each month and look for signs of overwatering in your yard! phoenix.gov/wrc

ADDITIONAL INFORMATION

TAKE A LANDSCAPE WATERING CLASS!
Sign up at: phoenix.gov/water

101 WAYS TO CONSERVE WATER.
Visit our partner www.wateruseitwisely.com for easy ways to use water wisely.

PHOENIX WATER CONSERVATION.
phoenix.gov/wrc

ARE YOU PHOENIX WATER SMART?

TINA, PHOENIX WATER CONSERVATION SPECIALIST. Phoenix Water offers free conservation classes and workshops to schools, HOAs, organizations, and businesses year-round.
WHEN YOU THINK
AHEAD OF THE CURVE