

Maintaining and upgrading infrastructure critical to the reliability of water systems

Our cities' infrastructure is vital to making our daily lives function smoothly. Of all infrastructure types, water systems are the most fundamental to life by delivering safe and clean water to households, industries, and businesses. Millions of gallons of treated water move through miles of pipes buried deep under our feet every day. The water circulates through treatment plants, tanks, pumps, and miles of service lines that deliver water to our water meters and into our homes.



Providing water to 3.7 million people, more than half of the State's population, is no small feat, yet that is precisely what the AMWUA cities collectively do every day of the year because they have invested billions into the infrastructure to ensure water can be delivered to all who rely upon it. Their collective infrastructure consists of over 30 water treatment plants, over 18,000 miles of water lines, 136,000 fire hydrants, and more than one million water meters. All of which highlights the extent of the infrastructure needed to deliver water every day of the year.

Clean and safe water is a precious commodity, and investing in pipelines, canals, treatment plants, recharge projects, and countless other technology upgrades is critical for guaranteeing that you have water today and in the future. Such investments ensure that Arizona's water supplies remain clean and reliable. This is even more important than ever as water utilities face pressures on their water supplies impacted by two decades of historic drought and a Colorado River shortage.

When operating a water system, continual maintenance and upgrading are required, especially as infrastructure ages. Like all other types of infrastructure, including transportation, telecommunications, and power, water infrastructure ages over time and eventually must be replaced. Maintaining, upgrading, and expanding infrastructure is a continual priority for the AMWUA cities and all water providers, which requires a significant financial commitment.

Maintaining aging and expansive water distribution and collection systems is an ongoing and growing expense for your city and is a significant component of your city's water rates. Your city water professionals are continually fine-tuning their overall plan and funding for the timely replacement of this critical infrastructure, so expensive emergency repairs and customer service disruption are avoided as often as possible. Recognizing the importance of improving and upgrading water systems, the Federal Government passed the Bipartisan Infrastructure Law, Water Resources Development Act, and funding for drought resiliency in the Inflation

Reduction Act in 2021 and 2022. This is providing additional funding for critical infrastructure in Arizona and across the West.

As we recognize Infrastructure Week - a national week of advocacy and education that brings together business, labor, and elected leaders to spotlight the need to revitalize, modernize, and invest in infrastructure – it's essential to understand and appreciate the critical role infrastructure plays here in the desert since cities run on water. Prioritizing investments in the rehabilitation or replacement of aging water and wastewater systems and building new infrastructure ensures the reliability and resiliency of our water now and for future generations.

Learn more about the water infrastructure within your city:

AVONDALE – The City of Avondale now stretches 41 square miles and is home to over 90,000 residents. The city maintains 385 miles of water lines, 243 miles of sanitary sewer lines, 2,903 fire hydrants, 27,386 water meters and operates three water treatment plants, 16 GW wells, 11 lift stations, and one water reclamation facility.

CHANDLER - More than 280,000 people reside in the City of Chandler. The city supplies an average of 58 million gallons of drinking water each day to customers across 64 square miles through two water treatment plants and 1,230 miles of potable water lines. The city maintains 15,096 fire hydrants, nearly 84,000 meters, 1.015 miles of wastewater lines and operates three wastewater treatment plants. Chandler also delivers more than 9.4 billion gallons of recycled water for irrigation, groundwater recharge, and wildlife habitat through 94 miles of reclaimed water lines.

GILBERT – The Town of Gilbert is home to nearly 276,000 residents across 72 square miles. The town's infrastructure includes two water treatment plants, two wastewater treatment plants, 1,473 miles of water lines, 912 miles of sanitary sewer pipeline, 91,349 water meters, 42,162 system valves, and 14,456 fire hydrants. In addition, 74 miles of reclaimed water pipes deliver water to 71 customers for irrigation of parks and common areas, offsetting drinking water use. The remaining reclaimed water is used to replenish underground water supplies.

GLENDALE – The City of Glendale has been providing water to its residents for more than a century. It is now the state's fifth-largest city, spanning nearly 56 square miles with a population of about 250,000. It maintains and operates four water treatment plants, two wastewater treatment plants, 1,040 miles of water lines, 703 miles of wastewater lines, 8,400 fire hydrants, and 62,600 water meters. Glendale was the first city in the country to adopt an ordinance requiring water-efficient fixtures.

GOODYEAR – The City of Goodyear is growing into 191 square miles of space on the west side of the Valley. Serving a population of 63,000 residents in the city's water service area, Goodyear's infrastructure is currently comprised of four water treatment plants, three

wastewater treatment plants, 359 miles of water lines, 254 miles of wastewater lines, 3,721 fire hydrants, and 23,334 water meters.

MESA - Serving over a half million people each day, the City of Mesa has been committed to provide safe, reliable, and responsible water and wastewater services for over 100 years. Mesa's robust infrastructure includes three water treatment plants and four water reclamation plants. As the state's third largest city, Mesa builds and maintains one of the largest water and wastewater distribution and collection systems in Arizona with 2,586 miles of water lines, 1,826 miles of wastewater lines, 20,248 fire hydrants, and 162,764 total water connections across 138 square miles.

PEORIA – The City of Peoria incorporated in 1954 and initiated water service that same year. Today, the city stretches across 178 square miles, reaching north of Lake Pleasant, and serves 190,000 residents. The city's infrastructure comprises two water treatment plants, with a 44% ownership in a third plant, three wastewater treatment plants, 1,043 miles of water lines, 764 miles of wastewater lines, 27,815 water valves, 10,182 fire hydrants, and 62,810 water meters.

PHOENIX – As one of the largest utilities in the country, Phoenix Water delivers water to over 1.6 million residents and handles wastewater treatment operations for 2.5 million residents in five cities. Phoenix's 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 more than 420,000 water meters over a 540 square-mile service area.

SCOTTSDALE – With a population of almost 250,000, Scottsdale Water delivers an average of 61 million gallons of water daily to more than 91,000 customers through more than 2,085 miles of pipes and maintains more than 10,979 fire hydrants. Its wastewater system comprises 1,341 miles of lines and more than 40 lift stations. It is the first Arizona water utility to implement indirect potable reuse.

TEMPE – Serving 192,687 residents within 40 square miles, growing by an additional 80,000 when Arizona State University is in session, the City of Tempe's infrastructure includes two surface water treatment plants and a water reclamation facility. Tempe also maintains more than 860 miles of water lines, 500 miles of wastewater lines, 200 miles of stormwater mains, 9,400 fire hydrants and 44,000 meters.

For over 50 years, Arizona Municipal Water Users Association has worked to protect our member cities' ability to provide assured, safe, and sustainable water supplies to their communities. For more water information, visit www.amwua.org.