



Mesa Water Resources

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Quick Facts

- ▶ Provide safe, reliable and environmentally responsible water and wastewater services for over 500,000 people in a 170 square-mile service area.
- ▶ Generate revenue through rates and fees to help pay for essential City-wide services and infrastructure.
- ▶ Average Mesa household uses about 140 gallons of water per day.
- ▶ Over 2,500 miles of pipe in the water distribution system.
- ▶ Up to 186 million gallons per day is treated at the Val Vista, Brown Road and Signal Butte Water Treatment Plants using conventional treatment, filtration, fluoridation and chlorine disinfection. The Signal Butte plant also uses the latest in water treatment technology, including ozone disinfection.
- ▶ Over 1,750 miles of sanitary sewer system mains.
- ▶ Over 27 million gallons per day of wastewater is treated at the Northwest, Southeast and Greenfield Water Reclamation Plants.

100-Year Assured Water Supply

Mesa has a **100-Year Assured Water Supply designation** from the Arizona Department of Water Resources.

Mesa has shown continuous physical and legal availability of water along with water quality and financial capability standards to maintain water supplies.

The designation is renewed every 15 years. Water Resources is applying for redesignation this year for renewal by 2025.

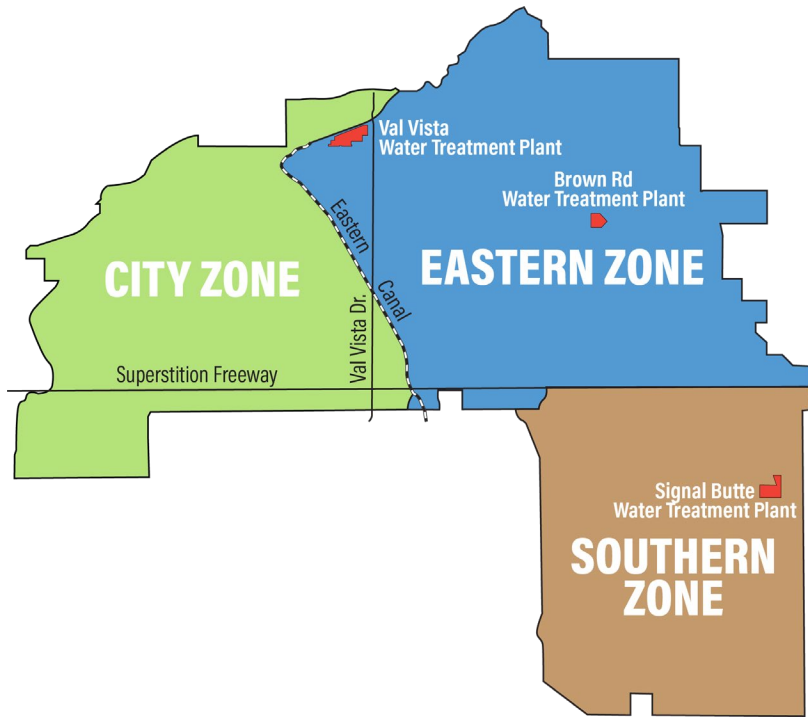
Diverse and Sustainable Water Supply



Salt River Project - Salt and Verde Rivers

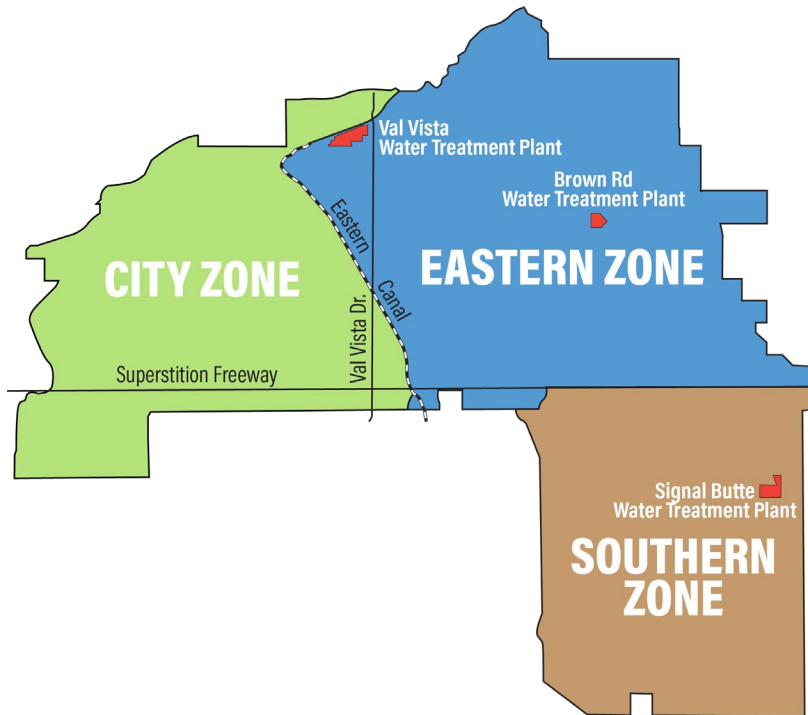
Salt and Verde Rivers - SRP (City Zone) Salt River Project (Salt and Verde Rivers) 37% - Reserved for On Project Use

Exceptions exist such as New Conservation Space (NCS) water which can be used anywhere in the city



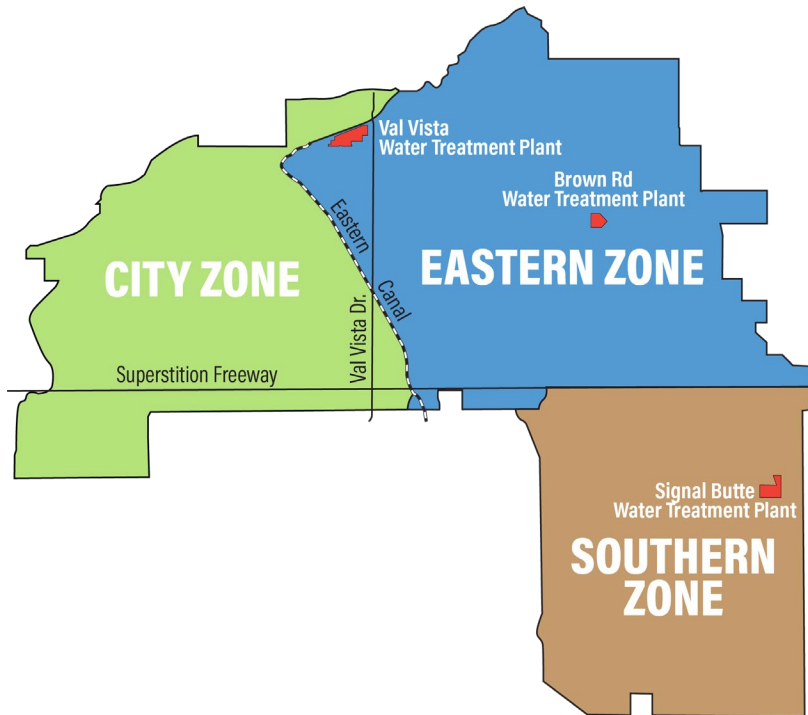
Central Arizona Project - Colorado River

Colorado River - CAP (Eastern and Southern Zones) 55% - Can be used anywhere in the City. Limited by canal capacity and water availability

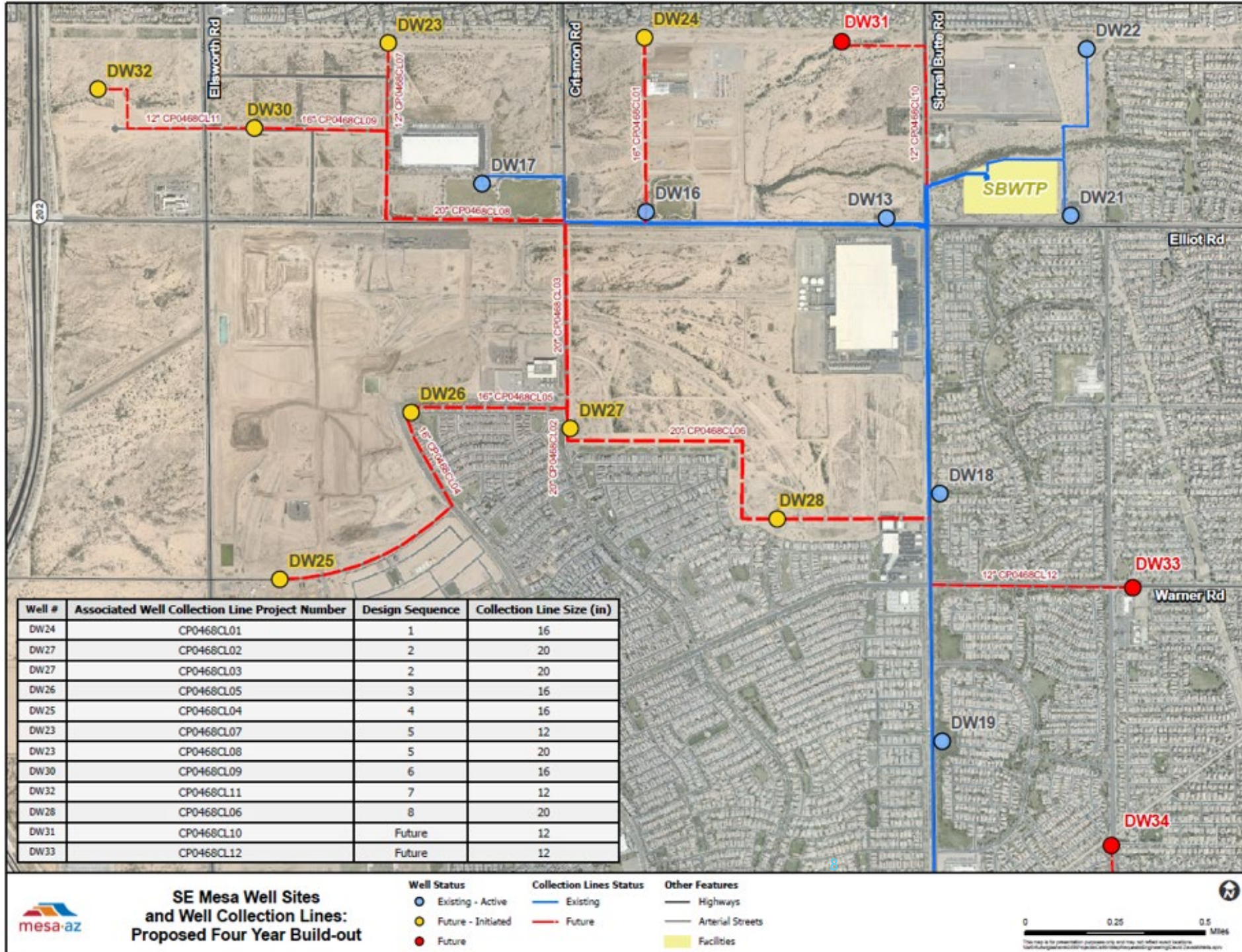


Groundwater

Groundwater (all zones) 8% -
from 35 deep aquifer wells
Restricted by 1980 Groundwater
Management Act



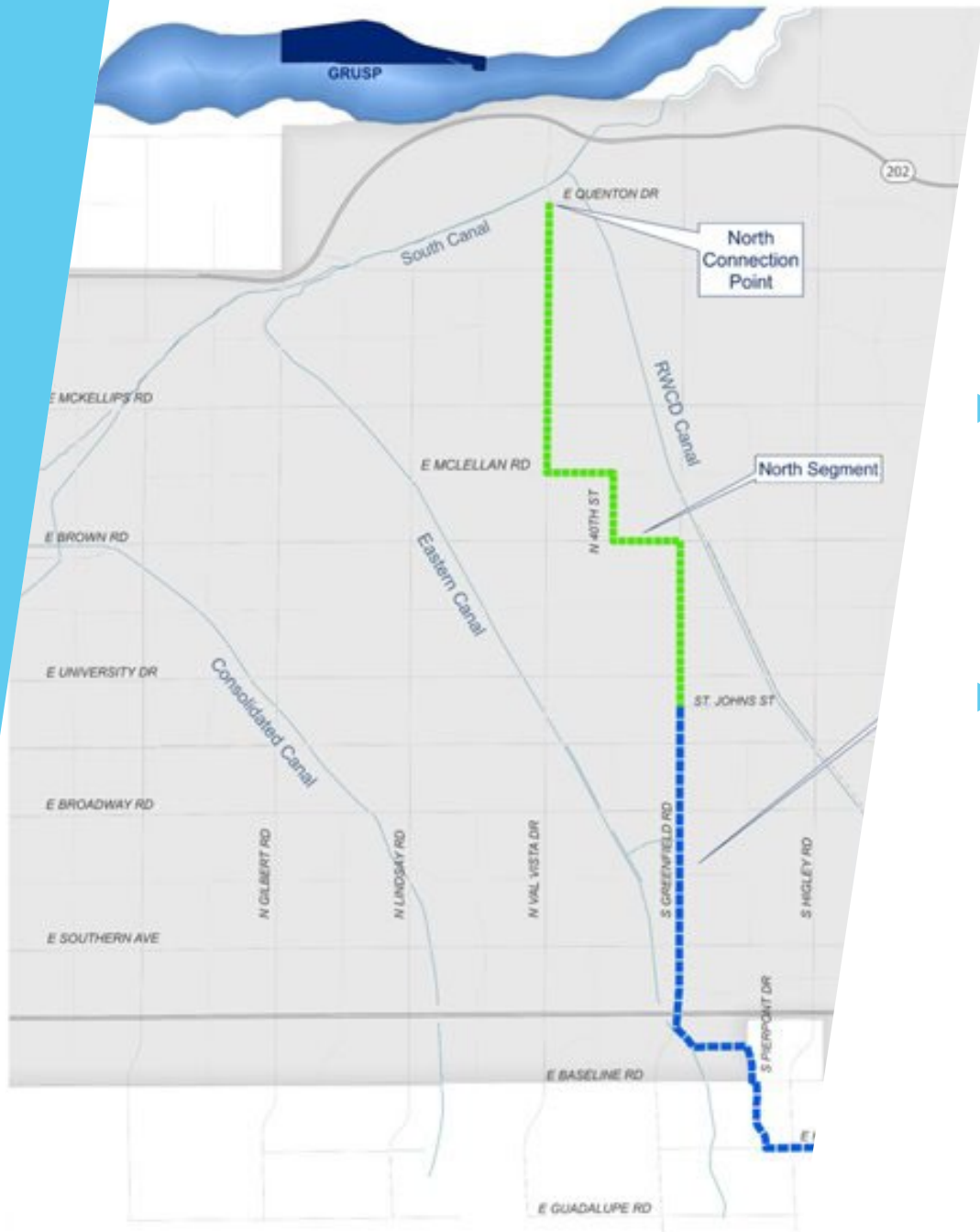
New Wells & Collection Lines



Beneficial Reuse

- ▶ Treated wastewater (effluent) delivered from the Mesa's Reclamation Plants to the Gila River Indian Community for crop irrigation in exchange for vital Colorado River supplies.
- ▶ Exchange is a ratio of one acre-foot of Mesa reclaimed water to 0.8 acre-foot of Colorado River water.
- ▶ Irrigating with effluent is cheaper than river water and Mesa can use the potable water supplies - also it is a beneficial reuse of effluent.





Beneficial Reuse

- ▶ The 10.5-mile Central Mesa Reuse Pipeline will make available effluent produced at the Northwest Water Reclamation Plant.
- ▶ The new pipeline will help Mesa meet the conditions of the exchange agreement by maximizing deliveries and gaining an additional 12,000 acre-feet of Colorado River water supplies.



Water Banking - GRUSP

- ▶ **Recharge** (putting water back into the aquifer) increases Mesa's water supply through long-term storage credits.
- ▶ Class A+ effluent is locally recharged at the **Granite Reef Underground Storage Project**.
- ▶ On average, Mesa recharges about 8,000 acre-feet of water a year (seven million gallons a day). Water is stored underground (banked) for recovery later when needed most.
- ▶ 540,000+ acre-feet of water stored in the aquifer city-wide.

Water Shortage

STAGE ONE - WATER WATCH



Trigger - Prolonged surface water shortage is predicted to affect Mesa

- ▶ No mandatory water use reductions
- ▶ Efficient water use highly encouraged for all customers
- ▶ 5% reduction at City facilities, including parks
- ▶ Complete Water Shortage Management Plan can be found online at www.mesaaz.gov/water



Demand Management Examples

Expanding customer outreach and conservation programs to help residents and businesses take an active part in using water efficiently.

Increasing monetary incentives for turf removal and irrigation efficiency improvements.

Utilizing a four-tiered rate structure and implementing a drought commodity charge to encourage water conservation.

Managing and balancing the needs of new growth, including policy changes to manage large water users and working with commercial/industrial customers on water sustainability plans.



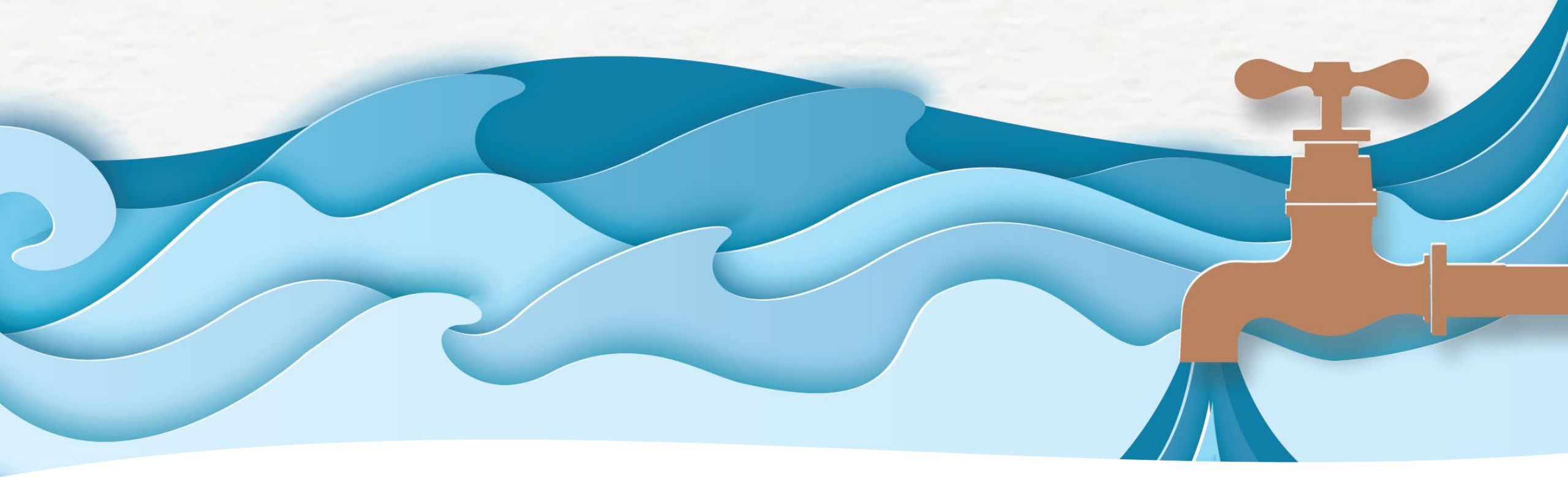
Maximizing Operational Efficiency for Sustainable Water Supply

- ▶ Mesa Water Resources builds and maintains one of the largest water pipe infrastructure systems in Arizona.
- ▶ Mesa has less water loss from main breaks and leaks than the national average due to a rigorous pipe inspection and replacement program.
- ▶ The latest technologies are used to detect leaks before they happen so repairs can be made.
- ▶ Mesa conducts water loss audits to identify, document, evaluate and address water losses using industry-recognized and best management practices of the American Water Works Association's M36 methodology.

Water Quality

- ▶ The City of Mesa vigilantly safeguards its water supplies.
- ▶ For over 100 years, the City of Mesa has committed to provide water that meets more than **100** state and federal water quality standards.
- ▶ Mesa's award-winning Water Quality Consumer Confidence Report can be found online at www.mesaaz.gov/ccr and in Spanish at www.mesaaz.gov/ccrespanol





Find fact sheets and more resources online at
mesaaz.gov/water



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