



Chandler Water Resources & Colorado River Update

Preparing for less Colorado River water

City Council Work Session – May 21, 2026
Simone Kjolsrud, Water Resources Manager

Where does our water come from?

Surface Water

Snow and rain runs off into rivers, lakes and streams. The water is stored in reservoirs behind dams.



Groundwater

Water stored underground in the space between sand and gravel.

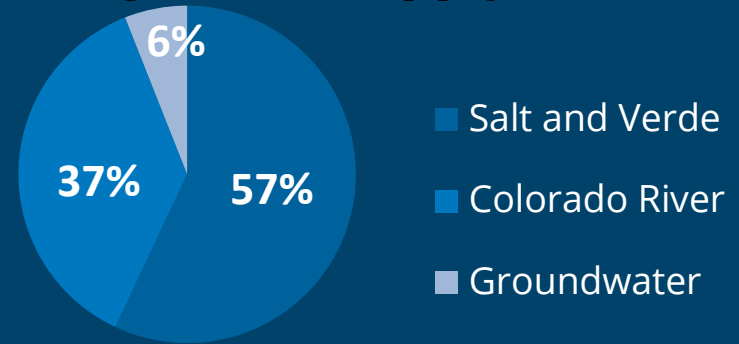


Chandler's Water Supplies

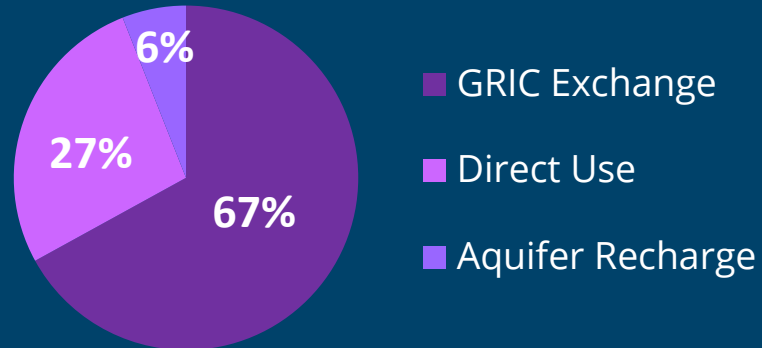
Projected Build-out Supply

Annual Supply (AF)	Water Source
59,530	Salt and Verde Water (SRP)
38,755	Colorado River Water (CAP)
6,346	Groundwater
104,631	Annual Drinking Water Supply
29,936	Annual Reclaimed Water Supply

Drinking Water Supply



Reclaimed Water Supply



Water Supply Challenges



Drinking Water

- **Colorado River Shortage (CAP)**
Permanent reductions to Arizona's allocation will likely result in a 20% to 50% cut to Colorado River supplies
- **Salt & Verde Supplies (SRP)**
Winter 2025 driest on record, Winter 2026 also very dry. 2026 and 2027 SRP allocation reduced to ≤ 1.5 AF/acre.
- **Groundwater & Stored Water**
Reduced surface water supplies will result in aquifer draw down



Reclaimed Water

- Gila River Indian Community Exchange – 67% of supply
- Many direct use customers are currently exceeding their contract allocation
- Aquifer recharge helps to manage seasonal demand

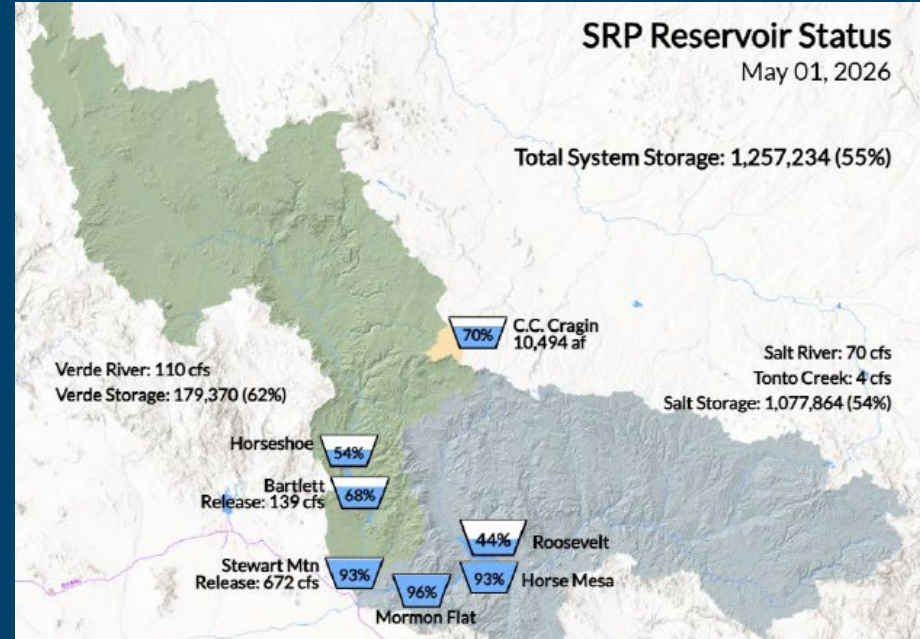
Salt and Verde Reservoirs

2023 – Very wet year, reservoirs 100%

2025 – driest winter on record, reservoirs down from 77% to 55%

2026 – very dry winter, reservoirs remain at 55%

- SRP reduced CY 2026 water supply due to low reservoir conditions. Need a good summer monsoon, or further reductions remain possible.
- Winter 2026 (Jan–May 2026) 35% of avg – 13th lowest on record
- Water Year 2026 (Oct – Sept 2026) projected 29% of normal
- Water supply for CY 2027 expected to be ≤ 1.5 AF/acre



SRP reservoir status as of May 1, 2026

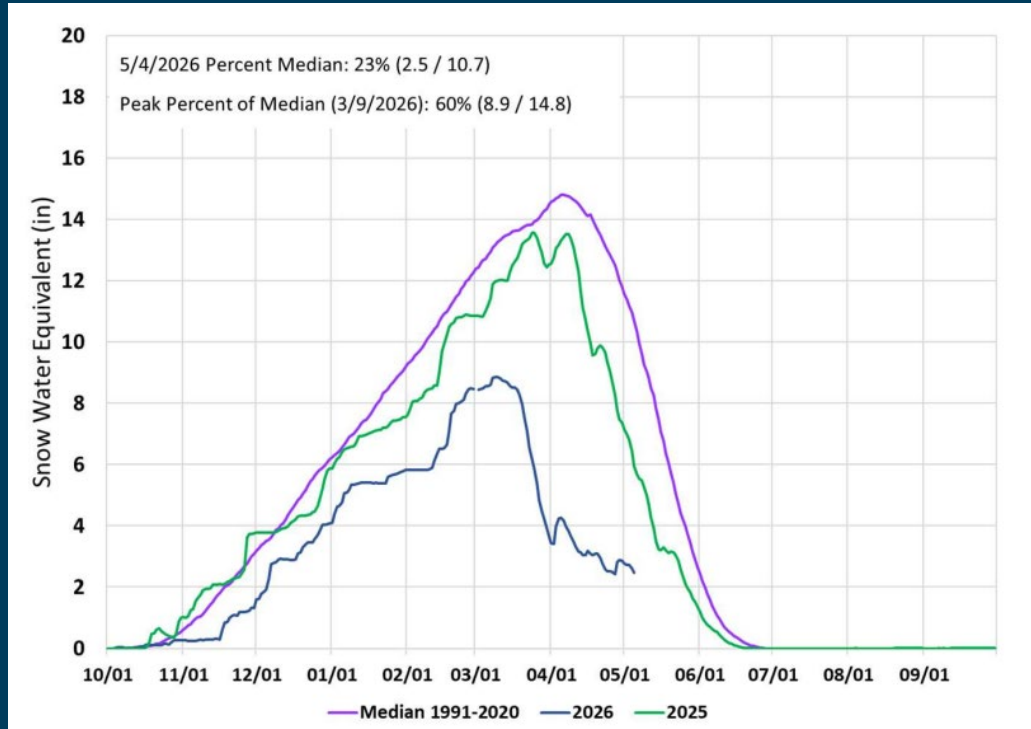
Colorado River Reservoirs

The Colorado River accounts for approximately a third of Chandler's average annual drinking water. Lake Powell and Lake Mead are the two largest reservoirs in the system.



2026 Colorado River Conditions

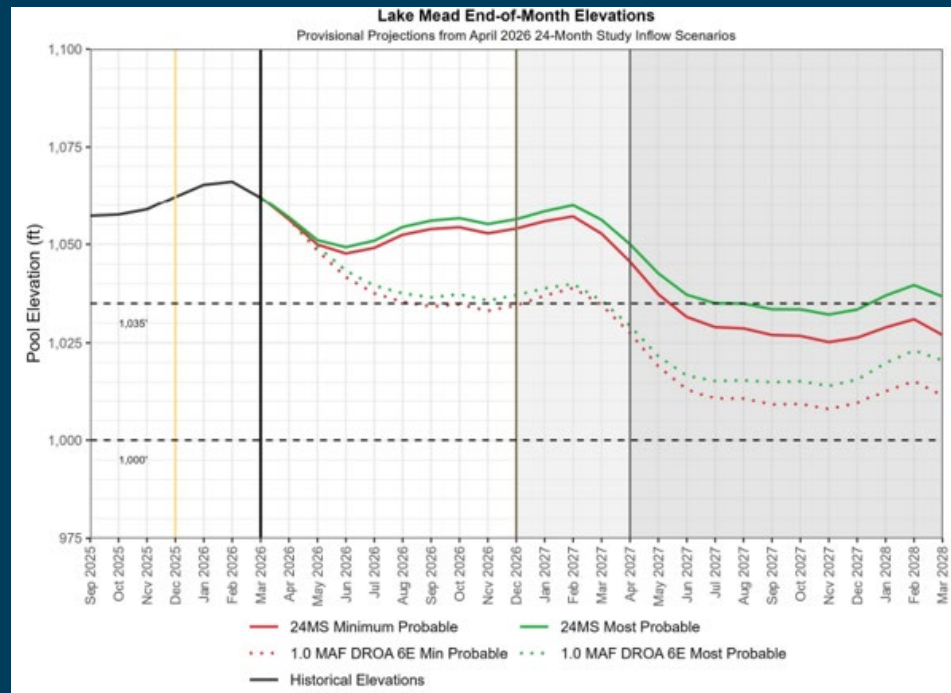
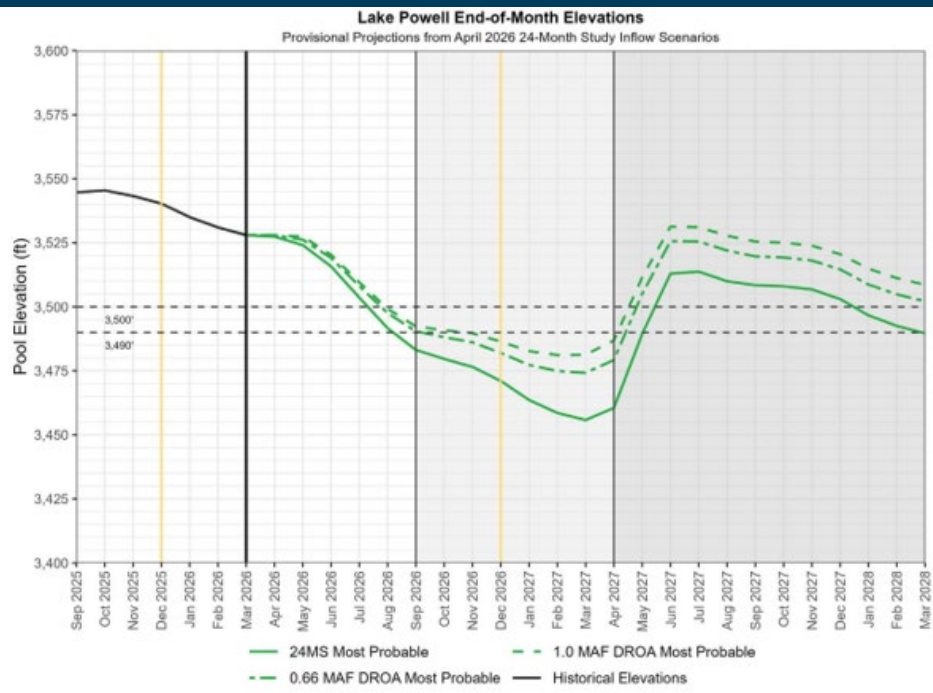
Water year 2026 is forecasted as the worst year on record.



Colorado River snow water equivalent compares 2025 and 2026 to 30-yr average

Colorado River Emergency Actions

April 2026 - reduced releases from 7.48 to 6.0 MAF to maintain elevation 3,500 feet in Lake Powell



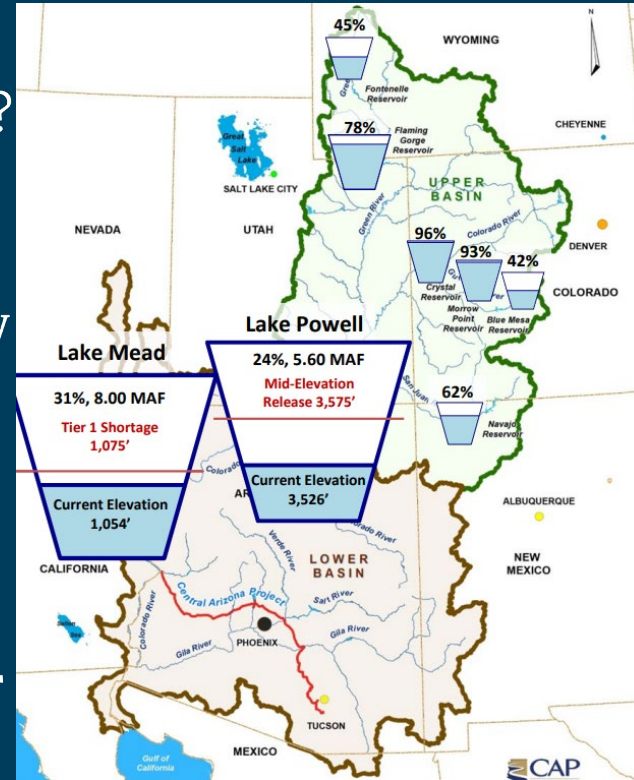
Lake Powell end of month elevations as modeled with Drought Response Operating Agreement (DROA) releases of 0.66 and 1.0 MAF from Flaming Gorge.

Lake Mead end of month elevations as modeled with 1.0 MAF DROA releases and reduced releases from Lake Powell to Lake Mead.

Lower Basin States Proposal

2027 & 2028 Operations

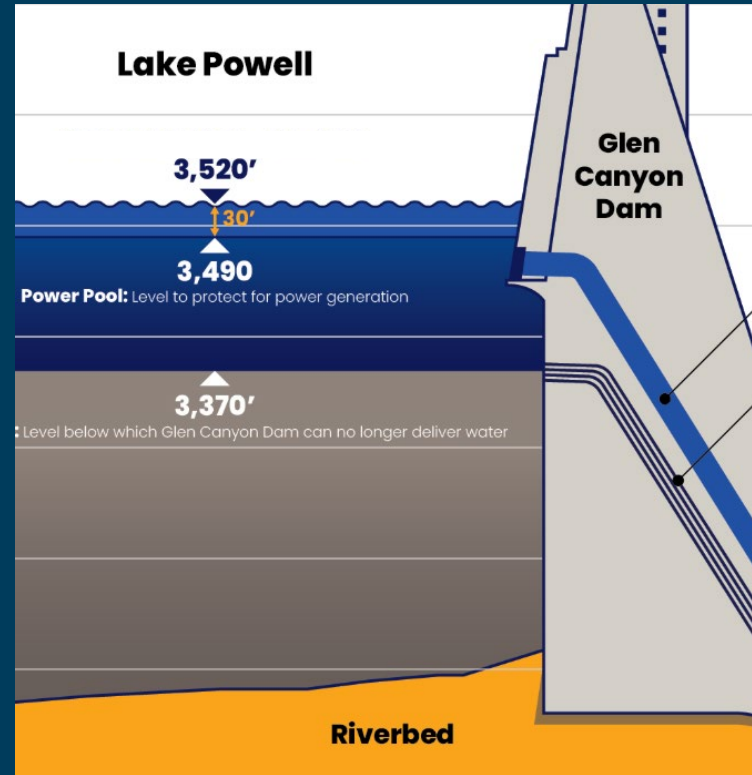
- **Lower Basin Reductions** – 1.25 MAF
(AZ -760 kaf, CA -440 kaf, NV -50 kaf) + Mex 250 ?
Lake Mead elevation 1,010 ft trigger additional cuts
- **Intentionally Created Surplus (ICS)** – Extends ICS by expanding the annual/max limits, allows delivery until 1,000 ft. (previously 1,075 ft). New delivery limitations between 1,000 ft to 1,025 ft.
- **Tribal Pool** – Lake Mead storage pool to ensure U.S. can meet trust obligation to AZ tribes (GRIC, etc..)
- **Additional Conservation** – “700+ Plan” 700,000 AF
(AZ – 300 kaf, CA – 300 kaf, NV – 100 kaf)



Lower Basin States Proposal

2027 & 2028 Operations

- **Lake Powell Release** – Reductions < 3,565 ft. 7.0 to 8.0 MAF and protect 3,500 ft (min. power pool elevation 3,490 ft.)
- **Upper Initial Units (UIUs)** – Min. 600 kaf release from Upper Basin reservoirs (above Lake Powell) to protect min. power pool
- **Glen Canyon Dam** – Implement a plan to address structural risks by end of 2028
- **Lake Powell Bypass Valves** – Implement a Pilot Test for extended releases through the river outlet works



Glen Canyon Dam diagram

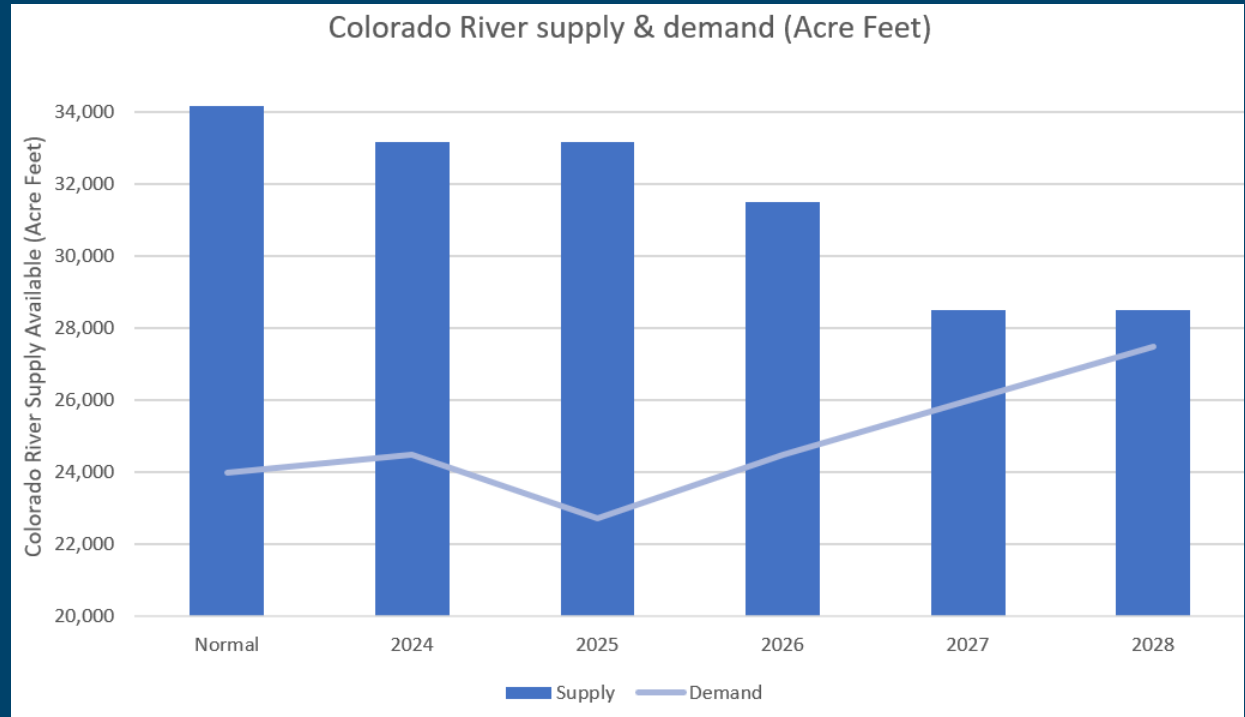
Colorado River Timeline

- ✓ **January 2025** – US Bureau of Reclamation published the Post-2026 Alternatives Report, excluding each of the alternatives proposed by the upper basin and lower basin states.
- ✓ **April 17, 2026** – Bureau of Reclamation announced Emergency Actions will begin on April 23, 2026
- ✓ **May 1, 2026** – Lower Basin States submit a short-term proposal to manage reductions in 2027 and 2028
- ✓ **May 8, 2026** – Bureau of Reclamation begins consultation with states and tribes on the preferred alternative in the final EIS. Includes a 10-year period with updates every two years.
- ✓ **June/July 2026** – Final Environmental Impact Statement (EIS) and Record of Decision for implementation on January 1, 2027.



Colorado River Impact to Chandler

- ✓ **Normal Year Supply**
(non-shortage year)
Chandler's CAP supplies
~ 34,000 AF
- ✓ **2024 & 2025 Tier 1 Shortage w/ DCP Mitigation**
Supplies exceed demand
- ✓ **2026 Tier 1 Shortage no DCP Mitigation**
Supplies exceed demand
- ✓ **2027 & 2028 Projections**
Assuming the U.S. accepts
the LB States proposal,
Chandler's shortage is 17%



Colorado River supply and demand 2024 to 2028

What makes Chandler unique?

Chandler is uniquely positioned to adapt to changes in water resource availability

- ✓ Diverse Supplies – Chandler’s back-up alternative water supplies can be used during a Colorado River shortage
- ✓ Water Recycling & Reuse – 100% reuse, reduces demand on drinking water supplies
- ✓ Decades of infrastructure investments
 - **1** Interconnected water distribution system, with flexibility to deliver multiple water sources to anywhere in Chandler
 - **2** Surface water treatment plants (SRP and CAP systems)
 - **33** Drinking water wells provide 100% back-up supply
 - **3** Water Reclamation Facilities – Every drop is treated and reused!
 - **6** Recharge facilities to store water in underground aquifers

What are we already doing?

Chandler has been preparing for surface water shortages for decades

- ✓ Water infrastructure investments
- ✓ Advanced Metering Infrastructure (AMI)
- ✓ Chandler Drought Team
- ✓ RWIF – Reclaimed Water Interconnect Facility
- ✓ Parks irrigation efficiency program
- ✓ Stormwater management and drywells
- ✓ Aquifer Recharge (injection wells & basins)
- ✓ Tiered rate structure to encourage conservation
- ✓ 100-Year Assured Water Supply Designation
- ✓ Conservation education and rebate programs



Recharge basins at Veteran's Oasis Park



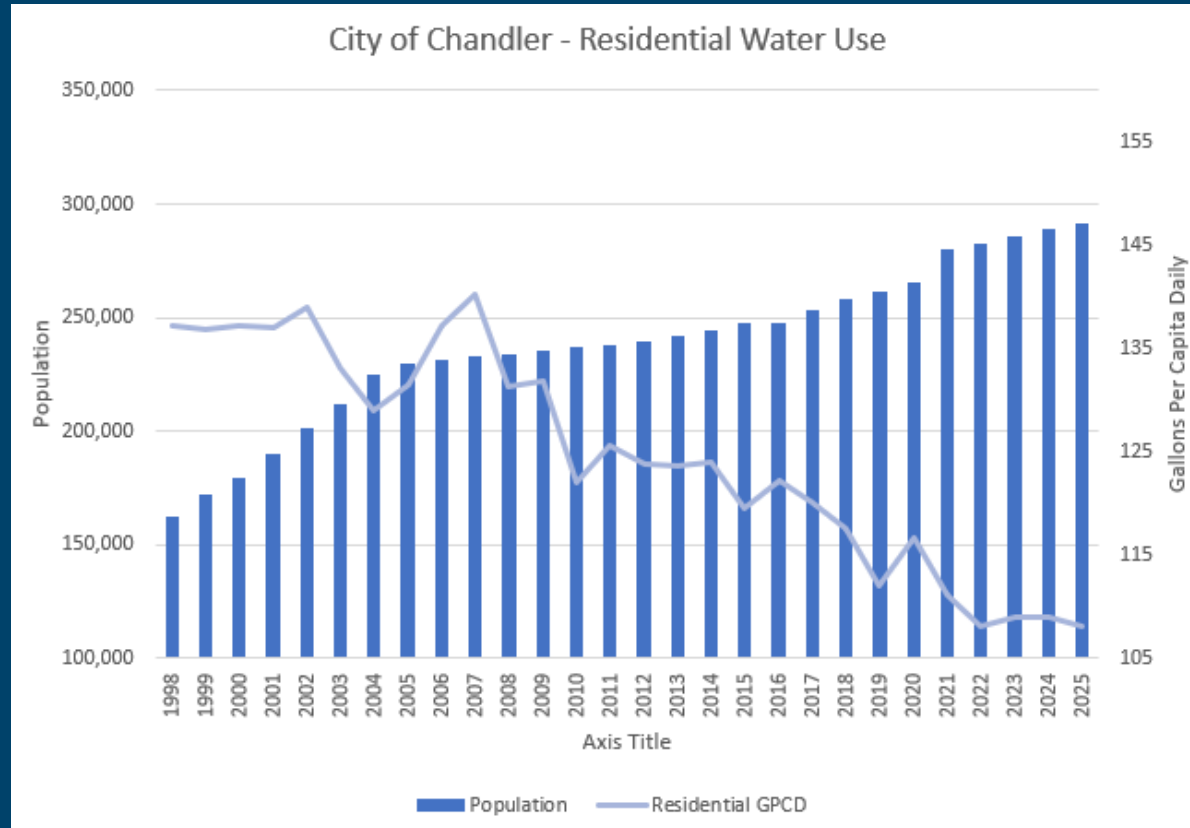
Water Conservation Successes

Grass removal incentives, leak alerts and water efficiency technology rebates. Conservation programs are changing the way Chandler uses water.

- ✓ **Continuous Consumption Alerts**— New in 2026! Advanced Metering Infrastructure (AMI) allows us proactively reach out quickly.
- ✓ **Reclaimed Water Evaluations**— New program in 2025. Communicating with all customers to enforce contract limits.
- ✓ **Single Family Grass Removal** — Roughly 165,000 sq ft of grass removed since Oct. 2023 and approximately \$300,000 in rebates.
- ✓ **Commercial/HOA Grass Removal**— Roughly 415,000 sq ft of grass removed since October 2023, and over \$1,000,000 in rebates.
- ✓ **Smart Controller Rebate**— Residential smart controller rebates have more than doubled. Over 400 installed and over \$30,000 in rebates.
- ✓ **Water Efficient Technology Rebate**— New program in Oct. 2023, with 22 customers approved and approximately \$200,000 in rebates.

Water Demand Trends

- ✓ Chandler water consumption:
57% Residential
43% Non-Residential
- ✓ Since 1998, population has nearly doubled, residential gallons per capita per day (GPCD) declined by 20%
- ✓ Improvements in water efficient appliances and xeriscape landscaping can lower residential GPCD
- ✓ Chandler total consumption is roughly the same as 10 years ago (excluding 2020 & 2021)



2025 Conservation Initiatives – City Facilities



New sub-meters on select city pools and all city facilities with cooling towers



Turf to xeriscape program in city retention basins, \$3 Million WIFA grant funding (2,000,000+ sq. ft.)



City Parks – reduced overseeding, smart controllers for all parks and 13 basins/medians



Partnered with SRP for funding landscape irrigation efficiency evaluations at all city parks



Consultant completed water efficiency evaluations for large city facilities and implemented updates



Where do we go from here?

Chandler is committed to conservation and smart water management

- ✓ Develop recommendations for new water conservation ordinances
- ✓ Continue conservation programs
- ✓ Parks irrigation efficiency program
- ✓ Prioritize Aquifer Recharge
- ✓ Evaluate tiered rate structure to encourage conservation – new cost of service study
- ✓ Utility customer Portal
- ✓ Expand Large Landscape Irrigation Efficiency Program
- ✓ Expanded messaging and public awareness campaigns



Recharge basins at Veteran's Oasis Park

2026 Public Awareness Campaigns

Expanded messaging - drought awareness, landscape rebates and outdoor water use tips

City Government of Chandler, Arizona
Sponsored

Due to drought in the Colorado River Basin and a Tier 2 shortage in 2023, Chandler has implemented Stage One of its Drought Management Plan. However, a Colorado River shortage does not mean shortage at the tap. Learn how Chandler has prepared for drought.

CHANDLER IS PREPARED
FOR A HOTTER AND DRIER FUTURE

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Water Conservation
Chandler's parks, pools, museums, art galleries, ...

City Government of Chandler, Arizona
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Lake Mead is at Historic Lows and a Tier 2 Shortage has been declared for 2023. Please limit outdoor water use. Learn how at chandleraz.gov/OutdoorWaterSavings

LIMIT OUTDOOR WATER USE
LAKE MEAD IS AT HISTORIC LOWS

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Help Chandler save water by doing absolutely nothing. Skip your winter lawn and make time for what you enjoy. Even better, you'll save water and money... save up to 8,000 gallons per year for every 1,000 square feet of grass you don't overseed.

SKIP WINTER GRASS THIS YEAR
AND SAVE THOUSANDS OF GALLONS OF WATER

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Did you know that more than half the water used by Chandler residents is used outdoors? One of the best ways to help save water is by replacing thirsty grass with drought tolerant native plants. Chandler offers rebates to replace your grass!

WATER-WISE REBATES
REPLACE GRASS WITH WATER-SAVING DESERT LANDSCAPE OR INSTALL A SMART CONTROLLER

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Chandler's parks, pools, museums, art galleries, ...



Next Steps

- ✓ **Develop Ordinance Recommendations** – Complete an evaluation of potential new water conservation ordinances and develop recommendations.
- ✓ **Public Awareness Messaging** – A new campaign will begin Fall 2026 to share information about how Chandler is preparing.
- ✓ **Reclaimed Water Agreements** – Continued customer engagement, offer water budgeting software and irrigation strategies, assist customers exceeding their allotment.
- ✓ **Regional Partnerships** – Participate in the feasibility study to modify Bartlett Dam and evaluate projects proposed to the Water Infrastructure Finance Authority Long-Term Augmentation.

Thank you!



Questions?