Greater Phoenix Economic Council

Photo Credit Visit Phoenix

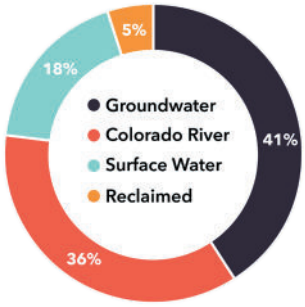
Arizona Water

Leading the nation with rigorous water conservation efforts.

Recent changes in the Colorado River have clients questioning Greater Phoenix's water supply and headlines across the country do not properly express the nuance of water supplies that vary by region – both in the southwest, but also across Arizona. We've convened water policy experts and consolidated their responses to commonly asked questions below.

How does Arizona get its water?

- Arizona has four primary water resources:
  - » Groundwater (41%)
  - » Colorado River (36%)
  - » In-state surface water (18%)
  - » Reclaimed water (5%)



- While Arizona does rely on Colorado River Water for a portion of its usage, it is less reliant than many of its neighboring regions like Southern Nevada (90%), Southern California (60%) and Colorado (40%).
- In-state surface water is delivered primarily through the Salt River and Verde River systems managed by the Salt River Project and are less susceptible to climate change. SRP system reservoirs are currently at full capacity.
- Arizona has 12 million acre-feet of water in reservoirs and underground – 1.75 times more water stored than it uses. Because of the legal infrastructure established by the 1980 Groundwater Management act, there is an assured 100-year water supply in managed areas. Groundwater is regulated in Greater Phoenix as part of the Phoenix Active Management Area (AMA).
- Municipal providers in Greater Phoenix reclaim 93% of water that enters water treatment systems and reclaimed water comprises approximately 12% of the Phoenix area's water portfolio.

KEY TAKEAWAYS:

Large scale site selection projects should not eliminate this market based on infrastructure demands (water, wastewater, electrical, etc.).

Greater Phoenix Economic Council continues to work with Metro Phoenix cities, utilities, and landowners to identify the top 'Industry Ready' sites to meet the needs of megaprojects.

There are 40+ sites larger than 200 acres with readily available infrastructure, zoning, and land use conformity in Greater Phoenix.

How has water usage increased year-over-year in Greater Phoenix?

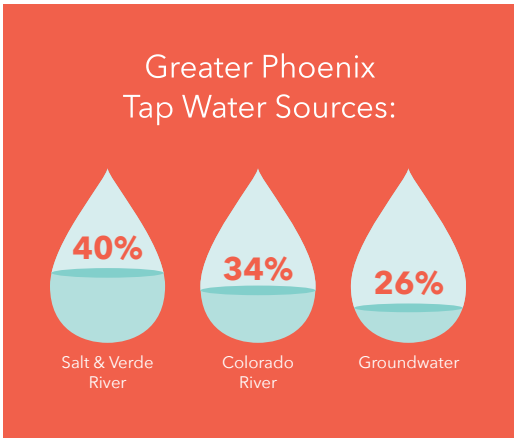
Total water use has remained steady or declined over time as water use has become more efficient in every sector.

- Arizona uses less water than 1957 despite nearly 7x population growth and 10x the economic growth

How do the Colorado, Salt, and Verde Rivers supplement Greater Phoenix water?

Greater Phoenix tap water needs are met mostly though delivers of Salt River, Verde River, and groundwater supplies. A large amount of Colorado River water has been "banked" in local aquifers in the event of a Colorado River shortage.

- As the western drought continues to affect the Colorado River, municipalities have begun to explore alternative water sources like a transfer of agricultural water rights, additional water leases held by Native American communities, direct potable use of reclaimed water, brackish groundwater extraction, and local reservoir expansion. Recent company announcements have illustrated alignment with the cities and Maricopa County in firms achieving net zero and environmental, social and governance (ESG) goals.



How does water access and allocation vary by municipality?

Each municipal or private water utility has its own portfolio of water supply and philosophy on water allocation.

- Municipalities evaluate projects for compliance of general land use plan and zoning. Communities in Greater Phoenix are also evaluating the highest and best use of their water supply with a review of a project's new tax revenue, jobs created, wages, industry, water, and wastewater demands.

How do cuts to the Colorado River impact municipalities and industry access to water supply?

The Bureau of Reclamation recently announced a Tier 2a shortage for the Colorado River. These impacts affected the seven upper and lower basin states that rely on Colorado River allocation. In Arizona, the impact fell mainly on the Arizona Water Banking Authority which uses water to recharge aquifers, and farms – particularly irrigation districts in Pinal County.

- If further deeper cuts are determined to be needed some central Arizona municipalities could be impacted, though most municipalities in the short term will use groundwater and other supplies to backfill shortage.

What is Arizona's plan for dealing with water shortages and shoring up long-term water supply?

Primary responsibility for dealing with water shortages fall to municipal, private water utilities, and agricultural irrigation districts.

- The newly created Arizona Water Infrastructure Finance Authority (WIFA) has been given powers to finance water augmentation projects – including $1 billion for projects that result in additional water supplies.
- The Bureau of Reclamation has announced plans to use at least some of the $4 billion IRA funding for conservation projects to preserve water in reservoirs and projects that lead to permanent reductions in water consumption – such as infrastructure augmentation.
- Future sources of water include desalinated-brackish groundwater, desalinated-ocean water, tribal leases, and direct potable reuse of claimed water.

What restrictions are currently placed on water use in Greater Phoenix?

Each of the four primary sources of water have individually set rules and regulations based on existing laws. For example, the Active Management Area (AMA) established in Phoenix has a management plan that is updated every ten years to address water use by all sectors.

- Municipalities also implement their own rules regarding water use. Restrictions tend to focus on outdoor water use and commercial cooling water use.

What limits are placed on private landowners with grandfathered rights to wells? What is preventing private landowners with a well from pumping water out of the ground without limits?

The 1980 Groundwater Management Act includes provisions to help prevent a scenario where private landowners operate outside of existing laws.

- Since 1980, new irrigated agriculture has been prohibited in active management areas (which encompass most of Greater Phoenix).
- The primary goal of the 1980 Groundwater Management Act was to push urban growth to renewable surface water supplies.

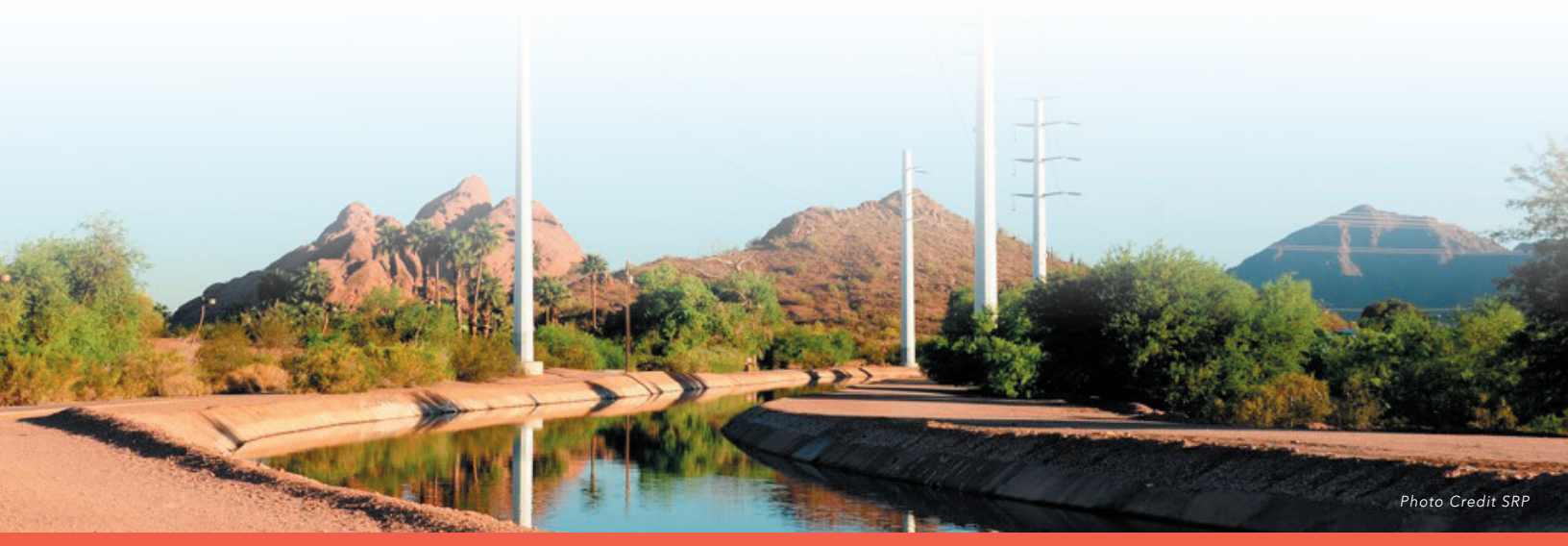


Photo Credit SRP