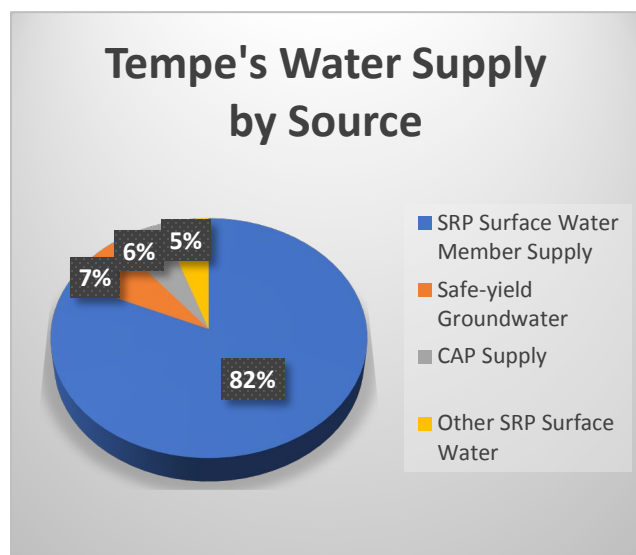




## Drought Resiliency and Preparedness Update Colorado River Shortage Awareness

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The City of Tempe relies primarily on treated surface water, the majority of which is supplied by Salt River Project (SRP), to meet the demands of Tempe's water service area.

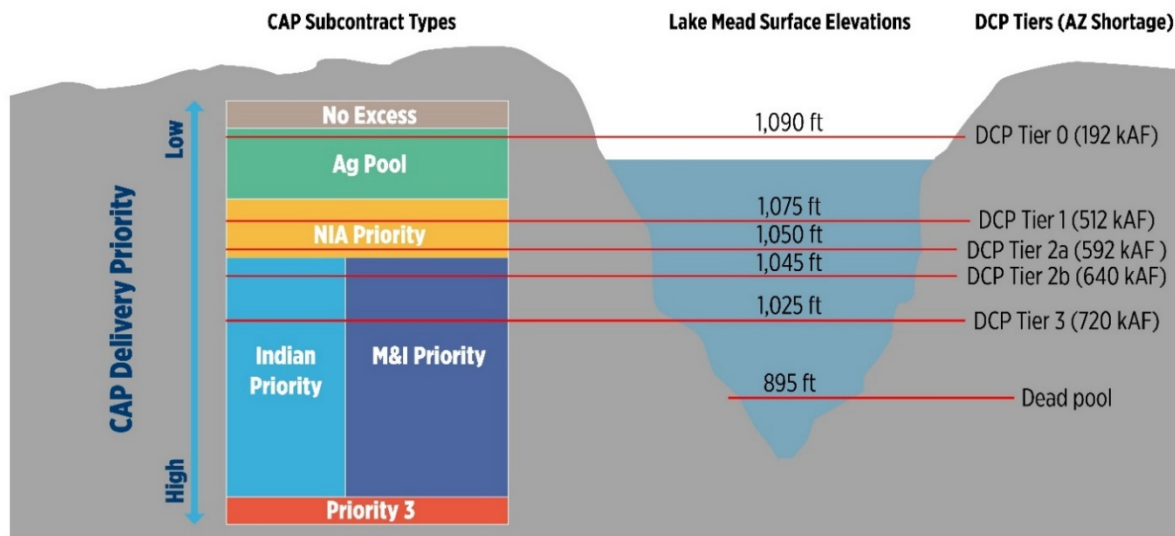


Over the last two decades, large portions of the Southwestern United States have experienced various levels of drought. Drought can reduce the amount of annual runoff from watersheds, which in turn can reduce the supply of available surface water collected in rivers and lakes. To ensure Tempe is prepared to meet potential water supply challenges, the Municipal Utilities Department's Water Utilities Division closely monitors drought conditions, maintains a robust and resilient water resources portfolio and operates an effective Water Conservation and Efficiency program.

Tempe's SRP and Central Arizona Project (CAP) renewable surface water supplies are managed to avoid significant surface water shortages. However, one area of concern is the on-going drought on the Colorado River basin. The vast watershed of the Colorado River is divided into two basins and covers portions of seven western states and Mexico. The river is managed by the United States Bureau of Reclamation and there are significant federal resources invested in monitoring and communicating drought status, runoff conditions and shortages. This massive reservoir system supports nearly five and a half million acres of farmland and provides water to more than 40 million people in the western United States and Mexico.



In the mid-2010s, the Colorado River reservoir system began experiencing difficulties maintaining the storage level at 50 percent. In order to prevent shortages that would necessitate restrictions on the operation of the Colorado River system, representatives from the Department of the Interior, the Bureau of Reclamation and each of the seven Colorado River basin states crafted agreements describing voluntary reductions in supplies and other measures that would be enacted should the water storage level continue to decline. The Drought Contingency Plan (DCP) effort in Arizona developed a package of agreements that came to be called the Arizona DCP Implementation Plan. In 2020, DCP officially started as the Colorado River system was deemed to be in DCP Tier 0 shortage. This resulted in the curtailment of Arizona's allotment of Colorado River water and a decrease in the CAP agricultural allotment. DCP Tier 0 shortages on the Colorado River system have no impact on Tempe's CAP supply.



Recent studies indicate that drought conditions on the Colorado River system will likely persist in 2022, which may result in an increase to the DCP Tier level and a slight reduction to Tempe's CAP allocation. Monitoring DCP shortage Tiers is critical to determining the potential impact on Tempe's CAP supplies. A potential reduction

is difficult to predict, but CAP and water managers estimate that the impact to Tempe’s CAP allocation by DCP Tier as indicated in the table below:

<b>DCP Tier Shortage</b>	<b>Estimated Reduction in Tempe’s CAP Allocation</b>
Tier 0	0%
Tier 1	0.2%
Tier 2a	0.5%
Tier 2b	3.4%
Tier 3	11.3%

It is important to note that the values in the table and graphic are estimates, based on many factors. These factors include the amount of Colorado River water available to CAP in the year shortages occur, whether or not all CAP sub-contractors take their full allotment of water and the level of Lake Mead’s surface elevation.

While a potential reduction in available CAP water is concerning, this source of surface water represents a very small fraction of Tempe’s total available water supplies. Tempe has sufficient water resources to meet the demands of the water service area, even in the event of a DCP Tier 3 shortage

on the Colorado River system. In this circumstance, Tempe would mitigate any physical shortage in CAP supply by increasing the use of water supplies from other existing sources, including SRP surface water and groundwater.

Municipal Utilities continuously strives to advance initiatives and activities related to drought resiliency and preparedness, including updates to the Water Resources Master Plan and the Drought Resiliency and Preparedness Plan. Water is critical to the Tempe community and cost-effective, secure provision of water provides an essential foundation for economic growth. Municipal Utilities is committed to providing the quantity and quality of water services necessary to all of Tempe, and to managing our urban water environment to ensure that the quality of life in Tempe is sustained.