

CITY OF TUCSON WATER DEPARTMENT  
DROUGHT PREPAREDNESS AND RESPONSE PLAN



Groundwater wells can provide backup supplies during severe drought.

## CHAPTER FOUR

### EMERGENCY OR BACKUP SUPPLIES FOR POTABLE WATER

Guidelines for development of drought preparedness and response plans were provided by ADWR to assist water providers in completing meaningful plans. A discussion of emergency, or backup, potable water supplies is an essential element of the drought preparedness and response plan. This section will address Tucson Water's potable backup supplies for meeting service area demands as well as address agreements with other local water providers for emergency water supplies.

#### **Tucson Water Backup Supplies**

Decades of water supply and system infrastructure planning have resulted in a water system that utilizes both CAP water and groundwater for most of the Tucson Water service area, with the exception of isolated water systems which depend solely on groundwater. The conjunctive use of groundwater and surface water supplies, particularly the operation of the Clearwater recharge and recovery system, provides a great deal of resilience to the Tucson Water supply system during water emergencies as well as during times of local drought.

Tucson Water's resource planning and system design staff acknowledge the similarity in certain operational responses to water emergencies and severe drought conditions while recognizing that drought itself is not an emergency situation. Drought does not occur suddenly and without warning. Rather, careful observation of key drought indicators will allow for implementation of responses to avoid reaching emergency conditions.

However, should a prolonged unforeseen crisis occur with delivery of surface water supplies, such as damage to the CAP canal or a long-term declared shortage on the Colorado River causing a reduction in CAP water deliveries to Tucson, groundwater supplies would serve as emergency backup for the City of Tucson. Although long-term reliance on groundwater is not a preferred alternative, and is not advisable from a Utility policy, regulatory, or environmental standpoint, short-term reliance will provide a reliable emergency supply should Tucson Water customers need it.

#### **Emergency Supply Policy for Other Water Providers**

Other water providers in the greater Tucson region may occasionally experience difficulty in meeting customer demand due to a variety of supply or infrastructure issues. The City of Tucson currently has "interconnect agreements" with some area water providers for such specific needs as fire protection capacity or other emergencies related to water supply or infrastructure. As stated above, drought is not an emergency and *these agreements do not cover water shortages due to drought.*

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However, it is possible the Utility could occasionally be asked to provide water on an emergency basis to other water providers who may have less resource or system reliability than Tucson Water during a severe drought. Such requests for drought-related, short-term emergency supplies will be reviewed on a case by case basis. The Water Director will expedite review of the request and forward a recommendation to the Mayor and Council, or if a quorum is not available the Mayor or Mayor's designee, for approval or denial of the request based on the following guidelines:

1. Short-term drought supply assistance will only be provided to alleviate a public health or safety condition. A public health or safety condition is defined as inadequate water supply to provide for fire flow capacity, essential human uses or to meet the requirements of healthcare establishments.
2. Short-term drought supply assistance will only be provided if the Utility can adequately meet the projected needs of its customers on a continuing basis.
3. Short-term drought supplies will be provided at a price equivalent to three times the Commercial Customer rate. The price is in part determined by the fact that the water supply is being provided during peak demand times and therefore is going to be more expensive for the Utility to provide than water delivered during off-peak times.
4. Recipients of short-term drought supplies are required to implement in their service area drought response measures equal to or more stringent than Tucson Water's Stage 4 drought response measures. Recipients of these short-term supplies also must make provisions for developing their own alternative water supplies.
5. The duration of short-term drought supply shall not exceed 90 days (subject to approval of the Mayor and Council) while alternative supplies are being developed. However, the Utility has the right to discontinue emergency service at any time.