Drought Preparedness and Response Plan

Original version:
- Required by A.R.S. §45-342, submitted to ADWR
- Approved in 2006, minor updates in 2012 and 2017

Key updates:
- Drought stages and thresholds are now aligned with the 2019 Drought Contingency Plan tiers
- Demonstrating how the Utility has diversified its water supply portfolio, increased water savings, and improved infrastructure redundancy
- Integrating climate change adaptation planning into the drought plan and One Water 2100
- Streamlining the drought responses and incorporating a strategic, data driven approach (water use guidelines) rather than relying on the Emergency Water Ordinance (short term, reactive responses that are difficult to enforce)
Water Director advises City Manager to declare Tier 0 when Lake Mead’s elevation is between 1090’ and 1075’ (current status in Jan. 2021)

City response measures:

- Continuation of Tucson Water’s conservation program
- Public notification and education campaign based on current drought conditions
- City departments start conducting water audits
- Tucson Water continues or accelerates ongoing operations and maintenance programs to ensure that production and distribution capacity exceed peak demand

Community / customer response measures:

- Increased awareness of drought conditions and conservation program options
Water Director advises City Manager to declare Tier 1 when Lake Mead’s elevation falls below 1075’

City response measures:

- Continue Tier 0 measures
- City departments begin implementing water audit recommendations
- Tucson Water will provide targeted conservation program information for customers whose consumption exceeds their specific water use guidelines
- Mayor and Council will initiate an automatic review of the Water Service Area Policy (WSAP) to consider suspending new Requests for water service through Pre-Annexation Development Agreements and assess whether other adjustments to the WSAP are needed

Community / customer response measures:

- Continue Tier 0 measures
- Customers will receive information about their water use guidelines
- If a customer’s consumption exceeds their guidelines, they will also receive targeted conservation recommendations
- Potable water will not be available as a backup supply for the reclaimed system, unless a delivery system failure occurs
Drought Preparedness and Response Plan

City Manager advises Mayor and Council to declare Tier 2 when Lake Mead falls below 1045’

City response measures:
- Continue Tier 0 & 1 measures
- Tucson Water will provide water audit assistance for customers whose consumption continues to exceed water use guidelines
- Mayor and Council may consider a drought surcharge
- Mayor and Council will suspend new requests for water service through Pre-Annexation Development Agreements and assess whether other adjustments to the WSAP are needed

Community / customer response measures:
- Continue Tier 0 & 1 measures
- Customers whose consumption continues to exceed water use guidelines will be required to conduct water audits
City Manager advises Mayor and Council to declare Tier 3 when Lake Mead falls below 1025’ or the volume of water delivered by the Central Arizona Project to Tucson Water is less than annual potable demand

City response measures:

- Continue Tier 0, 1 & 2 measures
- If water consumption does not decrease as a result of earlier drought tier responses, Mayor and Council may consider water use restrictions for customers whose consumption continues to exceed their water use guidelines

Community / customer response measures:

- Continue Tier 0, 1 & 2 measures
- Customers whose consumption continues to exceed water use guidelines must implement water audit recommendations
Current drought status: Tier 0

- We will continuously monitor the Bureau of Reclamation 24-month studies and prepare for Tier 1

Lake Mead Projections
Implementing the Drought Plan

Already underway:
- Outreach and education
- Delivering a diversified, resilient water supply
- Conservation and GPCD
- Leading by example
- Emphasizing the importance of green infrastructure and storm / rainwater harvesting

Under development:
- Developing water use guidelines with GIS and IT support
- Working with New Development as Mayor & Council review the Water Service Area Policy and Pre-Annexation Development Agreements
Drought responses underway:

- Outreach and education

Tucson Water Social Media

Follow Tucson Water.

- Tucson Water on Twitter
- Tucson Water on Facebook
- Tucson Water on Instagram
- Tucson Water on YouTube
Historical Water Use (1940-2019)

- Delivering a diversified, resilient water supply
Drought responses underway:

- Conservation and GPCD
Drought responses underway:

• The City of Tucson is leading by example
  • Water audits for all City facilities, currently focusing on Parks and Housing & Community Development
  • “Desktop” audits are being conducted in lieu of site visits
  • Recommendations that are provided during the audits must be implemented in Tier 1
Drought responses underway:

- Emphasizing the importance of green infrastructure and storm / rainwater harvesting
  - Rainwater harvesting rebates
  - Green Stormwater Infrastructure Fund
    - A pilot program to build and maintain public projects that capture stormwater runoff from streets and parking lots and divert it into vegetated water harvesting areas
  - Program coordinators for the Tucson Million Trees and GSI Fund have been hired

- We can increase tree canopy and adapt to climate change while keeping GPCD low by increasing rain and stormwater harvesting
• Developing water use guidelines with GIS and IT support
• Supporting Mayor & Council when they review the Water Service Area Policy and Pre-Annexation Development Agreements

Under development:
We have increased drought resilience through a diversified supply portfolio and water savings.

We need to be able to adapt to climate change while improving drought resilience.

Groundwater is available as a backup, but only when long term savings of CAP have been depleted. We save 1/3rd of our allotment every year.

The Reconsultation committee’s final agreement will affect the next version of this plan.