

PIMA COUNTY LOCAL DROUGHT IMPACT GROUP
Wednesday, November 10, 2021
Via Microsoft TEAMS
RECAP

Attendance: Kathy Chavez (Pima County Office of Sustainability and Conservation), Némesis Ortiz-Declet (Arizona Department of Water Resources), Erin Boyle (National Weather Service), Mitch Basefsky (Central Arizona Project), Mark Johnson (Tortolita Alliance), Justyn Dillingham (Pima County Communications Office), Mead Mier and Melanie Alvarez (Pima Association of Governments), Asia Philbin (Marana Water), Arturo Gabaldón and Glen Barnes (Community Water Company of Green Valley), Wally Wilson (Metro Water), Jessica Rodriguez (Tucson Water), Linda Mayro and Colby Bowser (Pima County Office of Sustainability and Conservation), Christine Olsenius (Green Valley), Joseph Tabor and Sharon Browning (Pima County Health Department), Vanessa Barchfield (Pima County Supervisor Heinz office)

1. Welcome & Introductions – Kathy Chavez, OSC, welcomed attendees and announced them.
2. Review September 8 LDIG meeting - Kathy Chavez, OSC
 - a. ADWR provided updates.
 - b. NWS summarized 2021 monsoon season, 2nd wettest
 - c. CAP updated Colorado River status and probabilities for additional tier shortages beyond 2022
3. Arizona Department of Water Resources Updates - Némesis Ortiz-Declet, ADWR
 - a. Short-Term and Long-Term Drought Status – May-September 2021 short-term drought. In May, Extreme and Exceptional drought covered most of the state. This was followed by the active monsoon season in July and August with wettest July on record. By August, most of the state was in Moderate drought with Exceptional drought eliminated. Extreme drought decreased to cover only 14% of the state. In October, drought slightly improved but Extreme drought remains in northeast and western areas. Moderate drought covers 43% of the state. October 2020-September 2021 long-term drought. October-December 2020 experienced increasing drought following a lack of monsoon, drought continued increasing through January-March 2021 with most of the state in Extreme drought. This changed in July-September 2021 after an active monsoon season to Moderate and Severe drought in southern areas and Extreme and Exceptional drought in northern areas.
 - b. Recap of November 10 Interagency Coordinating Group meeting. Recommendation to the Governor to extend emergency drought declaration. 2021 Arizona Drought Preparedness Report to be published first week of December 2021.
 - c. ADWR drought workshop on December 2, Monitoring Technical Committee meets January 5, 2022, Governor's Water Augmentation, Innovation and Conservation Council meets November 30, 2021.
4. Cienega Creek and Davidson Canyon Monitoring Update, Melanie Alvarez, PAG
 - a. The rare shallow groundwater dependent ecosystem, Davidson Canyon, flows into Cienega Creek. The watershed runs from Sonoita to Vail supporting groundwater recharge. Davidson Canyon and Cienega Creek are designated Outstanding Arizona Waters supporting diverse wildlife. Representative of perennial waters in supporting critical, valuable habitat.
 - b. Review of wet/dry maps. Water levels are close to the surface, within 50 feet or shallower in many areas.

- c. Increase in heat and drought and water use for natural areas and increase in well population as competing uses. Pima County's Cienega Creek Natural Preserve offers protection and lessens impact. Dr. Jennifer Macintosh, UA, study finds decreased recharge contributes to lower Cienega Creek flows since 2017.
- d. Monitoring conducted four times annually for both waters, including pre-monsoon when baseflow is at its minimum and vegetation most stressed.
- e. Review of measurement of pre-monsoon flow extent, maximum and minimum. Records go back to mid-1980's and results indicate a downward trend in pre-monsoon flows during the current 20-year drought. Less than a mile of baseflow extent in June 2021. PAG doesn't measure stormflow. In June 2021, seven percent of lower Cienega Creek extent was wet. No upstream flows, but some pools. Quarterly 2020-2021 monitoring indicated lowest flows on record in all four seasons.
- f. For the first time, no flow was present in Davidson Canyon on quarterly monitoring dates from September 2020 through June 2021.
- g. Monsoon precipitation totals in the Cienega Watershed ranged from 1 to 7 inches in 2020 and 10 to 20 inches in 2021.
- h. Less Gila Chub observed since sedimentation following the 2017 Sawmill Fire. No leopard frogs sighted by PAG in Davidson Canyon for over 10 years. Pima County Regional Flood Control District partnering with Watershed Management Group for erosion and water retention restoration project.
- i. Increased baseflow in September following monsoon. Highest baseflows in 20 years with over seven miles in Cienega Creek and over two miles in Davidson Canyon. Increased groundwater levels. Erosion and some landslides.
- j. Questions: Any observed impacts to vegetation? Cottonwoods are stressed due to long-term drought conditions.

5. Drought Updates

- a. Kathy Chavez – Annual LDIG report submitted to ADWR and on line. Working with Office of Emergency Management on update of 5-year Multi-Jurisdiction Hazard Mitigation Plan. Updating website and can provide links to water providers' drought response plans.
- b. Arturo Gabaldon and Glen Barnes, noted the benefits of water providers' collaboration with AzWarn to share resources for water emergencies
- c. Erin Boyle- update on the 2021 water year. It was the 24th warmest. Water year 2022 has started with a drier than normal October. Warm for November and no rain. Outlook for 8-14 months is above normal temperature and below normal precipitation. Expected through winter. Of the last 24 La Niña winters, only three had above normal precipitation. Two wildfires have occurred in Arizona in October.
- d. Christine Olsenius – Green Valley Council providing water issue forums for their residents to improve education.
- e. Mark Johnson- Monsoon rains resulted in invasive grasses. Town of Marana assisting with buffle grass removal in November.
- f. Mead Meir – New heat maps on PAG website.
- g. Melanie Alvarez – Planning December monitoring of Cienega Creek and Davidson Canyon.
- h. Mitch Basefsky- CAP progress on 1030 consultations. Adding additional 500,000 acre-feet to Lake Mead, on top of Arizona's 520,000 acre-feet. Planning for drought, compensation for conservation roundtable.
- i. Wally Wilson – Metro Water is contributing to system conservation through 2026. Participating in additional conservation. 25% of their allocation is going to Lake Mead to preserve lake levels.
- j. Sharon Browning- Health Department providing at home COVID testing kits.

6. Adjournment and next meeting is January 12 Notes and presentation materials will be posted on the [LDIG Website](#).
7. Meetings 2022 dates: via Teams until further notice. January 12, March 9, May 11, July 13, September 14 and November 9