

Pima County Local Drought Impact Group 2009 Annual Report

Introduction Pima County's Local Drought Impact Group (LDIG) consists of water providers and local, state and federal agencies; and meets regularly to monitor drought conditions, discuss drought impacts and coordinate drought declarations and responses. During 2009 presentations were made on the drought impact reporting system *AzDroughtWatch*, climate change in the Colorado River basin along with Central Arizona Water Conservation District's response actions and USGS methods for estimating flood magnitude and frequency using stream gage data.

Status of Drought Drought Conditions continue to persist in Pima County. For the eighth straight year Tucson recorded below average precipitation. The 2009 monsoon season was atypical and produced below average precipitation, particularly in August. According to the National Weather Service, 2009 saw the coolest June since 1998, the third warmest July and the 2nd warmest August. The 2009 monsoon season was the 8th warmest and 13th driest since the National Weather Service has been recording temperature and precipitation. The consensus of Pima County's LDIG is that the drought is not over.

Drought Impacts The impacts of sustained drought are being observed in several sectors throughout Pima County:

- For ranchers, impacts to stock ponds and grasses indicate the drought is worsening.
- Stream flow at Cienega Creek was one tenth of the flow seen in pre-drought years (1992-2002). Groundwater levels measured adjacent to the creek were four to six feet lower than at the same time the previous year and stream flow length in September was two miles or about half the average September flow, as measured since 2001.
- The lack of spring flow at Agua Caliente Park required supplementing flow with groundwater; however, pumping was limited due to falling groundwater levels.
- Stormwater harvesting at the Kino Environmental Restoration Project was below previous years resulting in the need to purchase reclaimed water to supplement irrigation.
- Despite the warm, dry summer weather patterns, water utilities have reported reduced water demands and a later than normal peak use day.

Comparison of Different Areas The short-term and long-term drought status in the far western area of Pima County has fared slightly better than the remaining areas of the county. The Lower Gila River Watershed has ranged from normal to abnormally dry, whereas the San Simon River and Santa Cruz River watersheds have ranged from abnormally dry to severe drought.

Drought-Related Actions The City of Tucson and Pima County are conducting a multi-year study of water and wastewater infrastructure, supply and planning issues. As part of this effort a technical paper on drought management was prepared. It recommends continued coordination of drought response actions for the region and an adaptive planning approach. Additionally, the Study Oversight Committee prepared a primer on drought and drought preparedness. The technical report and drought primer are available on the study's website at: <http://www.tucsonpimawaterstudy.com>

The City of Tucson published its 2009 Annual Drought Monitoring Report which recommends continuation of the Stage 1 Drought Response. The report is available at: <http://www.tucsonaz.gov/water/pubs-gi.htm>

Tucson also approved a rainwater harvesting ordinance that mandates commercial properties to meet 50 percent of their landscaping water requirements by capturing rainwater. The ordinance is effective June 1, 2010.

Each of the water providers has prepared a drought response plan on file with ADWR. As of September 2009 the status of regional drought declarations had not changed from 2008. The status of drought declarations is:

Regional Drought Declarations

Entity	Drought Declaration
Pima County	Stage One Alert
City of Tucson	Stage One
Town of Oro Valley	Stage One
Town of Marana	Stage One Alert
Metropolitan DWID	Stage One Alert
Community Water of Green Valley	Stage One Alert

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