

Pima County Local Drought Impact Group 2012 Annual Report to ADWR

Introduction: Pima County's Local Drought Impact Group (LDIG) has been active since 2006 when the Board of Supervisors adopted the Drought Response Plan and Water Wasting Ordinance (Chapter 8.70). LDIG consists of water providers and local, state and federal agencies that have an interest in drought conditions in Pima County. LDIG meets bimonthly to monitor the short term and long term drought status, discuss drought impacts and coordinate drought declarations and responses.

During 2012, LDIG explored the impacts of drought on various sectors in Pima County including agricultural water use, ranching, wildfire, hydrology, and flooding. Because many providers depend on Central Arizona Project water, LDIG also monitors the status of the Colorado River. The El Niño Southern Oscillation and other climate weather patterns were discussed in relation to their effect on drought conditions and climate variability in the Southwest. LDIG also monitored the status of the summer monsoon season and held a roundtable discussion of drought and water conservation outreach programs.

LDIG's meeting agendas, presentations and past meeting summaries can be found on Pima County's [LDIG website](#).

Status of Drought: Short-term drought conditions in Pima County did not improve during 2012. According to the U.S. Drought Monitor, all of Pima County was in some stage of drought throughout the year. Approximately 80 percent of Pima County was consistently at Stage D2-Severe while the remaining western 20 percent of the County remained at Stage D1-Moderate. Pima County's Long-term drought status worsened during 2012. The year began with Santa Cruz River watershed in moderate drought, the San Simon watershed in severe drought and the Lower Gila River watershed in no drought. By July, the Santa Cruz River watershed had worsened to severe drought, the San Simon watershed was at extreme drought and the Lower Gila River watershed was abnormally dry. Long-term drought status is expected to improve slightly reflecting a near-normal summer monsoon season.

For the second straight year, a La Niña weather pattern suppressed winter precipitation producing only 0.56 inches compared to a normal of 2.53 inches from January through March. Snowpack conditions in the Rocky Mountains generated lower than normal flows to the Colorado River and major reservoirs along the Colorado River were 57 percent full at Lake Powell and 50 percent full at Lake Mead. These reservoirs levels mean shortages on the Colorado River will not be declared anytime in the near future.

The summer monsoon season produced a near normal 6.02 inches of precipitation. Normal precipitation for June through September is 6.08 inches. Summer temperatures were warm. June recorded 20 consecutive days of triple digits. July was cooler with only ten days of triple digit temperatures and 1.3°F below normal. August, however, was warm with four days of high temperatures that set or tied previous records. September temperatures were closer to average with the monthly average temperature a one-half degree above normal.

Despite persistent drought conditions, LDIG recommends Pima County remain at Drought Stage One. The major water providers are also maintaining a Drought Stage One.

Drought Impacts: The impacts of sustained drought continue to be observed in Pima County:

- Ranches are experiencing both drying stock ponds and decreased pasture grasses. Low winter precipitation resulted in a decrease in native grasses on pasture lands requiring ranchers to move their herds, take them to market sooner or purchase supplemental feed. Dry stock ponds also mean herds must be moved or ranchers must haul water at considerable cost.
- This summer the stream flow length at the Cienega Creek Preserve was reported to be at its shortest since 1975 when record keeping started. The Pima Association of Governments reports that the Creek flowed only 1.24 miles in total among the intermittent perennial segments in June 2012. By contrast, there were 9.5 miles of perennial stream flow during wetter years in the early 1980's. Decreased stream flow length has adverse impacts to the riparian habitat and wildlife that depends on perennial flow.
- Agua Caliente Park, a spring fed oasis located at the base of the Catalina Mountains continued to receive groundwater to supplement spring flows to one of its ponds. Of the three ponds on the property, one has been dry since 2003, the second is nearly dry and the third is being supplemented with groundwater to support the wetlands habitat. When Pima County acquired the park in 1984, spring flows were 150 gallons per minute. Last summer, measured flows were 1.5 gallons per minute. Pima County continues to supplement flow from groundwater wells, although continuation of this practice is not sustainable in the long term.

Drought Indicators: Pima County LDIG continues to use the U.S. Drought Monitor as an indicator of drought severity. The U.S. Drought Monitor is also used by the ADWR Drought Monitoring Technical Committee providing continued consistency and timely updates.

Drought-Related Actions: Water providers continue to promote water conservation and are focusing their message on water efficiency and reliability, rather than drought-specific messages. Some are implementing rebate programs, irrigation efficiency programs, use of low-water fixtures, drought tolerant landscapes and community education.

In 2010 Pima County and the City of Tucson completed a Water/Wastewater Study [Action Plan](#) and are in Year Two of its implementation. Actions underway during 2012 included an update to the City of Tucson's Drought Preparedness and Response Plan, increased reclaimed water system efficiencies, increased use of renewable sources of water including reclaimed water and Central Arizona Project water and model city/county building codes that reduce the water/energy footprint in new and renovated buildings. The status of local drought declarations remains unchanged from 2011. The status of the 2012 drought declarations in Pima County is:

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