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Governor

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Mr. Kevin Kinsall, Natural Resources Policy Advisor  
Office of Governor Jan Brewer  
1700 West Washington Street  
Phoenix, Arizona 85007

**Re: Recommendation to Maintain the Drought Emergency Declaration  
PCA99006 and Drought Declaration issued by Executive Order 2007-10**

Dear Mr. Kevin Kinsall,

This letter provides the fall update on Arizona's drought conditions and recommendations to the Governor from the Drought Interagency Coordinating Group (ICG). The ICG, comprised of state, federal, tribal and non-governmental organizations, is an advisory body to the Governor on Arizona drought issues. This group meets in the spring and fall to evaluate drought conditions and provide recommendations regarding emergency declarations due to drought to the Governor. The Drought ICG is an important part of the state's overall drought preparedness strategy as described in the Arizona Drought Preparedness Plan and the progress reports prepared annually. The ICG met on November 5, 2013 and, based on the findings below, recommends that the state's Drought Emergency Declaration (PCA99006) and Drought Declaration for the State of Arizona (Executive Order 2007-10) be continued.

During the November 5th meeting, reports were provided by the Arizona Department of Water Resources on the impact of Colorado River hydrology on Arizona; the State Drought Monitoring Technical Committee on drought status, climate conditions and outlook; the State Forestry Division on the 2013 fire season and forest health; the Arizona Game and Fish Department on the impacts of drought on wildlife; the USDA Natural Resources Conservation Service on the 2013 forage loss and 2014 outlook; and Arizona State Parks on observed drought impacts. The main points described below form the basis of the Drought ICG's recommendations:

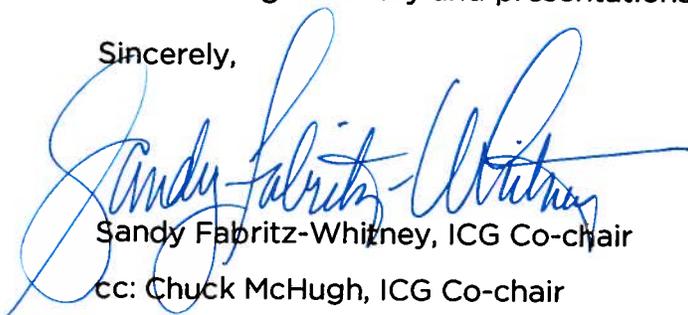
- The entire state continues to be in some level of drought, with only 15% of the state having no drought. Although most parts of the state are experiencing abnormally dry conditions or moderate drought, some areas are in severe or extreme drought. The driest conditions continue to occur in the south central and southeastern parts of the state.
- Although winter 2013 precipitation was marginally wetter than winter 2012 in the Salt and Verde watersheds and the upper Colorado Basin, these basins received less than 70% of average annual precipitation, while western and southern Arizona received less than 50% of average annual precipitation. Temperatures were warmer in the higher elevations, leading to more winter rain and less snow. The 2013 monsoon was wetter than average. The long-term drought status compared to last year shows improved conditions in the Salt, Santa Cruz and Lower Gila watersheds and worse conditions in the Little Colorado and San Pedro watersheds.
- The current Colorado River reservoir system storage stands at 50% of total system capacity as of November 4, 2013 compared to 56% at this time last year. It is projected that Lake Powell and Lake Mead storage will generally decline through 2015. The Colorado River Basin is experiencing a 14-year drought and the past 14 year's average inflow is the lowest since Glen Canyon Dam began filling in 1963. Due to the low runoff experienced in water years 2012 and 2013, the US Bureau of Reclamation's August 24-month Study projected that Lake Powell's release for water year 2014 will be reduced to 7.48 million acre-feet, a decrease of 750,000 acre-feet from the normal annual water year release of 8.23 million acre-feet. The lower release could lead to a shortage declaration by the US Secretary of the Interior as early as calendar year 2016. It should be noted in September 2013, inflows into Lake Powell totaled 857,000 acre-feet (210% of average). Because of this inflow, the probability of a shortage in the Lower Colorado River Basin has been reduced from 49% to 43%.
- Drought conditions continue to impact forest health and habitat conditions for wildlife. At best, the state is at 60% of historical greenness for this time of year, with most of the state below 40%. Greenness is a visual indication of the moisture available in the vegetation based on the National Drought Mitigation Center "VegDRI" maps. These maps are produced every two weeks from satellite observations of vegetation conditions, climate data, and other biophysical information such as land cover/land use type, soil characteristics, and ecological setting. The greener the vegetation, the more moisture is available to the vegetation for growth. Being at significantly low levels is a visual indicator of long-term drought effects.
- If localized drought conditions continue to occur on forested lands, bark beetle activity, mainly in the ponderosa pine forest type in and around recent fires, is expected to increase. Woodland health in old and new areas infested with pinyon needle scale will also be more heavily impacted if localized drought conditions continue (i.e. Prescott, Sedona, and Payson).

- The impact of drought on range and farmland resulted in USDA disaster designations for all counties except Mohave. According to the USDA Natural Resources Conservation Service (NRCS), crop production losses from 20 -80% are expected across all affected counties. Average forage production was approximately 66% of normal across the state. Though winter rains in 2013 brought some improvement in forage conditions compared to previous winters, conditions only slightly improved, and spring and early summer were relatively dry. Forage conditions improved during the monsoon except in low elevations and desert regions in the south central part of the state. The NRCS reported that livestock water (dirt ponds, water harvesting catchments, springs and wells) “were all impacted by water shortages, although the monsoon did help to replenish some supplies.”
- The official outlooks from NOAA’s Climate Prediction Center for January through March 2014 show slightly better chances for above average temperatures and slightly enhanced chances for below normal precipitation. The official outlooks for June through August show much better chances for above average temperatures and equal chances for above or below normal precipitation. USDA Natural Resources Conservation Service Field Offices report that below normal forage production is expected for the 2014 spring season.

The updates confirmed that Arizona remains in long-term drought with most of the state experiencing abnormally dry to moderate drought conditions. Projections include warmer temperatures, lower than average precipitation and persisting or intensifying drought. Based on this information, the Drought ICG unanimously recommends that both drought declarations be kept in place.

The meeting summary and presentations are posted on the [ADWR drought website](#).

Sincerely,



Sandy Fabritz-Whitney, ICG Co-chair  
cc: Chuck McHugh, ICG Co-chair

Enclosures:

- PCA99006 Drought Emergency Declaration
- Executive Order 2007-10 Drought Declaration for the State of Arizona