



DOUGLAS A. DUCEY
Governor

THOMAS BUSCHATZKE
Director

ARIZONA DEPARTMENT of WATER RESOURCES
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May 22, 2015

Mr. Hunter Moore, Natural Resources Policy Advisor
Office of Governor Douglas Ducey
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. Hunter Moore,

This letter provides the spring 2015 update on Arizona's drought conditions and recommendation to the Governor from the Drought Interagency Coordinating Group (ICG). The ICG is an important part of the state's overall drought preparedness strategy as described in the Arizona Drought Preparedness Plan and the Plan's annual progress reports. 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 to the Governor regarding emergency declarations due to drought. The ICG met on May 7, 2015 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.

The May 7 meeting included the following presentations:

**Drought Status Update and Activities of the Monitoring Technical
Committee**

Nancy Selover, Arizona State University,

Summer 2015 Outlook and Winter 2015-2016 Preview
Mark O'Malley, National Weather Service

Colorado River - Water Supply Update
Tom Buschatzke, Arizona Department of Water Resources

Salt & Verde Watersheds- Water Supply Update
James Walter, Salt River Project

Wildfire Outlook
Jeff Whitney, Arizona State Forestry

Update on California Drought
Chris Harris, California Colorado River Board

The main points described below form the basis of the Drought ICG's recommendations:

1. Drought status

Although the long-term drought status has improved somewhat from one year ago, most of the state continues to experience moderate to severe drought as can be seen in the table below. The only drought-free area is in the southwestern part of the state.

Long-term Drought Status as of March 31, 2015	
No drought	15%
Abnormally dry	22%
Drought moderate	59%
Drought severe	5%

This is the fifth consecutive dry winter within the Salt and Verde watersheds and the fourth consecutive dry winter in the Colorado River Basin. The few winter storms this year were relatively warm, resulting in minimal snowpack across the higher elevations of northern Arizona and the Mogollon Rim and therefore minimal spring run-off. Winter precipitation had its greatest impact on southern Arizona, greening up grasses for a short period before warm temperatures and winds dried them out again, potentially leading to a busy wildfire season.

2. Weather outlook

The official Climate Prediction Center summer outlook calls for a very slight chance of warmer and wetter weather over much of the state, however probabilities are not

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overwhelming. High pressure over the four corners area and the dry conditions over the west could be favorable for monsoon flow and northward moisture transport. There is still a large pool of warm water off the west coast that may provide additional moisture to fuel the monsoon, much like it did last year. If that warm water is still there when the monsoon circulation sets up, it could be a wet monsoon.

However, there are conflicting signals regarding rainfall potential this monsoon season due to competing atmospheric influences. El Nino conditions are present, and there is at least a 70% chance of El Nino persisting through the summer months. Although unusual, if El Nino strengthens during the summer, there is a weak correlation that the monsoon season could start later and provide less rainfall across the central and southern parts of the state. (Little correlation exists during El Nino summers over the northern part of the state.) It must be re-iterated that this connection is only weak, and there are several competing influences on summer monsoon weather. Also, rainfall from monsoon thunderstorms can be very localized, limiting predictive skill.

The outlook for winter calls for equal chances that temperatures will be above, below or near normal and only a very slight chance of above normal precipitation. There is at least a 60% chance of El Nino persisting into the early winter, with some climate models indicating El Nino growing into a moderate to strong category. If this happens, there is some hope that the upcoming winter season may be wetter, but it is far too early to make any stronger probability statements at this time.

3. Fire outlook

Dynamic live fuels conditions and weather pattern impacts are the likely primary drivers of the 2015 fire season. There have been over 320 fires to date for the calendar year. The outlook through May suggests cooler temperatures with periods of moisture and limited potential for critically windy and dry conditions. June will be hotter and drier with normal fire potential to develop across mid and lower elevations of Arizona and possibly spread to include the higher elevations before the monsoon onset. Although excessively windy and dry conditions should not be a factor, there is the potential for multiple lightning outbreaks in June. Non-desert areas have higher than normal fine fuel loads, and there are areas of residual fine fuels from two previous monsoon seasons and recent winter/spring moisture. Drought impacts will have to be carefully monitored, as fuels and fire potential will respond to changes in drought conditions.

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4. Reservoir status

The Colorado River reservoirs are expected to drop much lower than this time last year due to minimal run-off and dry conditions on the Upper Colorado watershed. The current Colorado River reservoir system storage stands at 47% of total system capacity as of May 1, 2015, which is the same as last year. It is projected that Lake Powell and Lake Mead storage will generally decline through 2016. The Colorado River Basin is experiencing a 15-year drought that is the driest in the historical record dating back to 1906. The United States Bureau of Reclamation's April projections show a 33% probability of a Tier 1 shortage in the Lower Basin in 2016 and a 75% probability of Tier 1 shortage in the Lower Basin in 2017. A Tier 1 shortage in 2016 — 320,000 acre-feet reduction to Arizona — would be taken by the Central Arizona Project (CAP). CAP water deliveries would not be reduced to Indian, Municipal, Industrial or Non-Indian Agricultural Priority users. However, all "other excess" deliveries would be curtailed, and deliveries to CAP's agriculture pool would be reduced by about 50%.

This is the fifth year that the Salt and Verde watersheds experienced below median winter runoff. The Salt and Verde reservoir levels have remained approximately the same as this time last year, approximately 57% of normal, due to increased use of groundwater to meet demand. If projections for very low inflow hold, the last consecutive five year period will be the driest five year period on record (1913-2015).

5. Recommendation

The updates confirmed that Arizona remains in long-term drought that is expected to continue, and the Drought Interagency Coordinating Group unanimously recommends that both drought declarations be kept in place.

The meeting summary and presentations are posted on the ADWR drought website.

Sincerely,



Thomas Buschatzke, ICG Co-chair

cc: Wendy Smith-Reeve, ICG Co-chair

Enclosures:

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

IN ACCORDANCE WITH ESTABLISHED EMERGENCY PROCEDURES

WHEREAS, precipitation throughout the State of Arizona during the past several months has been significantly below normal; and

WHEREAS, the lack of precipitation has significantly reduced stream flows in the State's interior basins and reduced surface and groundwater supplies upon which citizens and commerce of the State are dependent; and

WHEREAS, the lack of precipitation has created drought conditions throughout rural areas of the State with no near-term relief; and

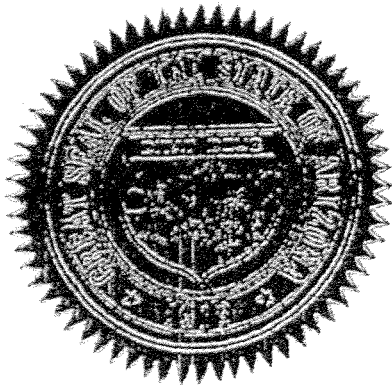
WHEREAS, the drought endangers the crops, property, and livestock of a considerable number of the citizens throughout the State of Arizona; and

NOW, THEREFORE I, Jane Dee Hull, Governor of the State of Arizona, by virtue of the authority vested in me by the Constitution and Laws of the State, do hereby determine that the lack of precipitation has and will continue to have an adverse impact on the citizens of the State and that a declaration of drought emergency is justified, and I hereby:

- a. Activate the State of Arizona Emergency Response and Recovery Plan
- b. Invoke A.R.S. § 26-309 to provide mutual aid assistance to stricken areas of the State

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Arizona

Jane Dee Hull
GOVERNOR



DONE at the Capitol in Phoenix on this twenty-third day of June in the Year One Thousand Nine Hundred and Ninety-nine and of the independence of the United States of America the Two Hundred and Twenty-third.

ATTEST:

Debra Bayless
Secretary of State

Executive Order 2007-10
Drought Declaration For The State of Arizona

WHEREAS, Arizona is entering its second decade of a statewide drought due to long-term precipitation deficits and increased demand for water; and

WHEREAS, on June 23, 1999, Governor Hull declared a drought emergency (PCA 99006), which remains in effect today; and

WHEREAS, drought conditions continue to stress Arizona's resources and have had significant impacts on the citizens and commerce of the state, including increases in wild land fires, water supply shortages, vegetation and wildlife mortality, and economic losses in the ranching, agriculture and tourism sectors; and

WHEREAS, climate research has shown that although droughts lasting multiple decades are common in Arizona, they may be intensified by the effects of global climate change;

NOW, THEREFORE I, Governor Janet Napolitano, Governor of the State of Arizona, by virtue of the authority vested in me by the Constitution and laws of the state, do hereby determine that a continued declaration of drought is justified, and I hereby:

- A. Order continued implementation of the *Arizona Drought Preparedness Plan* and *State of Arizona Emergency Response and Recovery Plan*;
- B. Order the continued invocation of A.R.S. § 26-309 to provide mutual aid assistance to stricken areas of the state;
- C. Request assistance from the federal government for the appropriate federal disaster programs;
- D. Order state agencies to implement their water use reduction plans and assist in drought planning efforts across the state;
- E. Urge water facilities to develop and implement more aggressive drought and conservation plans and monitor water use; and
- F. Call upon citizens, businesses, schools, institutions of higher learning, local governments and federal agencies to increase water conservation efforts.

THIS ORDER supplements the directives in PCA 99006, which remains in effect. This Executive Order shall take effect immediately and shall remain in effect until such time as the Governor rescinds it.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Arizona.


GOVERNOR



DONE at the Capitol in Phoenix on this *31st* day of May in the Year Two Thousand and Seven and of the Independence of the United States of America the Two Hundred and Thirty-First.

ATTEST:


SECRETARY OF STATE