

# Drought Status Update

## January 2011

### Short-term Drought Status Update

The past month has been quite dry everywhere in Arizona. Especially dry are the higher elevations of eastern and southeastern Arizona which have less than 70% of average winter precipitation. Only in the northwestern quarter of the state have we received more than our normal precipitation so far this winter. The next two months are forecast to continue drier than average, so improvement across the southern watersheds is unlikely.

### NEW in 2011

The State Drought Monitoring Technical Committee has changed the percentiles of precipitation and streamflow represented by the drought categories. Previously drought categories began below the 40<sup>th</sup> percentile. Since Arizona is an arid state, we are frequently between the 30<sup>th</sup> and 40<sup>th</sup> percentiles for precipitation and streamflow and beginning drought in that range has caused some watersheds to bounce in and out of "drought", while conditions on the ground have not supported the "drought" condition. Beginning with this January map, the drought categories will begin below the 30<sup>th</sup> percentile. Old and new ranges are shown in the table to the right.

In addition to better reflecting actual drought rather than our normal precipitation variability, maps will be more consistent with the U.S. Drought Monitor maps (<http://www.drought.unl.edu/dm/monitor.html>) that also use these percentile ranges.

### Long-term Drought Status Update

The La Niña circulation has diverted winter storms from southeast and east central Arizona, leaving these parts of the state well below normal winter precipitation levels. Northern and western Arizona are in a transition region, where the effects of La Niña are less consistent; this region has been visited by several winter storms. The upper Gila watershed has dried out substantially, during the dry early winter of 2010-11, which is in sharp contrast with the wetter early winters of some previous years. Last winter, although quite wet, did not make up for the water deficits across the southern watersheds. The outlook is for continued dry conditions through spring, so the situation is not likely to show much improvement in April when the long term drought status will be updated.

Summaries produced by the State Drought Monitoring Technical Committee - Feb. 4, 2011

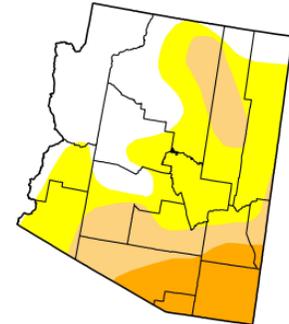
### U.S. Drought Monitor

#### Arizona

February 1, 2011  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

|   | None  | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4   |
|---|-------|-------|-------|-------|-------|------|
| Current                                 | 30.61 | 69.39 | 32.00 | 12.50 | 0.00  | 0.00 |
| Last Week (01/25/2011 map)              | 40.46 | 59.54 | 32.00 | 3.94  | 0.00  | 0.00 |
| 3 Months Ago (11/02/2010 map)           | 61.45 | 48.55 | 3.26  | 0.00  | 0.00  | 0.00 |
| Start of Calendar Year (12/29/2010 map) | 31.40 | 68.60 | 32.45 | 0.00  | 0.00  | 0.00 |
| Start of Water Year (09/28/2010 map)    | 40.00 | 60.00 | 18.58 | 3.23  | 0.00  | 0.00 |
| One Year Ago (01/26/2010 map)           | 7.79  | 92.21 | 68.52 | 15.75 | 3.47  | 0.00 |



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



| Drought Category         | old percentile range | new percentile range |
|--------------------------|----------------------|----------------------|
| D0 – Abnormally Dry      | 25-40                | 21-30                |
| D1 – Moderate Drought    | 16-25                | 11-20                |
| D2 – Severe Drought      | 6-15                 | 6-10                 |
| D3 – Extreme Drought     | 1-5                  | 2-5                  |
| D4 – Exceptional Drought | NA                   | 1-2                  |

