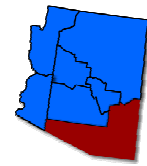


# Southeast Arizona Climate Summary

## Winter-Early Spring 2004

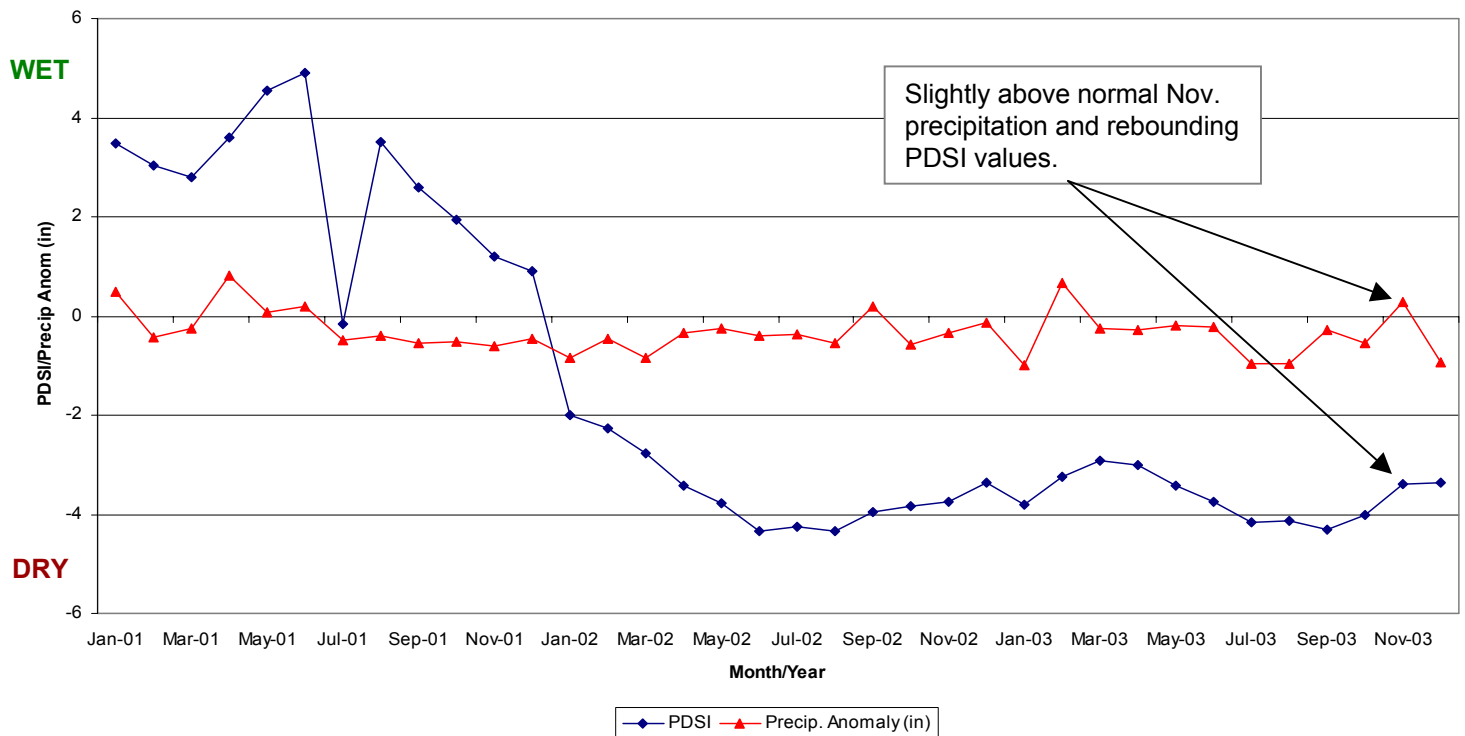


February 4, 2004 – Several winter storms crossed southeast Arizona in December 2003 and January 2004. The storms generally brought light precipitation leaving monthly rain and snow deficits across the region. Precipitation amounts across Arizona climate division #7 (southeast Arizona) were almost 1 inch below normal for the month of December while temperatures were slightly above normal (0.7 °F). The snowpack on ranges across central and southern Arizona appear to be fairing better than last winter, but are still below normal. Several SNOTEL monitoring sites on the Mogollon Rim are reporting snow water contents of 50 to 90% of normal compared to last winter’s values of 10 to 25% of normal. The near normal temperatures across the region in December and January may help carry the snowpack into the spring, improving water availability at local streams.

Forecasts for spring (March-April-May) from the Climate Prediction Center predict that the southwest U.S. will see above normal temperatures with an equal chance of below, above, or normal precipitation. The lack of strong El Nino or La Nina conditions in the tropical Pacific reduces the signal typically used to make higher confidence precipitation forecasts for the southwest U.S. The higher confidence temperature forecast is based on the upward trend in regional temperatures continuing.

(More information at [http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/enso\\_advisory/](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/))

**Southeast Arizona Palmer Drought Severity Index and Precip. Anomaly: 2001-2003**

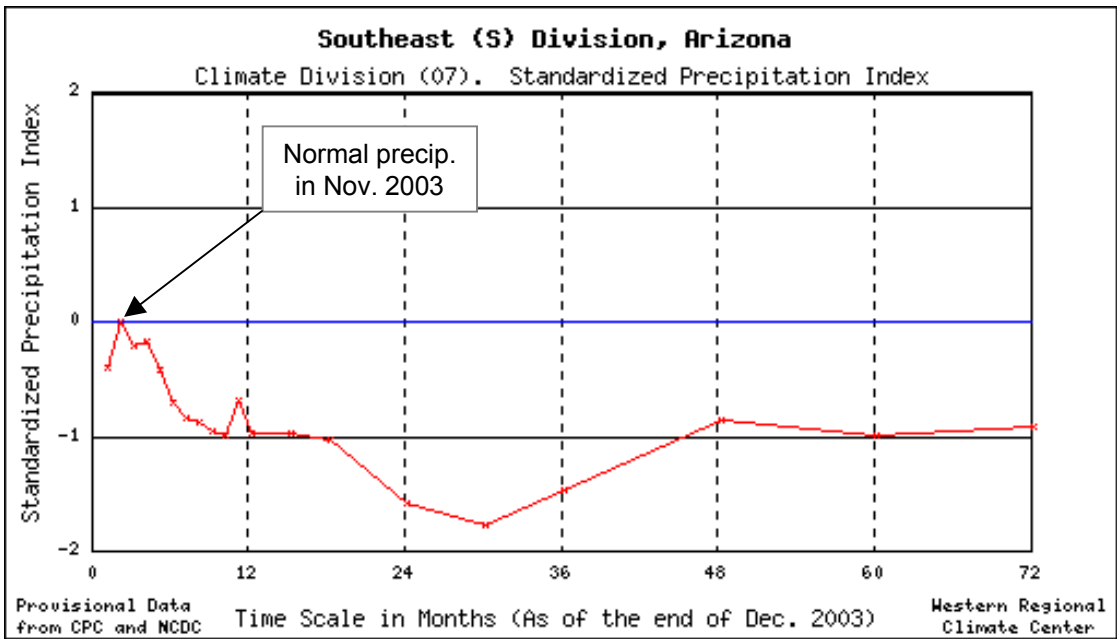


Above normal precipitation in November helped to slightly improve drought conditions as reflected in the improving PDSI values. Long-term drought conditions are reflected in the below normal monthly precipitation amounts extending back to July of 2001 (line with triangles)



THE UNIVERSITY OF ARIZONA

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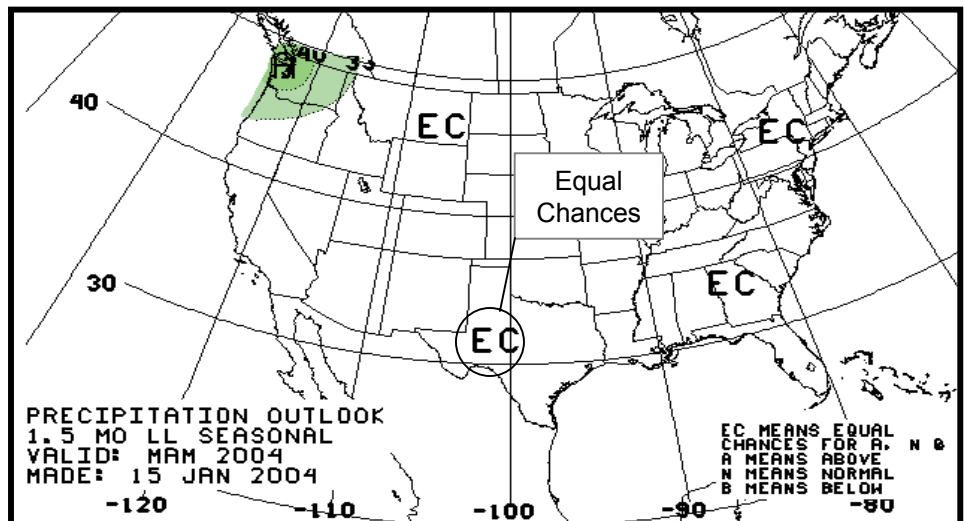
SPI values show that short-term precipitation amounts were normal to slightly below normal for SE AZ due to normal precipitation in November and below normal precip. in December. Longer-term windows (24-36 mos.) still show that precipitation is way below (>1.5 standard deviations) normal reflecting the extended drought period of the last several years.

Monthly average temperatures were very close to normal at most locations across SE Arizona. Precipitation amounts were still below normal to way below normal. Willcox and Safford only saw precipitation amounts of 10-15% of normal for the month of December. The Western Regional Climate Center estimates that most locations across SE AZ have received 60% of normal precipitation amounts for the period between 10/1/03 – 2/1/04.

Location	Dec. 2003 Avg. Temp (F)	Dec. Long-term Avg. Temp (F)	Dec. 2003 Total Precip(in.)	Dec. Long-term Avg. Precip (in)
Willcox	43.7	42.5	0.17"	1.11"
Safford	48.1	44.5	0.08"	0.86"
Chiricahua N.M.	44.8	43.4	0.28"	1.64"
Douglas	45.1	45.5	0.47"	0.94"
Tucson	52.8	52.1	0.16"	0.98"

(data from <http://www.wrh.noaa.gov/tucson> and <http://wrcc.dri.edu>)

The March-April-May seasonal forecast from the Climate Prediction Center shows equal chances of above, normal or below normal precipitation. The 'equal chances' forecast is due to neutral El Nino conditions in the tropical Pacific Ocean. The lack of strong El Nino or La Nina conditions makes a high confidence precipitation forecast for the southwest U.S. region difficult. Temperature forecasts are predicting above normal spring temperatures across most of the western U.S. and are based primarily on strong decadal trends.



From: [http://www.cpc.noaa.gov/products/predictions/long\\_range/lead02/off02\\_prpc.gif](http://www.cpc.noaa.gov/products/predictions/long_range/lead02/off02_prpc.gif)