



# Southeast Arizona Climate Summary Spring 2005

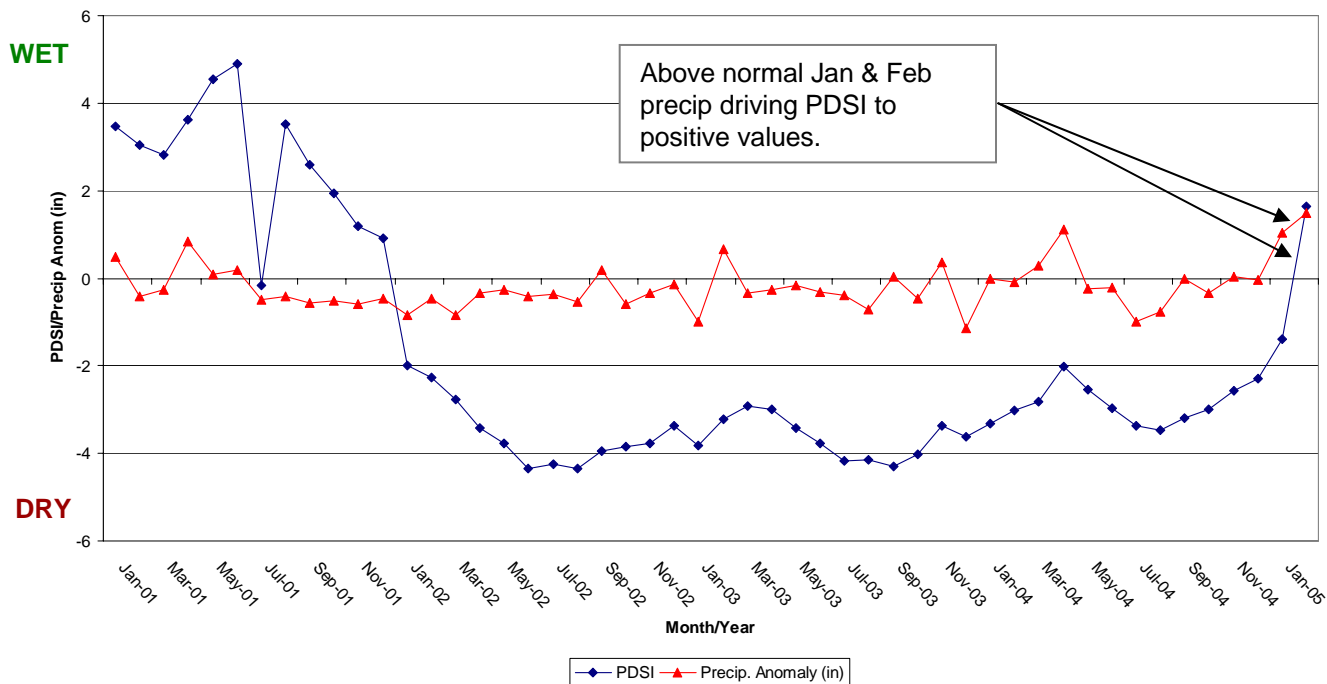


April 1, 2005 – Wet conditions persisted through January and February helping to improve long-term drought conditions that have plagued southeast Arizona. The National Drought Monitor has upgraded most of the region from ‘extreme’ drought status to ‘moderate’ (more information on the latest Drought Monitor can be found at <http://www.drought.unl.edu/dm/monitor.html>). A strong flow of subtropical moisture and favorable jet-stream pattern pushed many productive storm systems across Arizona in January and February. Areas of northwest Arizona received over 400% of their normal January precipitation. Most locations in southeast Arizona were also above normal receiving 150 to 200% of normal precipitation for the same period.

Forecasts for late spring/early summer (May-June-July) from the Climate Prediction Center indicate that the southwest U.S. will see above normal temperatures with an equal chance of above, below, or normal precipitation. Late spring/early summer precipitation forecasts are difficult to make due to the lack of a strong relationship with El Niño or La Niña conditions. ENSO related sea surface temperature anomalies do not appear to influence precipitation patterns over the Southwest during this period. The lack of a strong forecasting signal leads to a lower confidence precipitation forecast for the late spring/early summer period. The higher confidence temperature forecast is based on the upward trend in regional temperatures continuing.

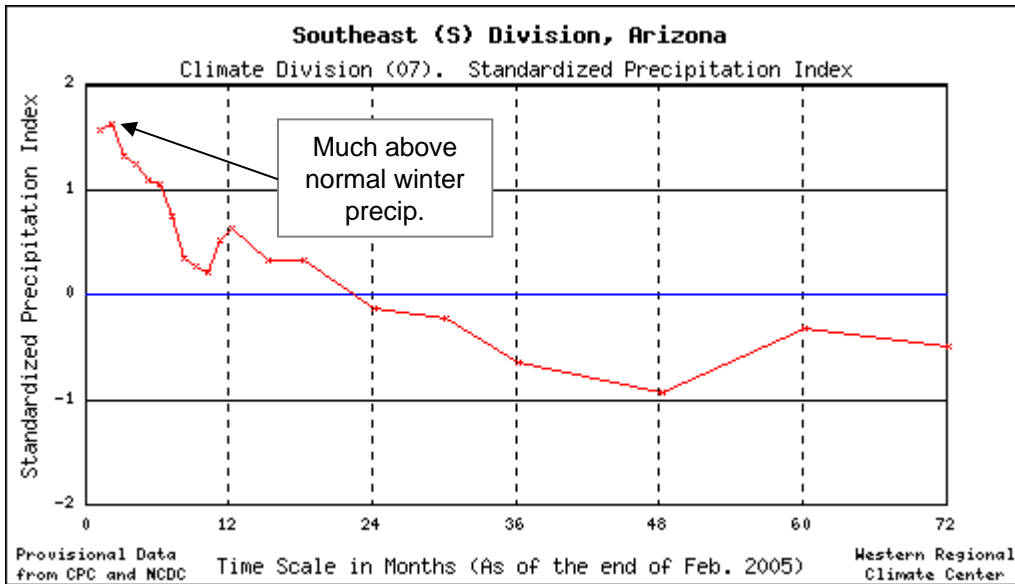
(More information at [http://www.cpc.ncep.noaa.gov/products/analysis\\_monitoring/enso\\_advisory/](http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/))

Southeast Arizona Palmer Drought Severity Index and Precip. Anomaly: Jan. 2001 - Feb. 2005



Above normal winter precipitation has helped to improve long-term drought conditions as reflected in the positive PDSI values. The positive PDSI value of 1.65 in February is the first time the PDSI has been greater than zero since late 2001.

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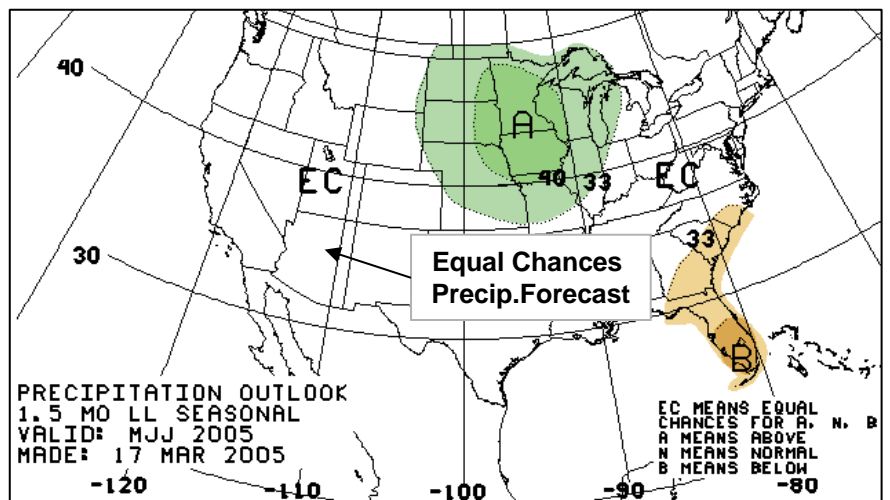
SPI values show that cumulative precipitation amounts extending back over 12-months are above normal with respect to the long-term record. The above normal precipitation in January and February has helped boost cumulative precipitation amounts and pushed SPI values up past the 12-month time-scale. Longer-term windows (36-48 mos.) are improving, but additional above normal precipitation will be needed to satisfy long-term deficits.

Average January temperatures were several degrees above normal at most locations across SE Arizona. Local precipitation amounts were also above normal at most stations with some receiving 150% to 200% of normal for the month. Douglas reported a total of 2.71" which is over 3-times the normal monthly total for January based on its long-term record (1948-2004)

Location	Jan. 2005 Avg. Temp (F)	Jan. Long-term Avg. Temp (F)	Jan. 2005 Total Precip(in.)	Jan. Long-term Avg. Precip (in)
Willcox	46.9	42.2	2.02"	0.93"
Safford	48.1	44.3	1.42"	0.68"
Chiricahua N.M.	46.1	42.9	2.02"	1.45"
Douglas	48.3	45.5	2.71"	0.73"
Tucson	54.5	51.7	1.35"	0.88"

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

The May-June-July seasonal forecast from the Climate Prediction Center depicts an 'equal chances' precipitation forecast for Arizona and New Mexico. This forecast means that the probability of above normal or below normal precipitation is no greater than the probability of receiving normal precipitation amounts for the period. Late spring/early summer precipitation forecasts are difficult to make for the Southwest. Pacific sea surface temperature patterns which are an important forecasting tool have little influence on Southwestern late spring/early summer weather patterns.



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)