



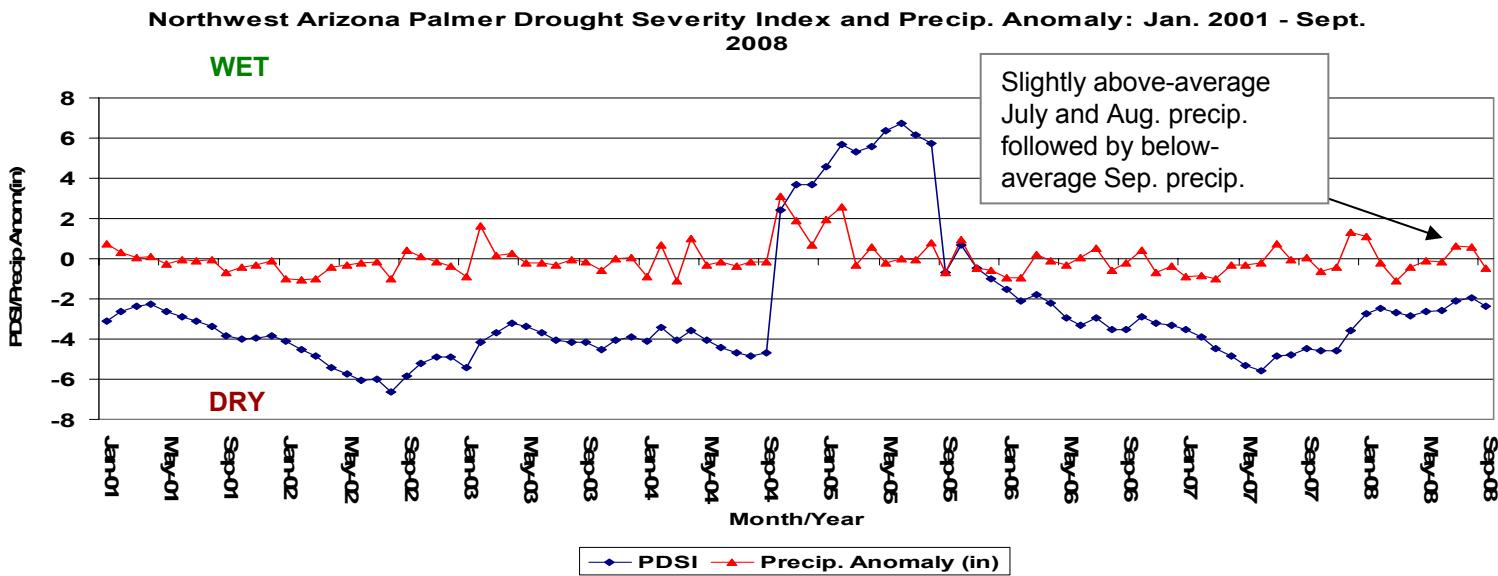
Northwest Arizona Climate Summary

Fall 2008



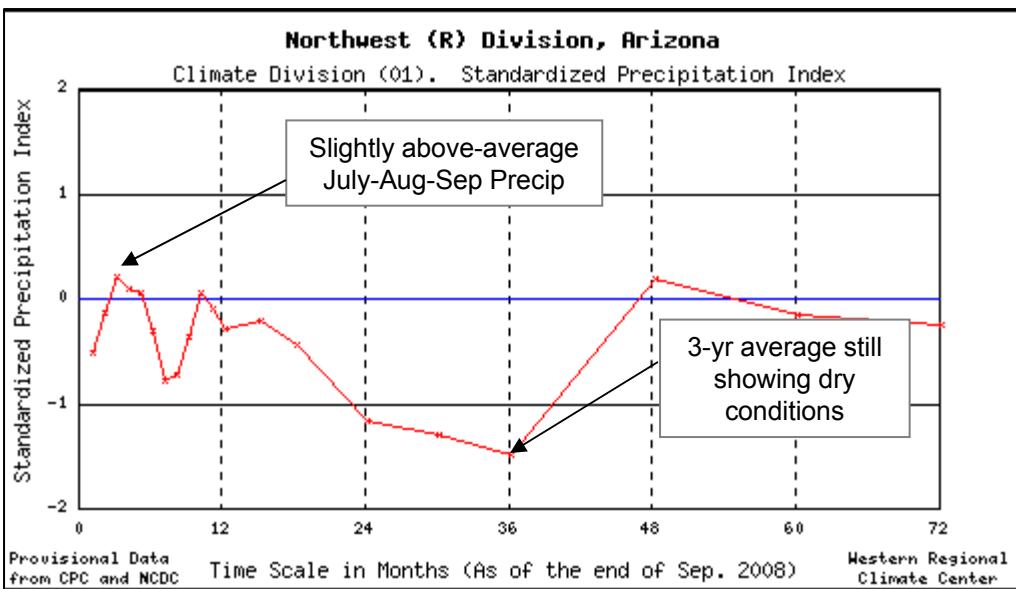
October 12, 2008 – A hot and dry June gave way to the summer monsoon season right on schedule with thunderstorms pushing up into northwestern Arizona on July 1st. Characteristic of monsoon thunderstorms, precipitation was spotty and total amounts highly variable. Overall most locations in northern and eastern Mohave County observed above-average precipitation during July with total amounts of 1-2 inches. RainLog (<http://www.rainlog.org>) volunteers in the Kingman Area observed one day total precipitation amounts of 0.25 to 0.5 inches on several days throughout the month of July. Conditions were much drier in western parts of Mohave County with most locations observing less than 0.25 inches during the month. August turned out to be an even wetter month for some eastern and northern areas with total precipitation amounts of 2 to 4 inches almost twice the long-term August average for these locations. Remote Automated Weather Stations (RAWS; <http://raws.dri.edu>) along the Arizona Strip recorded precipitation amounts over 3 inches in August with Nixon Flats and Yellow John Mountain observing 3.64 and 3.98 inches respectively. Dry air pushed back into the southwest U.S. in early September suppressing thunderstorm activity to south. Thunderstorms had trouble pushing back up into northern Arizona throughout the month, leaving September with below-average precipitation. Temperatures were warmer than average over the July-September period with many locations observing temperatures 2 to 4 deg °F above long-term means.

Fall (October-November-December) precipitation forecasts issued by the NOAA Climate Prediction Center indicate an increased chance of drier-than-average conditions for much of the southwest U.S. Global climate models and statistical analyses of trends converged on this picture of below average precipitation for the fall season. Sea-surface temperatures are back to normal across the Pacific Ocean with the end of last year's La Niña event and are not expected to influence Arizona's climate this fall and winter. This lack of strong sea-surface temperature requires the use of other tools like an examination of trends used in this upcoming season's forecast. Seasonal temperature forecasts are also using an analysis of trends to indicate an increased chance of above-average temperatures continuing across much of the Southwest for the October-December period. (More information on forecasts can be found at <http://www.cpc.noaa.gov>).



A dry spring gave way to welcome summer rains in July and August across northwestern Arizona. Precipitation amounts were slightly above-average for July and August helping to raise soil moisture levels, even though short-term drought conditions continue to exist as indicated in the negative PDSI values. Summer rainfall ended abruptly in late August, leaving below-average precipitation and worsening short-term drought in September.

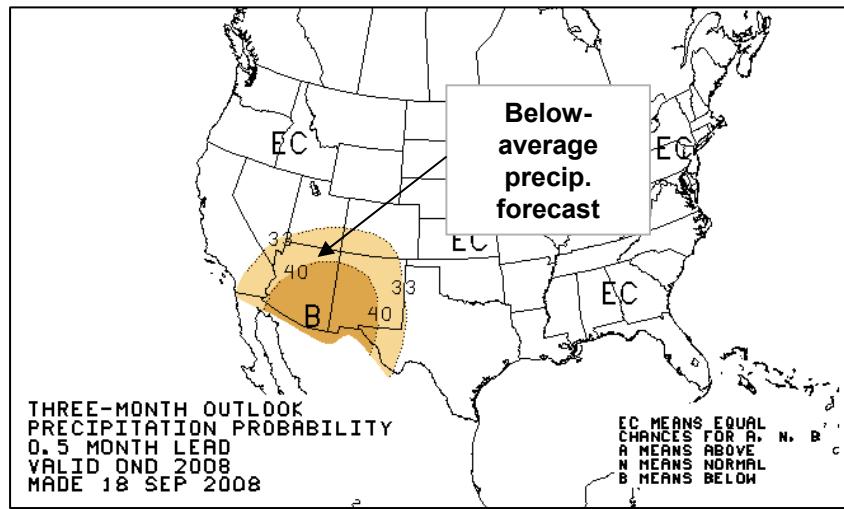
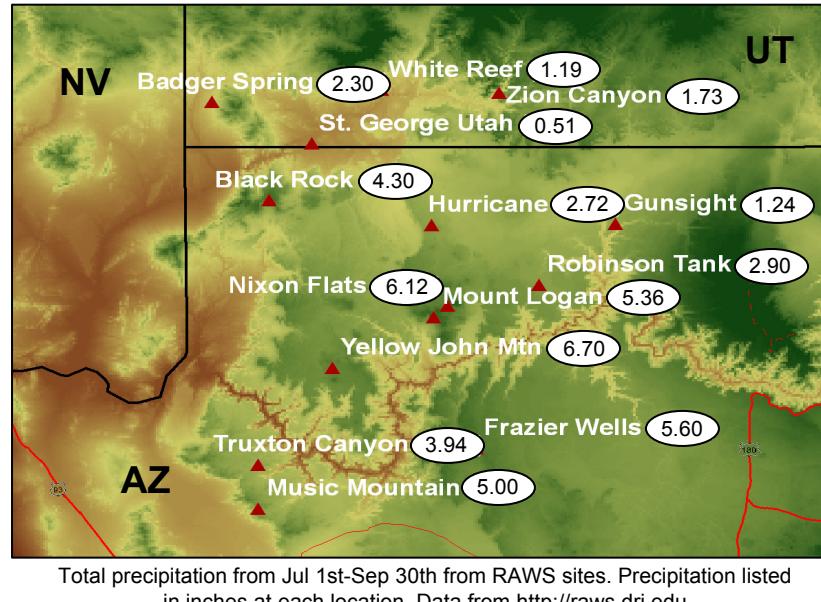
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The SPI represents precipitation levels over different time-scales in standard deviation units. The time scales represent individual comparison periods (for example, 12-month time-scale represents total precip over last 12 months compared to historical record of same period). The SPI value near -1.5 at 36 months represents below-average total precipitation for the past three-years. The positive value (SPI~0.25) at 3-months indicates slightly above-average precipitation over July-Aug-Sep for Northwest Arizona.

Observations from Remote Automated Weather Sites (RAWS) across northwest Arizona and southwest Utah for the July-Sep 2008 period show precipitation amounts generally between 3 and 6 inches in Arizona while most Utah stations saw less than 2 inches. Yellow John Mountain was the wettest station with over 6 inches falling during the summer rainy season. 1.9 inches fell on August 30th alone. Summer rainfall was much more sparse further north into southern Utah. St. George, UT observed the least rainfall with only 0.51 for July-September. Little summer monsoon thunderstorm activity was able to push that far north leading to drier than average conditions. (Find more information and data at <http://raws.dri.edu>).

The October-November-December seasonal precipitation forecast from the Climate Prediction Center indicates a slightly increased chance (>33% relative to chances of average and above average precipitation) of below average precipitation across northwest Arizona and southern Utah. Chances of below-average precipitation are even higher over southern Arizona and western New Mexico. This forecast is based on global climate models and long-term trends pointing towards drier-than-average conditions over the fall season for the southwest U.S. Stay tuned to forecast updates each month at <http://www.cpc.ncep.noaa.gov>.



http://www.cpc.noaa.gov/products/predictions/long_range/lead01/off01_prcp.gif