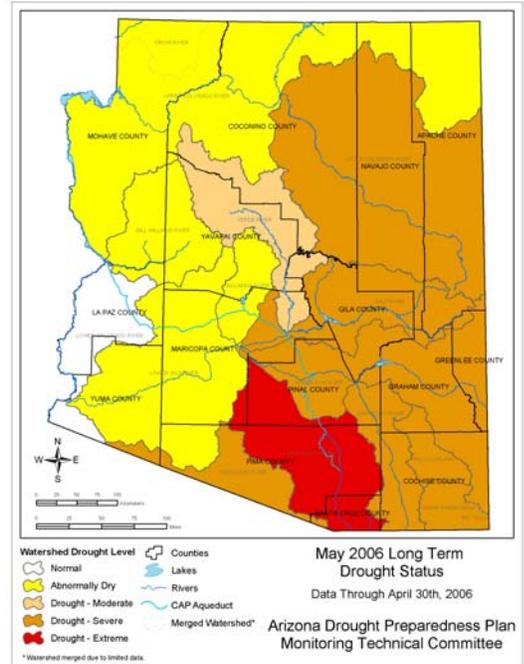
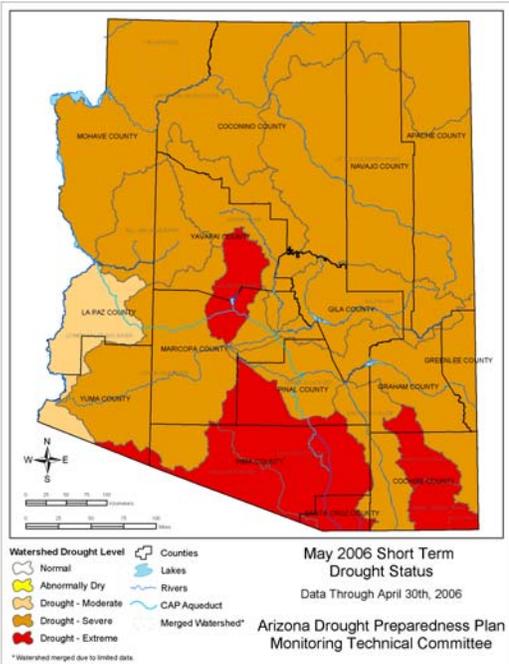




May Drought Monitor Report



Produced by the Monitoring
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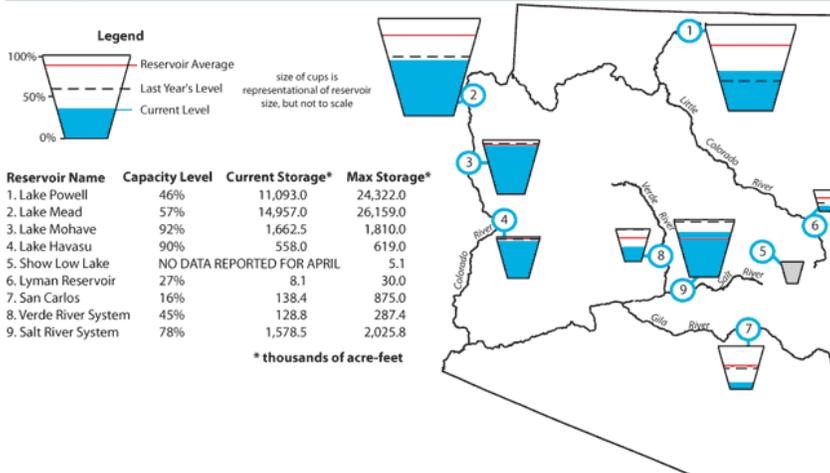
Short-term drought status has improved slightly from extreme to severe over much of the state as a result of precipitation in March. Some areas in the southern part of the state, along with the Agua Fria watershed, remain at extreme drought status.

**Drought Decision
Triggers**
www.azwater.gov

Arizona's long-term drought status is still severe throughout much of the eastern half of the state and abnormally dry across much of the western half. The Santa Cruz watershed remains at extreme long-term drought status.

Reservoir Storage Assessment

Arizona reservoir levels for April 2006 as a percent of capacity. The map depicts the average level and last year's storage for each reservoir, while the table also lists current and maximum storage levels.



Arizona's total in-state reservoir storage declined slightly over the last month by about 2 percent of capacity, while the total storage on the Colorado River remained steady. The Salt River system and San Carlos reservoir on the Gila River both declined by 3 percent of capacity, while Lyman Lake again remained steady at 27 percent of capacity. Storage on the Verde River system rose by 2 percent. On the Colorado River, Lake Havasu fell by 1 percent, while Lake Mohave remained constant. Of the two largest reservoirs, Lake Mead fell by 2 percent of capacity, while Lake Powell rose by 2 percent, resulting in no significant change in total storage. Storage on the Colorado River remains at below-average levels due to long-term precipitation deficits in the Upper Colorado River Basin, even though Lake Powell has risen by 11 percent of capacity relative to last year. Storage on the three largest Arizona reservoirs has continued to decline since this time last year. The Salt River system has declined by 18 percent of capacity since a year ago, but remains above average level. On the Verde River system, storage is at about 61 percent of the long-term average. The San Carlos reservoir is now at about 29 percent of average.

(Note that the cup that reflects Show Low Lake is colored gray because no data were reported at that site in April.)

Climate Assessment

Precipitation

UPDATE

The recent extremely dry conditions that briefly abated in March returned in April across many areas of the state of Arizona. These conditions were most pronounced across south-central Arizona, which received no precipitation for the month.

Precipitation totals

Previous 3- and 6 month periods –

Very low, with most of the state “abnormally dry” for the 3-month period, reflecting a moderately dry spring, and all of the watersheds moving to “severe” or “extreme” drought for the 6-month period, reflecting an exceptionally dry winter.

Previous 12 months –

Dryness characteristic of “extreme” or “severe” drought across the central and southern portions of the state, with “abnormally dry” conditions along the Little and Lower Colorado River, and “moderate” drought on the upper Colorado River.

Previous 2 years –

Very little evidence of drought within the state over the past 2 years, due to the exceptionally wet winter of 2005. “Moderate” drought is evident in the southeast part of the state, with the Santa Cruz watershed in “extreme” drought.

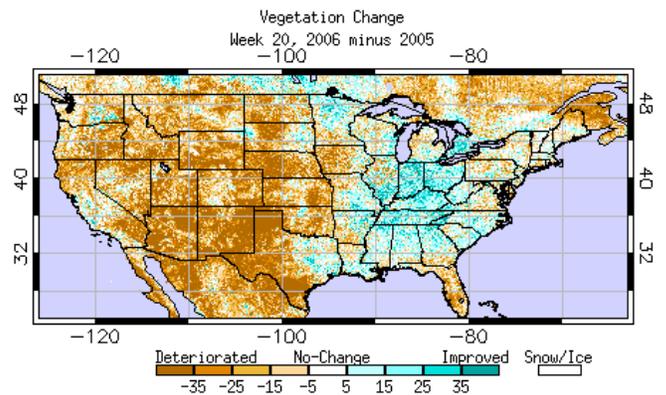
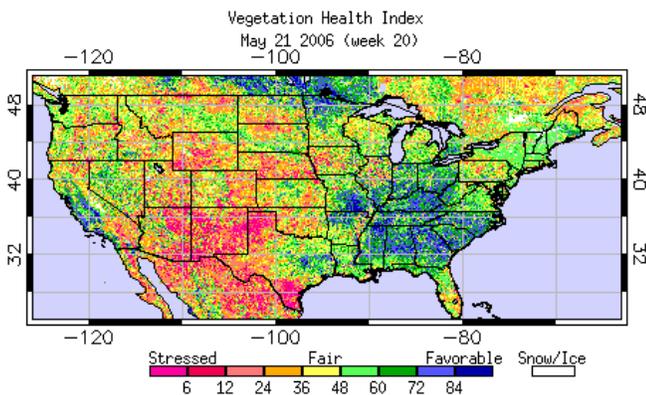
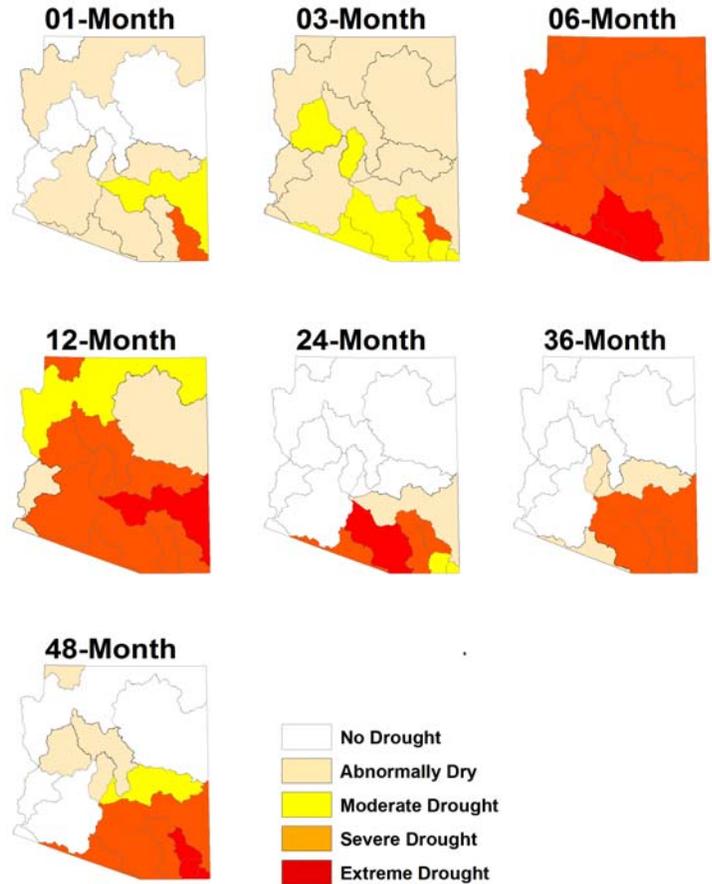
Previous 3 years –

The 36-month precipitation totals are at or above average for the 7 watersheds covering the western and northern parts of Arizona. However, across the southeast, the 36-month precipitation has left 5 watersheds in a “severe” drought, while the Salt and San Simon watersheds are “abnormally dry”.

Previous 4 years –

The long-term problematic areas within the state are the east-central and southeast regions, where the 4-year precipitation totals suggest “moderate” drought along the Salt River, “severe” drought further south, and “extreme” drought for the Wilcox Playa and White Water Draw.

For full assessment, see *State Climate Update for Arizona* – www.public.asu.edu/~dellis/update.html.



Vegetation Status

These satellite-derived images, from the NOAA National Environmental Satellite, Data and Information Service (NESDIS), were taken on May 21, 2006. The figure on the left shows extremely stressed vegetation over a significant portion of Arizona. The figure on the right shows the change from last year in vegetation status. Arizona has seen significant deterioration of vegetation health since the relatively wet winter and spring of 2004-2005; this is consistent with deteriorating conditions, compared to last year, throughout most of the Southwest.

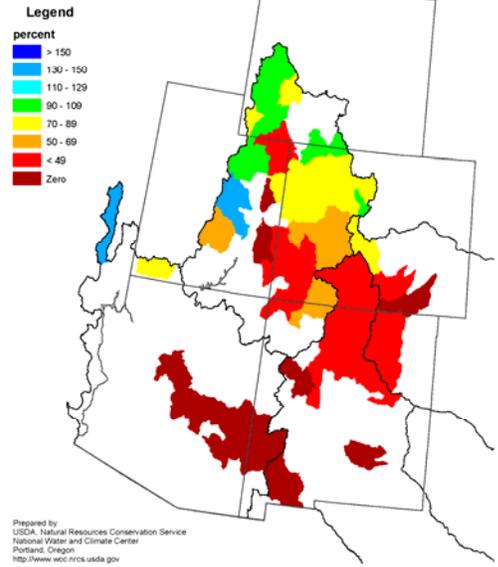
Streamflow/Runoff

Mountain Precipitation

Data from high elevation SNOTEL sites show that precipitation for April was 82 percent of average over the Salt River basin, 55 percent of average over the Verde River basin, and 72 percent of average over the San Francisco-Upper Gila River basin. The Little Colorado River basin received 62 percent of average precipitation in April.

Cumulative precipitation since October 1 is extremely low, ranging from 36 percent to 44 percent of average across the basins. All snow monitoring stations have melted out for the season.

Colorado & Rio Grande Mountain Snowpack as of May 1, 2006



Watershed	Percent (%) of 30-Yr. Average
	Precipitation Oct. 1– April
Salt River Basin	44%
Verde River Basin	39%
Little Colorado River Basin	40%
San Francisco-Upper Gila River Basin	41%
Central Mogollon Rim	36%
Grand Canyon	43%
Upper Colorado River Basin	100%

Water Year Precipitation (Source USDA-NRCS)

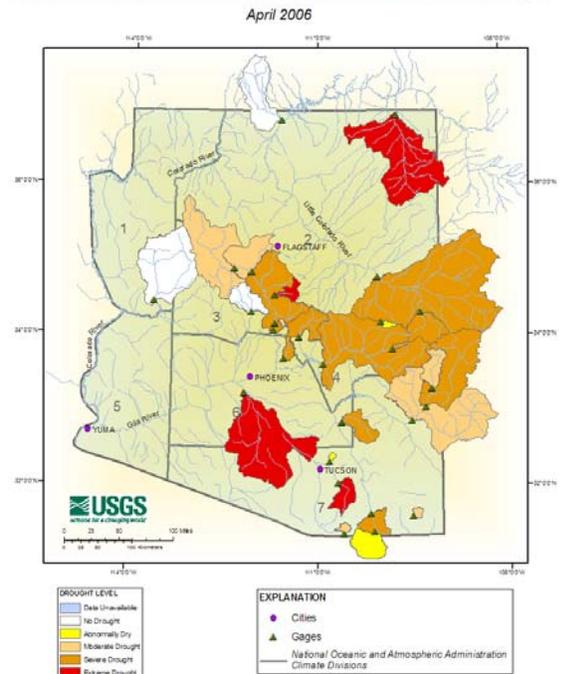
Runoff

Waterbody	April Runoff in Acre Feet	% of Median
Salt River near Roosevelt	16,125	16%
Tonto Creek	850	15%
Verde River at Horseshoe Dam	10,330	31%
Combined inflow to Salt River Project reservoir system	27,305	19%
Little Colorado River above Lyman Lake	164	5%
Gila River to San Carlos reservoir	1,650	10%
Colorado River inflow to Lake Powell	907,400	92% of the 30-yr. avg.

(Data provided by USGS gaging stations and USDA-NRCS)

For more information, visit az.water.usgs.gov/droughtmaps/droughtmaps.htm.

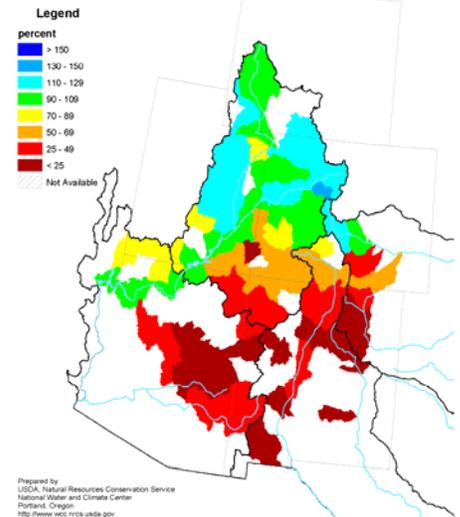
Drought Levels Based on Monthly Streamflow Discharge



Streamflow Forecasts

Waterbody	Forecasted Runoff (April – May unless noted) in Acre Feet	% of Median
Salt River near Roosevelt	30,000	21%
Tonto Creek	1,600	19%
Verde River at Horseshoe Dam	20,000	46%
San Francisco River at Clifton	5,300	29%
Gila River near Soloman	12,000	29%
San Carlos reservoir inflow	4,000	26%
Little Colorado River above Lyman Lake	April-June – 330	8%
Little Colorado River at Woodruff	60	7%
Colorado River inflow to Lake Powell	Apr-July – 7.7 million	97% of 30-yr. avg.
Virgin River at Littlefield	Apr-July – 40,000	54% of 30-yr. avg.

Colorado River Spring and Summer Streamflow Forecasts as of April 1, 2006



(Data provided by USDA-NRCS, NWS and SRP)

DroughtWise

Drought conditions tend to draw attention to the importance of water conservation. However, saving water is something we should always practice to help maintain an abundant water supply. Water conservation is everyone's responsibility.

Tip of the Month

Water outdoor plants during the evening or nighttime hours to reduce water lost to evaporation.



Weather Outlook

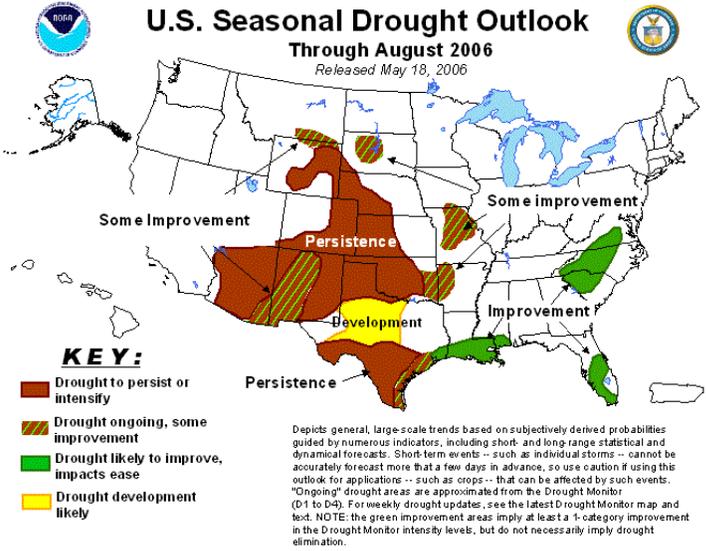
Climate & Drought Outlooks

The NOAA Climate Prediction Center (CPC) precipitation outlook for Arizona during June indicates equal chances for above average, average, and below average precipitation across the state. The CPC temperature outlook for June indicates high confidence for above average temperatures statewide.

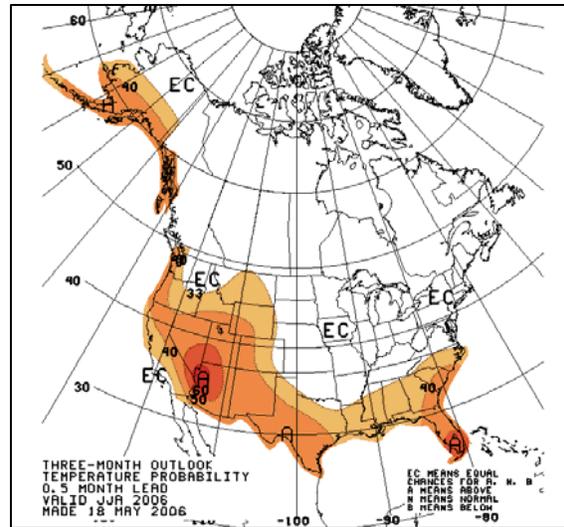
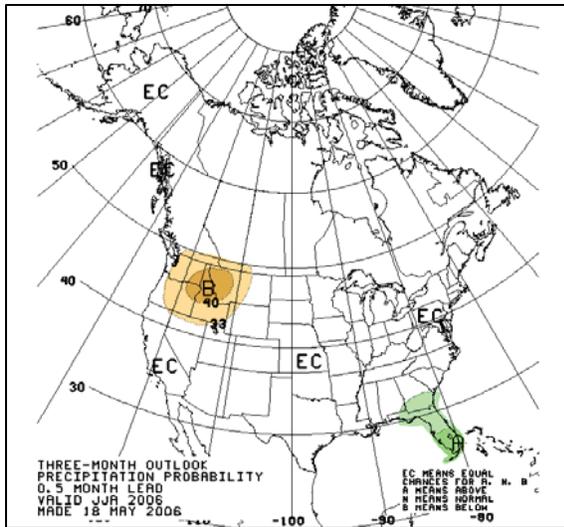
The CPC Seasonal Drought Outlook (right) indicates areas experiencing drought conditions in most of Arizona will see these conditions persist through August (at least), while *some* improvement in the southeast corner of the state is possible by August 2006. The CPC Outlook for the 90-day period, June through August 2006, indicates a high confidence level that temperatures will be above average, and equal chances for above average, average, and below average precipitation across the state.

Also see the most current Southwest Climate Outlook - www.ispe.arizona.edu/climas/forecasts/swoutlook.html.

For additional weather information from the Office of the State Climatologist for Arizona - www.public.asu.edu/~dellis/azscweather.html.



Precipitation & Temperature Outlooks



NOAA's CPC Outlooks are 3-category forecasts. As a starting point, the 1971–2000 climate record is divided into 3 categories, each with a 33.3 percent chance of occurring (i.e., equal chances, EC). The forecast indicates the likelihood of one of the extremes—above-average (A) or below-average (B)—with a corresponding adjustment to the other extreme category; the "average" category is preserved at 33.3 likelihood, unless the forecast is very strong. Thus, using the NOAA-CPC temperature (precipitation) outlooks, areas with light brown (green) shading display a 33.3–39.9 percent chance of above-average, a 33.3 percent chance of average, and a 26.7–33.3 percent chance of below-average temperature (precipitation). A shade darker indicates a higher than 40.0 percent chance of above-average, a 33.3 percent chance of average, and a further reduced chance of below-average temperature, and so on. Equal Chances (EC) indicates areas with an equal likelihood of above-average, average, or below-average conditions; it is used by forecasters when the forecast tools do not indicate a strong "signal" conditions during a given period will be in any one of the three categories.

This report was based on data and information through April 30, 2006, with the exception of the Vegetation Status images (taken on May 21).