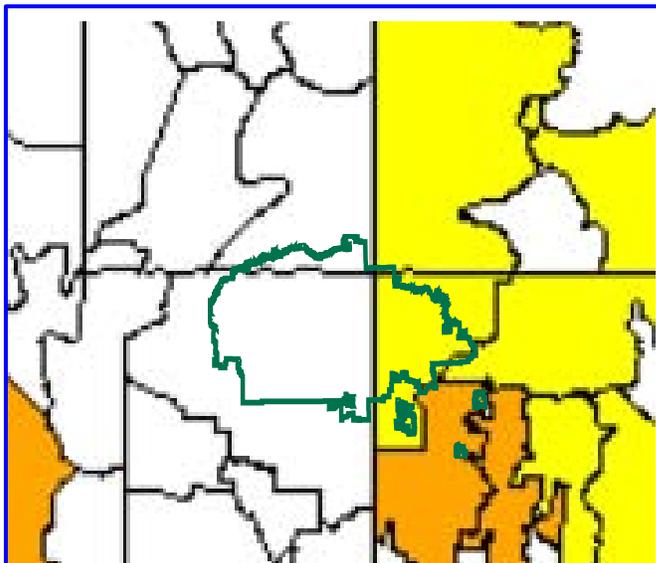




NAVAJO NATION DROUGHT STATUS REPORT

NN Dept. of Water Resources, Water Management Branch

P.O. Drawer 678 Fort Defiance, Arizona 86504 Ph.(928) 729-4004, Fax.(928) 729-4126



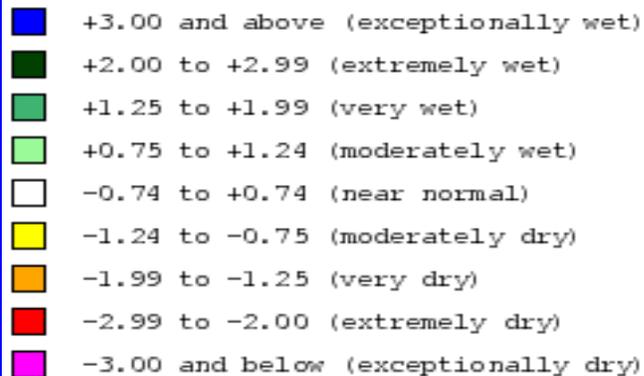
Navajo Nation Drought Stage

Location	6 month SPI		Stage as of Feb.
	Jan	Feb	
NE AZ	-0.53	-0.58	Alert
NW NM	-0.70	-0.75	Alert
SE UT	-0.35	-0.36	Alert

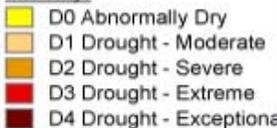
Drought Intensity Category

NN Drought US Drought

Normal	Normal	D0
Alert	Moderate	D1
Warning	Severe	D2
Emergency	Extreme- Exceptional	D3 & D4

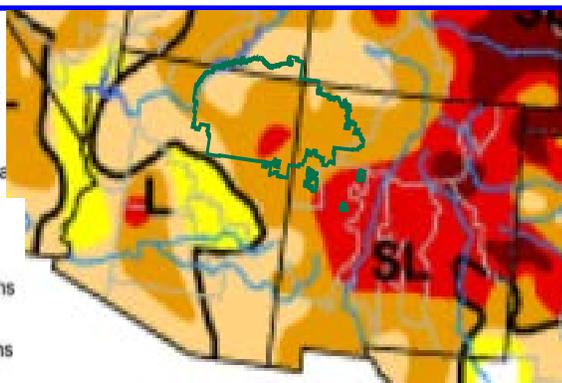


Intensity:



Drought Impact Types:

Delineates dominant impacts
 S = Short-Term, typically <6 months (e.g. agriculture, grasslands)
 L = Long-Term, typically >6 months (e.g. hydrology, ecology)



6-Month SPI for Feb 2013 www.wrcc.dri.edu

March 03, 2013 U.S. Drought Monitor <http://drought.unl.edu/dm>

Drought Summary by NDMC March 3, 2013

Weather Summary: The past week featured generally dry conditions across most of the western half of the contiguous 48 states with a deep trough over the eastern half. The deep low-pressure system over the eastern half of the contiguous 48 states yielded widespread precipitation, with rainfall totals generally less than 3.0 inches from the Ohio Valley to the Northeast, and across portions of the Mid-Atlantic. The Pacific Northwest was another stormy region, with multiple reports of more than 4 inches of precipitation during the past week. Isolated reports of 0.5-1.5 inches of precipitation came in from stations across the Central Rockies. Elsewhere, precipitation amounts were less than 0.5 inch.

The Rockies: Winter storms have brought some precipitation to portions of the Central and Northern Rockies, largely missing the southern Rockies since the start of the year. An area of D3 conditions was removed from Northwest Colorado based on standardized precipitation indices (SPIs) derived from PRISM gridded data (since this is a very data sparse region). The rest of the D3 region was retained as SNOTEL precipitation percentiles are primarily ranked below the 5th percentile. Across northeastern Colorado, D4 (exception drought) was trimmed, based on recent (past 30 days) precipitation amounts being above normal.

Some of the storms that brought heavy rains to the Pacific Northwest also provided precipitation to the interior portions of the Northern Rockies. Some improvements were made to southern Idaho and northern Utah, based on a reassessment and using SPI3, SPI6, and a trailing, weighted SPI index as guiding values.

Looking Ahead: During the next 5 days (March 7-11, 2013), moderate to heavy precipitation is forecast from the lower Mississippi Valley to the Mid-West, and across portions of the Central and Southern Rockies. Additional precipitation is likely for the northeast (early in the period) and the Pacific Northwest (episodically during the entire period). Beyond that timeframe, drier than median conditions are favored across the southern tier of the CONUS and southern Alaska, as the main storm track is forecast along the U.S.-Canada border.

For further enquiries contact Mr. Robert Kirk, Principal Hydrologist, Ph (928) 729-4140, Email: robertkirk@navajo-nsn.gov

February 2013

Southwest Drought at Glance

Climate Summary by CLIMAS February 27, 2013

Drought: While slight improvements in short-term drought conditions occurred in parts of central Arizona, drought intensified in central New Mexico.

Temperature: Temperatures between January 22 and February 20 were within two degrees of average, except in eastern New Mexico, which was warmer than average.

Precipitation: Five winter storms blew through Arizona in the last 30 days, bringing above-average precipitation to many parts of the state. These storms, however, missed most of New Mexico.

ENSO: The current ENSO-neutral event is expected to remain through the spring.

Climate Forecasts: March–May forecasts call for above-average temperatures and below-average precipitation in all of Arizona and New Mexico.

The Bottom Line: Five storms in the last month helped cut winter precipitation deficits, particularly in the higher elevations of Arizona. However, when viewed with a longer-term lens, dry conditions still remain the norm. This is particularly true for New Mexico, because recent storms have missed most of the state. Since January 1, for example, precipitation has been less than 70 percent of average in many parts of New Mexico and drier in central regions. Arizona has received slightly higher totals. Even with recent rain and snow, drought conditions remain widespread and intense in both states. Nearly 83 percent of Arizona and 98 percent of New Mexico are classified with moderate or more severe drought. Temperatures since January 1 have been between 3 and 6 degrees F below average in most of the higher elevations of Arizona, New Mexico, Colorado, and Utah. This has helped keep snowpacks larger than they otherwise would be. Nonetheless, water contained in snowpacks, or SWE, is generally below average in the Southwest. Many monitoring stations in the Upper Colorado River Basin and Rio Grande headwaters report less than 80 percent of average SWE, fueling below-average spring streamflow forecasts for the region's two largest rivers. It is looking increasingly unlikely that reservoirs on these and other rivers in the Southwest will get a boost from above-average precipitation, particularly since forecasts are calling for increased chances for below-average rain in coming months. Thin snowpacks coupled with potentially warm temperatures and dry conditions have resource managers concerned for an elevated risk of wildfires in the spring.

Useful Drought Related

Sites:

NWS-Climate Prediction Center

Seasonal Outlook

www.drought.unl.edu

USGS Daily Stream Flow

www.usgs.gov/water/

NDMC Drought Impact

Database Webpage

<http://droughtreporter.unl.edu>

Western Regional Climate Center

www.wrcc.dri.edu

CLIMAS Southwest

Climate Outlook

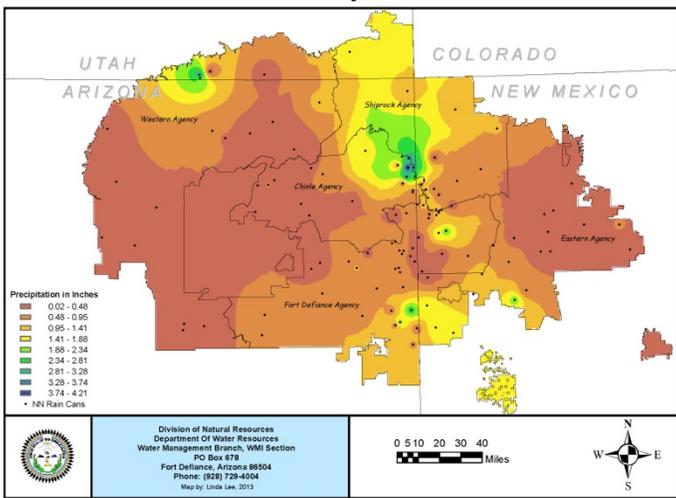
www.climas.arizona.edu

Navajo Nation Drought Summary

The monthly precipitation for February are near the monthly precipitation averages for most all agencies. Eastern, Shiprock, Western, and Chinle agencies are at near or normal percentages of averages for February. Meanwhile Fort Defiance agency is in the below average range at 67% of average.

<u>Agency</u>	<u>February</u> Feb	<u>Precipitation</u> Avg	<u>Summary</u> Percent of Avg
Chinle	1.19"	1.30"	92%
Eastern	0.74"	0.74"	100%
Fort Defiance	0.79"	1.15"	67%
Shiprock	1.06"	1.06"	100%
Western	0.55"	0.67"	82%

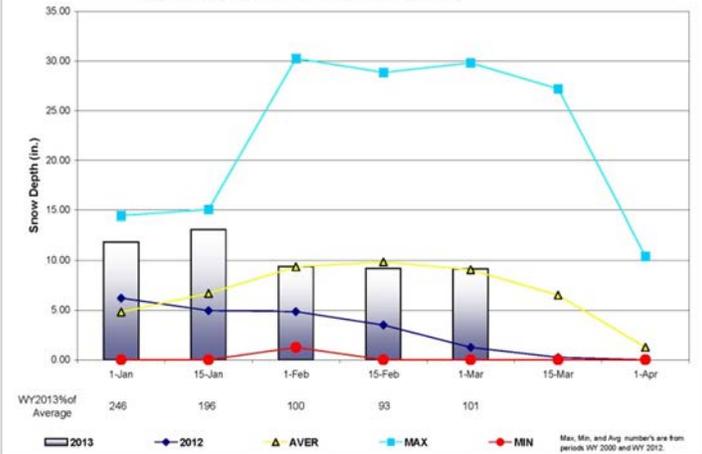
Average Precipitation On The Navajo Nation
February 2013



In terms of Snow Surveys, the Chuskas are at 115% of average in terms of snow depth. The average snow depth was 30 inches. The Defiance Plateau was at 101% of average in terms of snow depth. The average snow depth was 9 inches. The survey was performed around March 01, 2013.

SNOW DEPTH-Defiance Plateau

Snow Courses used in the calculations are: Arbal's Forest and Fluted Rock.



SNOW DEPTH-Chuska Mountain

Snow Courses used in the calculations are: Beaver Spring, Bow Canyon, Hidden Valley, Missionary Springs, Tsale I & II, and Whiskey Creek.

