



# New Mexico Drought Monitor Working Group

Monday, June 27, 2022

Andrew Mangham  
Senior Service Hydrologist  
NWS Albuquerque





## From the US Drought Monitor...

*“The map and associated statistics will be released to the public between 7:30 and 8:00 am Central Time each Thursday. Up until that time, all maps/figures/statistics associated with the final USDM map for the week are **100% embargoed** until the official release time. This has been the long standing policy of the US Drought Monitor. ”*

# About the USDM

NM Drought Monitor Working Group



Albuquerque  
WEATHER FORECAST OFFICE

- *U.S. Drought Monitor maps come out every Thursday morning at 8:30 Eastern Time, based on data through 7 a.m. Eastern Standard Time (8 a.m. Eastern Daylight Time) the preceding Tuesday. The map is based on measurements of climatic, hydrologic and soil conditions as well as reported impacts and observations from more than 450 contributors around the country.*
- *Eleven climatologists from the partner organizations take turns serving as the lead author each week.*
- *The authors examine all the data and use their best judgment to reconcile any differences in what different sources are saying.*
- ***The USDM is an analysis of drought and does not include any forecast information***

# Current Drought Monitor

NM Drought Monitor Working Group



Albuquerque  
WEATHER FORECAST OFFICE

## U.S. Drought Monitor New Mexico

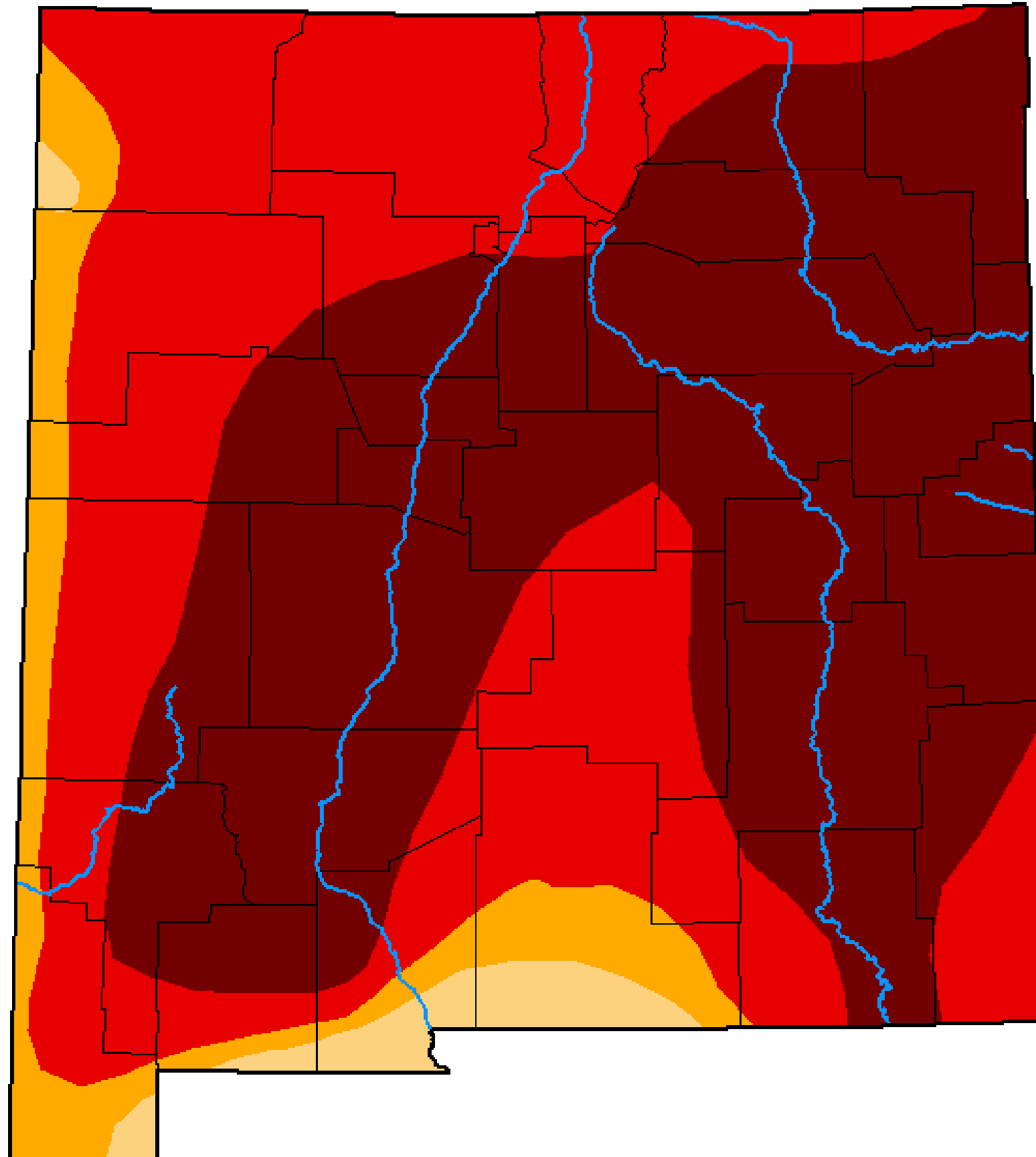
June 21, 2022

(Released Thursday, Jun. 23, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.00	100.00	100.00	97.41	90.45	52.17
<b>Last Week</b> <i>06-14-2022</i>	0.00	100.00	100.00	97.41	90.45	52.17
<b>3 Months Ago</b> <i>03-22-2022</i>	0.06	99.94	98.91	91.19	39.64	5.53
<b>Start of Calendar Year</b> <i>01-04-2022</i>	0.00	100.00	97.83	75.86	20.91	0.00
<b>Start of Water Year</b> <i>09-28-2021</i>	10.70	89.30	79.47	49.33	19.12	0.00
<b>One Year Ago</b> <i>06-22-2021</i>	1.04	98.96	94.11	87.49	63.06	31.84



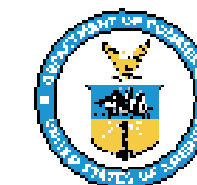
### Intensity:

None	D0 Abnormally Dry	D2 Severe Drought	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought		

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

### Author:

Adam Hartman  
NOAA/NWS/NCEP/CPC



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)



# Current Drought Monitor

NM Drought Monitor Working Group



Albuquerque  
WEATHER FORECAST OFFICE

## U.S. Drought Monitor Southwest

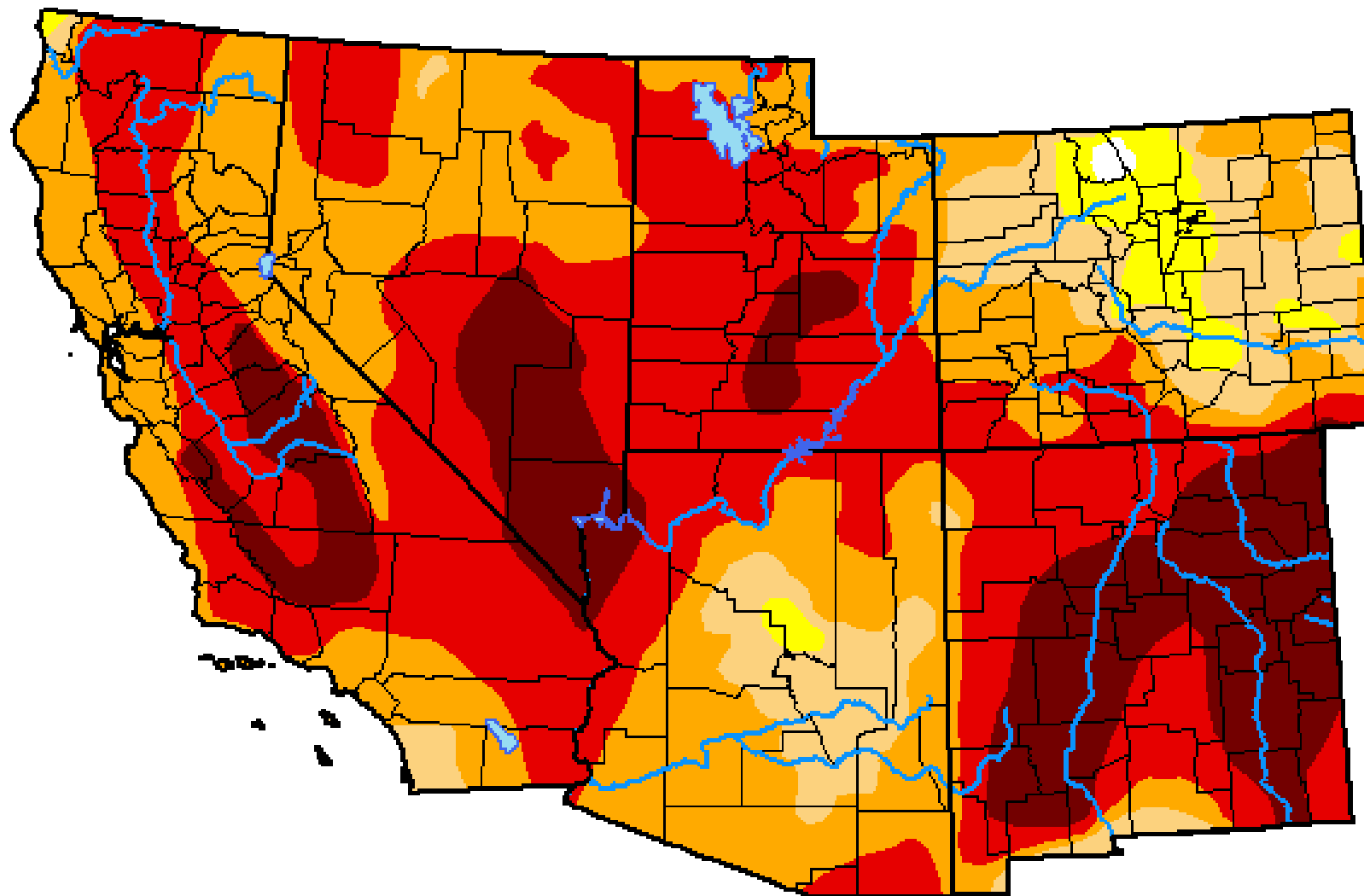
June 21, 2022

(Released Thursday, Jun. 23, 2022)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	0.16	99.84	96.93	86.70	55.30	16.66
<b>Last Week</b> <i>06-14-2022</i>	0.16	99.84	96.96	86.68	55.78	16.42
<b>3 Months Ago</b> <i>03-22-2022</i>	0.01	99.99	93.17	75.04	27.41	2.19
<b>Start of Calendar Year</b> <i>01-04-2022</i>	0.00	100.00	91.50	65.43	19.65	1.39
<b>Start of Water Year</b> <i>09-28-2021</i>	3.79	96.21	85.13	68.02	49.47	17.45
<b>One Year Ago</b> <i>06-22-2021</i>	8.35	91.65	90.02	85.27	72.78	39.81



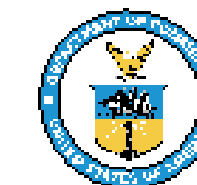
Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Adam Hartman  
NOAA/NWS/NCEP/CPC



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

# Current Drought Monitor

NM Drought Monitor Working Group



## Albuquerque

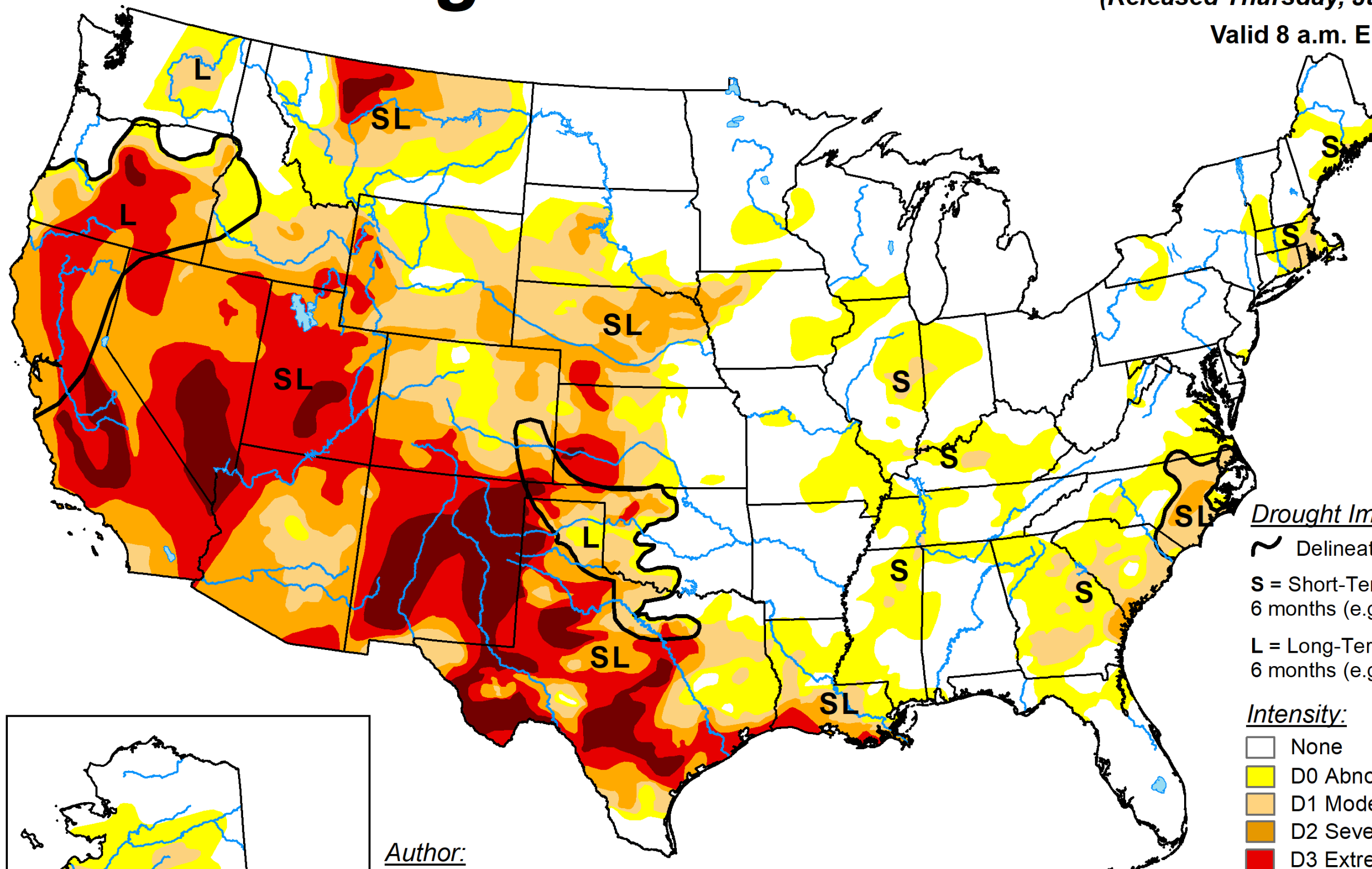
WEATHER FORECAST OFFICE

## U.S. Drought Monitor

June 21, 2022

(Released Thursday, Jun. 23, 2022)

Valid 8 a.m. EDT

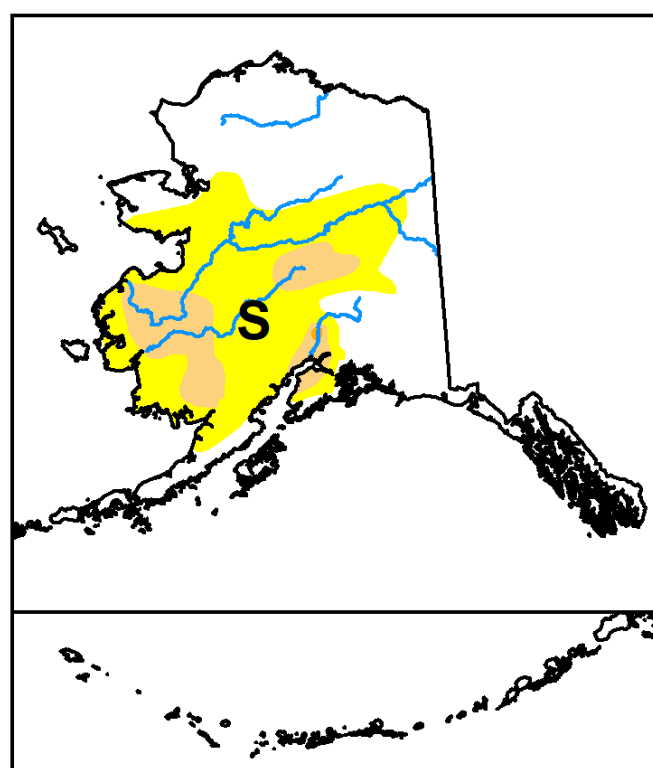


### Drought Impact Types:

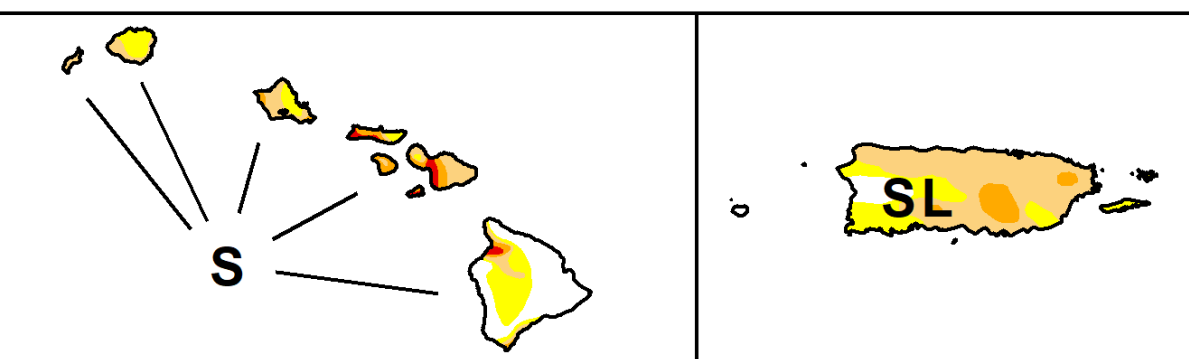
- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

### Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought



Author:  
Adam Hartman  
NOAA/NWS/NCEP/CPC



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

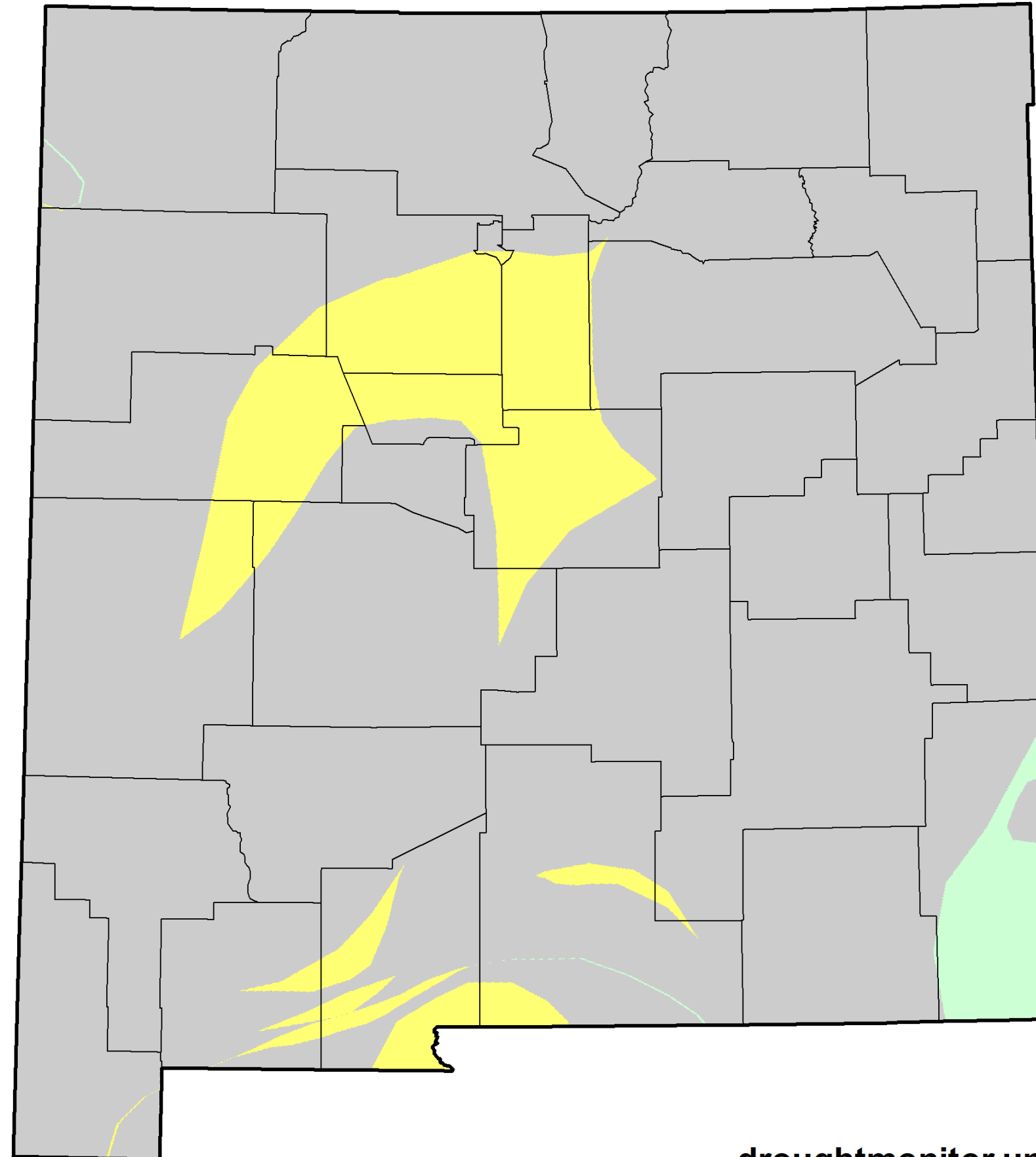
# One Month Change

NM Drought Monitor Working Group



Albuquerque  
WEATHER FORECAST OFFICE

## U.S. Drought Monitor Class Change - New Mexico 4 Week



June 21, 2022  
compared to  
May 24, 2022

[droughtmonitor.unl.edu](http://droughtmonitor.unl.edu)



- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

# Precipitation Percent of Normal

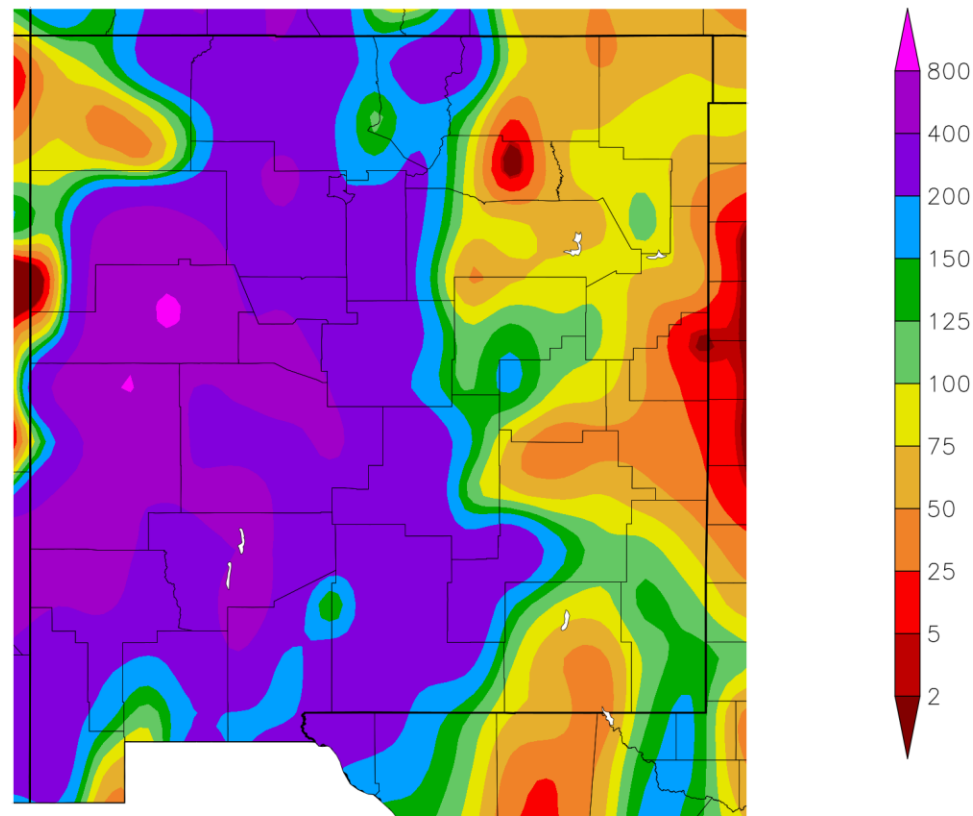


## Albuquerque

WEATHER FORECAST OFFICE

### NM Drought Monitor Working Group

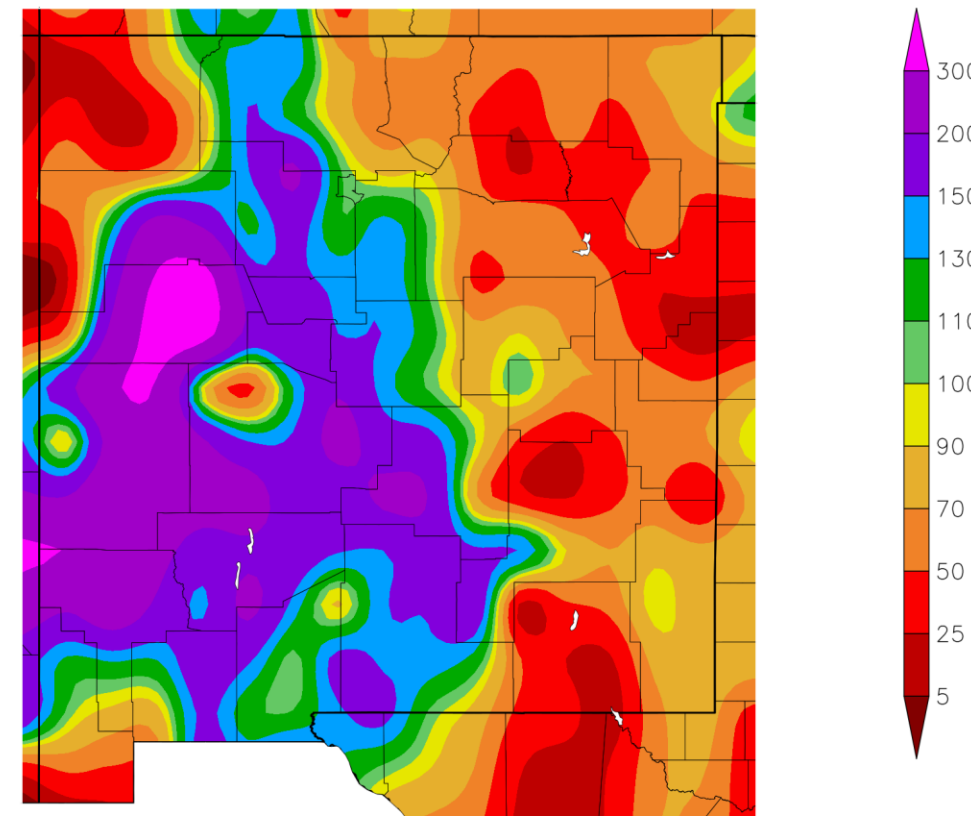
Percent of Normal Precipitation (%)  
5/28/2022 – 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

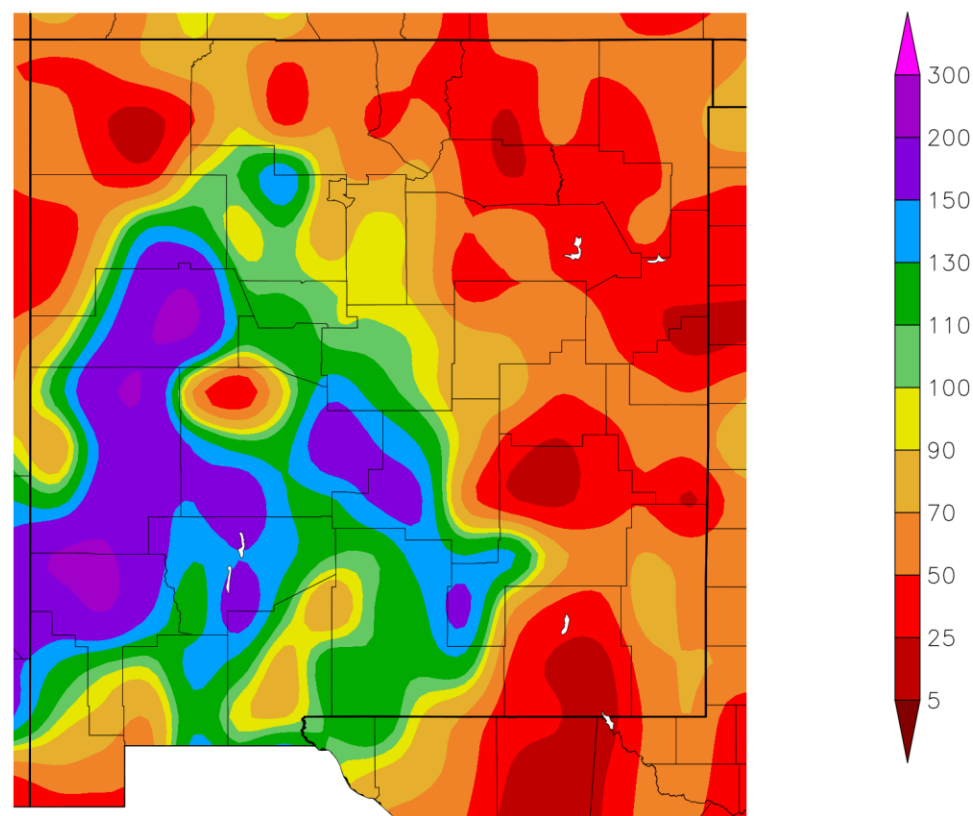
Percent of Normal Precipitation (%)  
4/28/2022 – 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

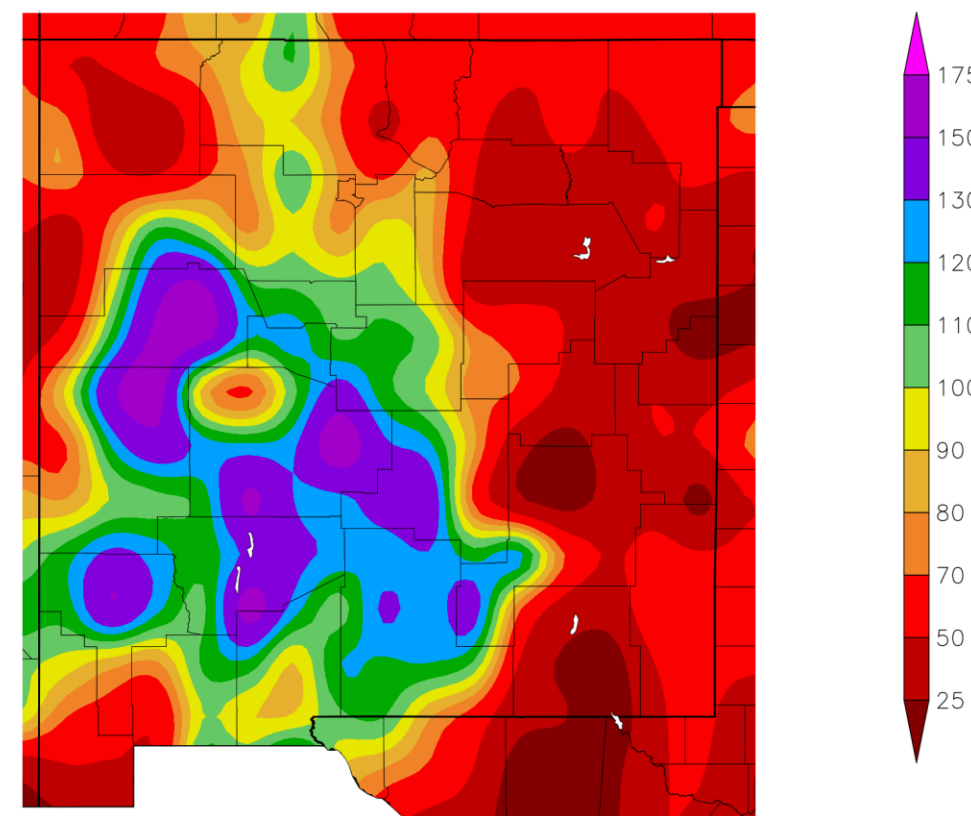
Percent of Normal Precipitation (%)  
3/29/2022 – 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)  
2/27/2022 – 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers



# Precipitation Percent of Normal

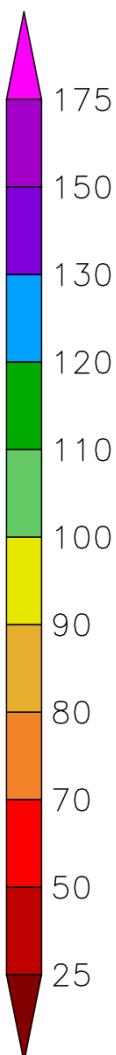
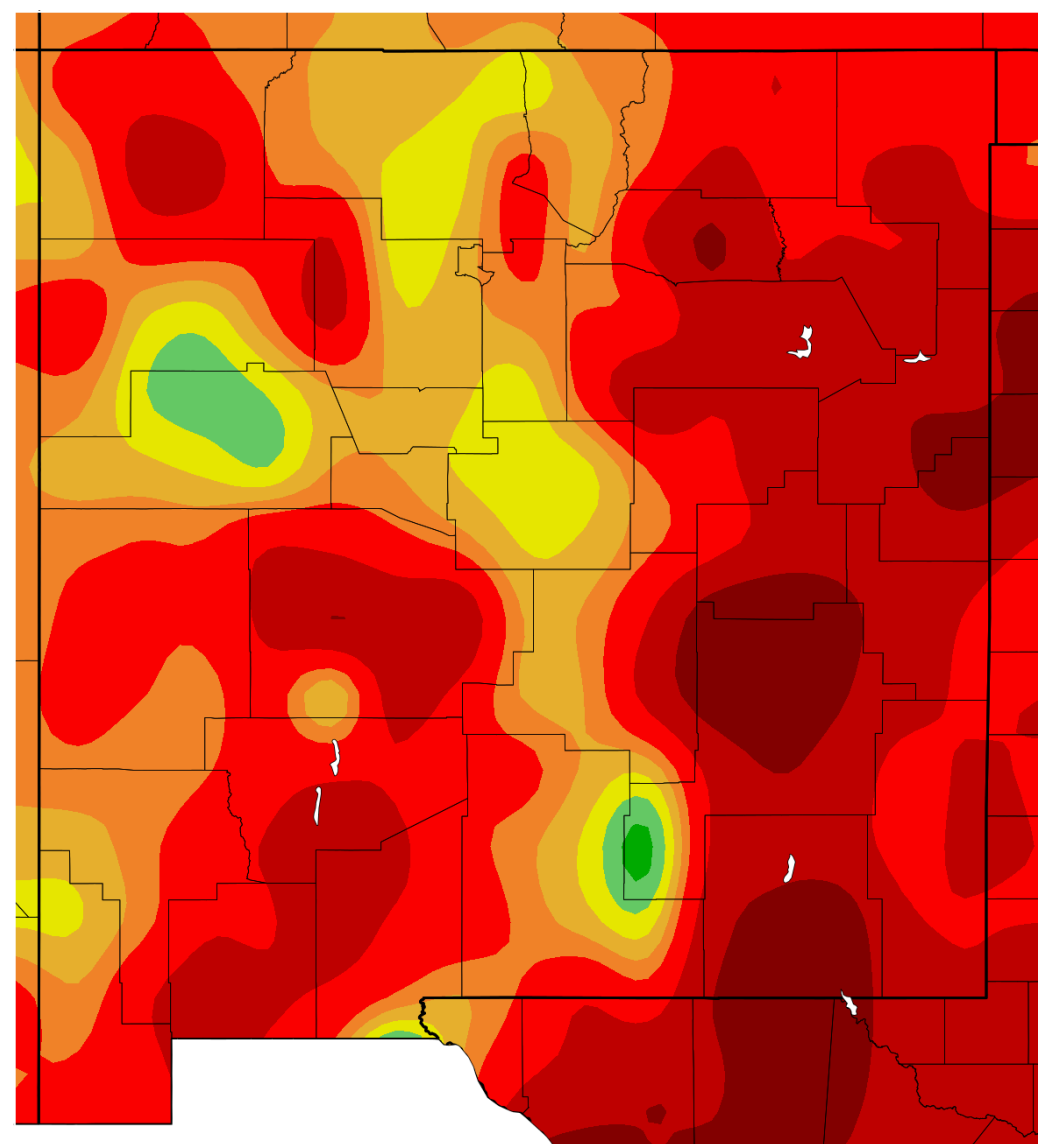


## Albuquerque

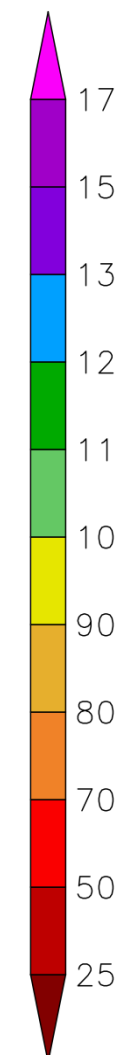
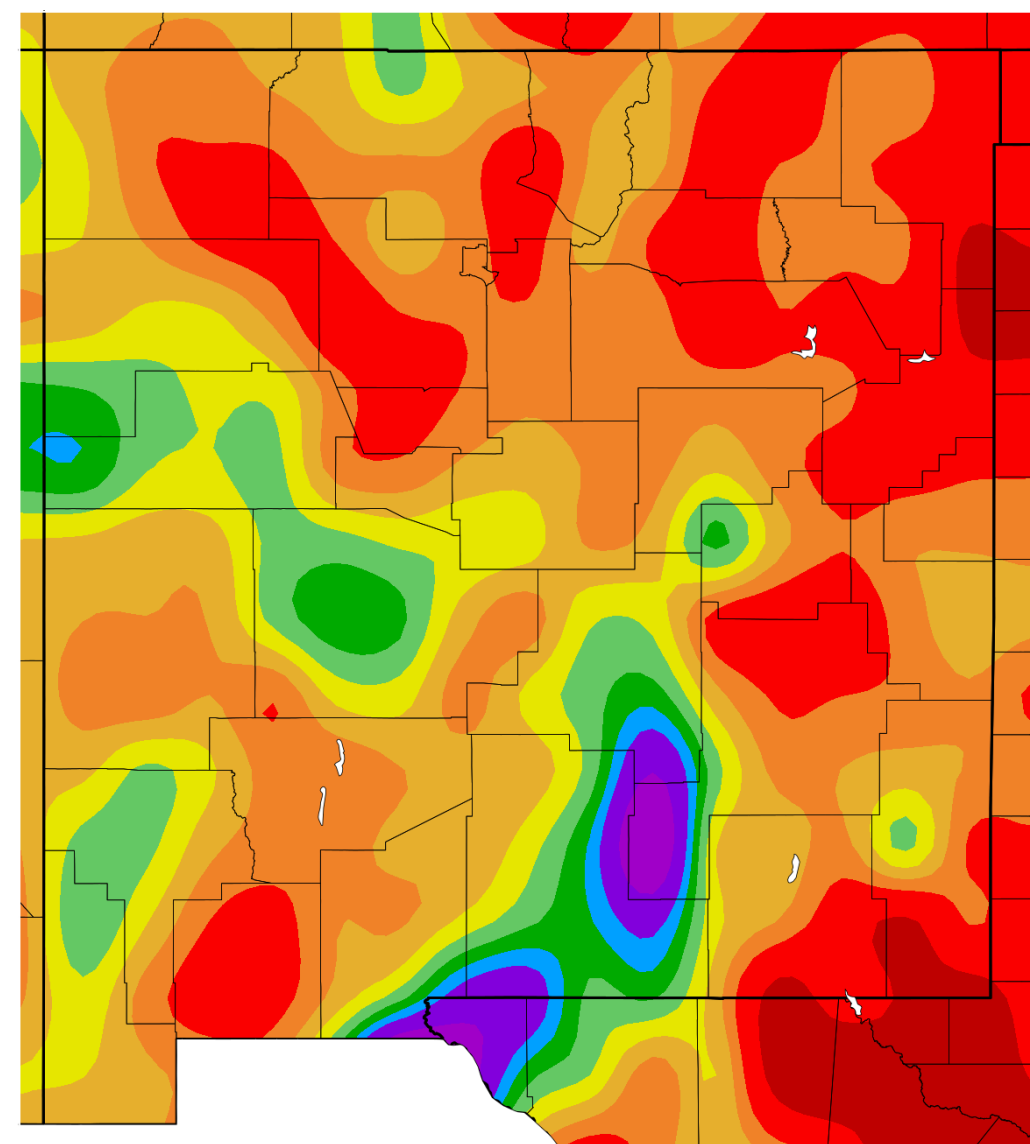
WEATHER FORECAST OFFICE

### NM Drought Monitor Working Group

Percent of Normal Precipitation (%)  
12/24/2021 – 6/23/2022



Percent of Normal Precipitation (%)  
6/24/2021 – 6/23/2022



Generated 6/24/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers Generated 6/24/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

# 30-120 Day Stand. Pcpn Index (SPI)

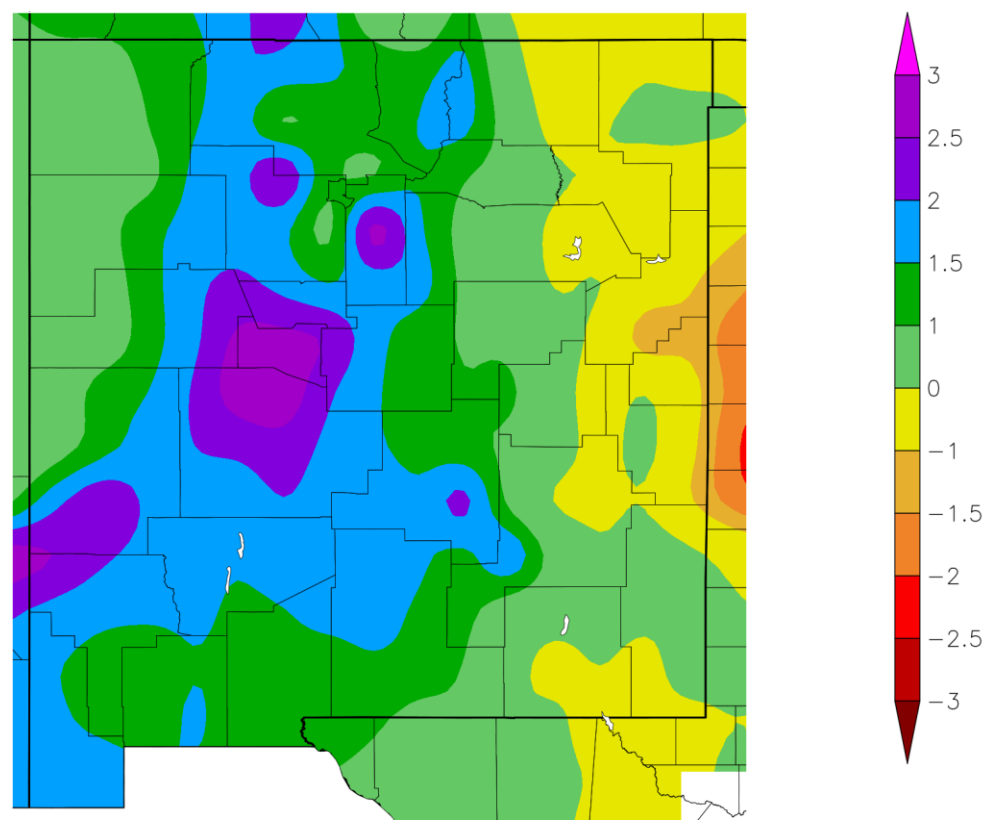


## Albuquerque

WEATHER FORECAST OFFICE

### NM Drought Monitor Working Group

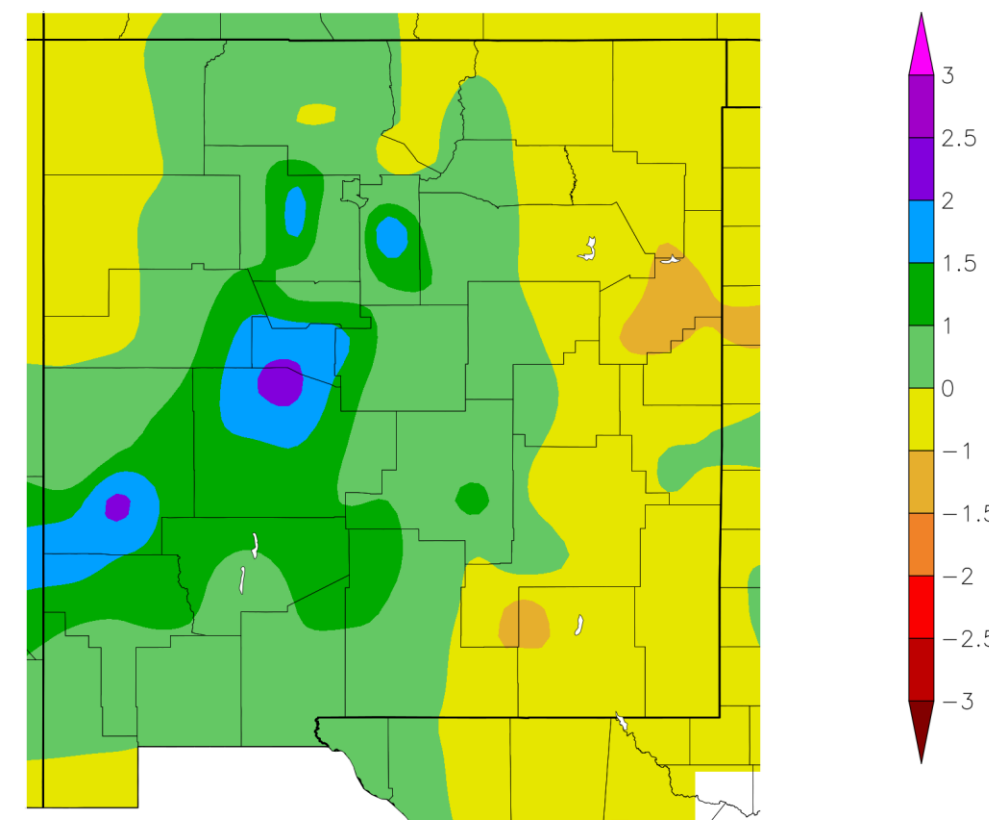
30 Day SPI  
5/28/2022 - 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

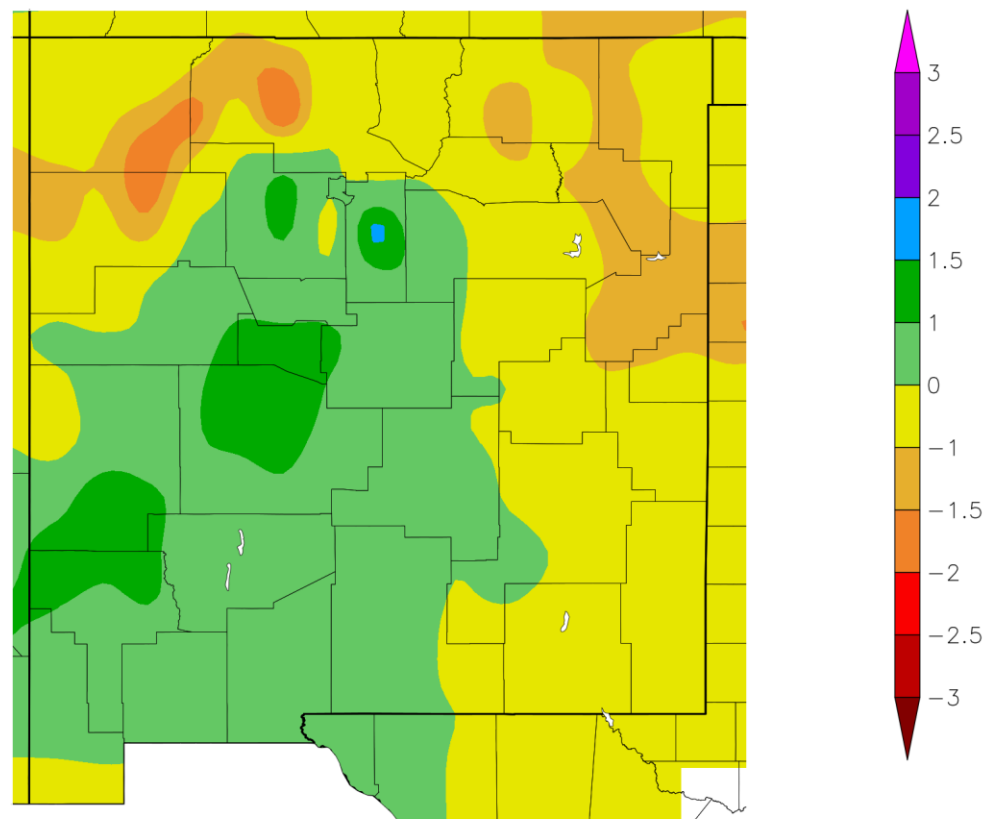
60 Day SPI  
4/28/2022 - 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

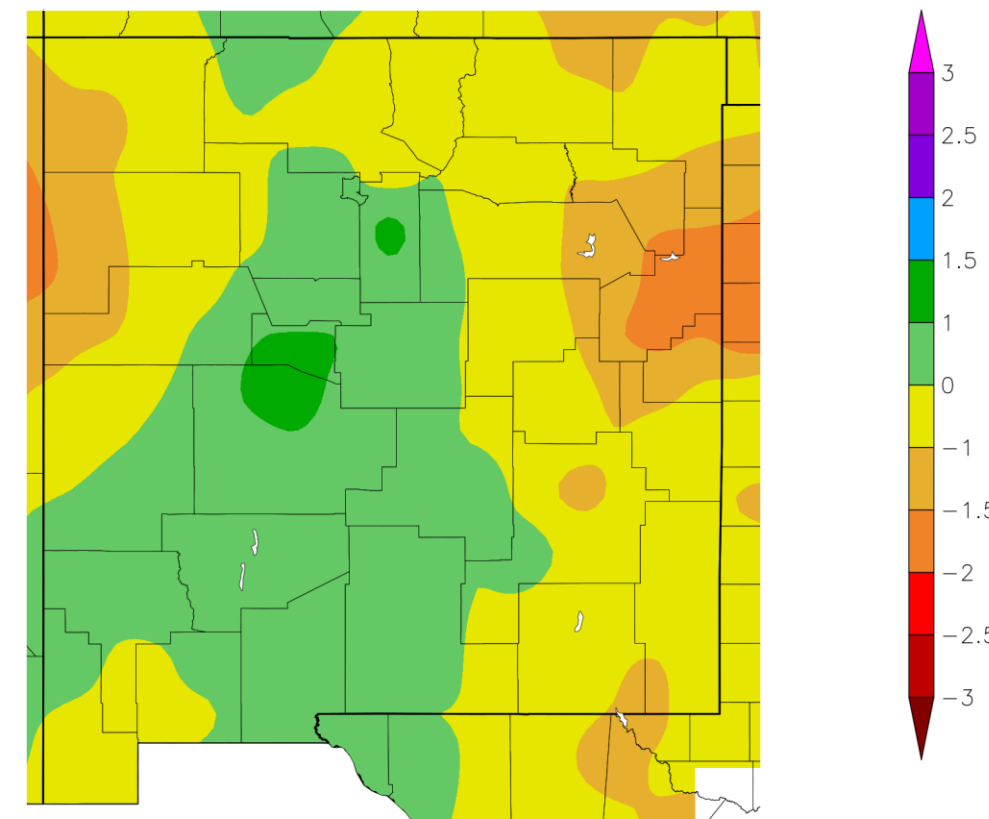
90 Day SPI  
3/29/2022 - 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

120 Day SPI  
2/27/2022 - 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers



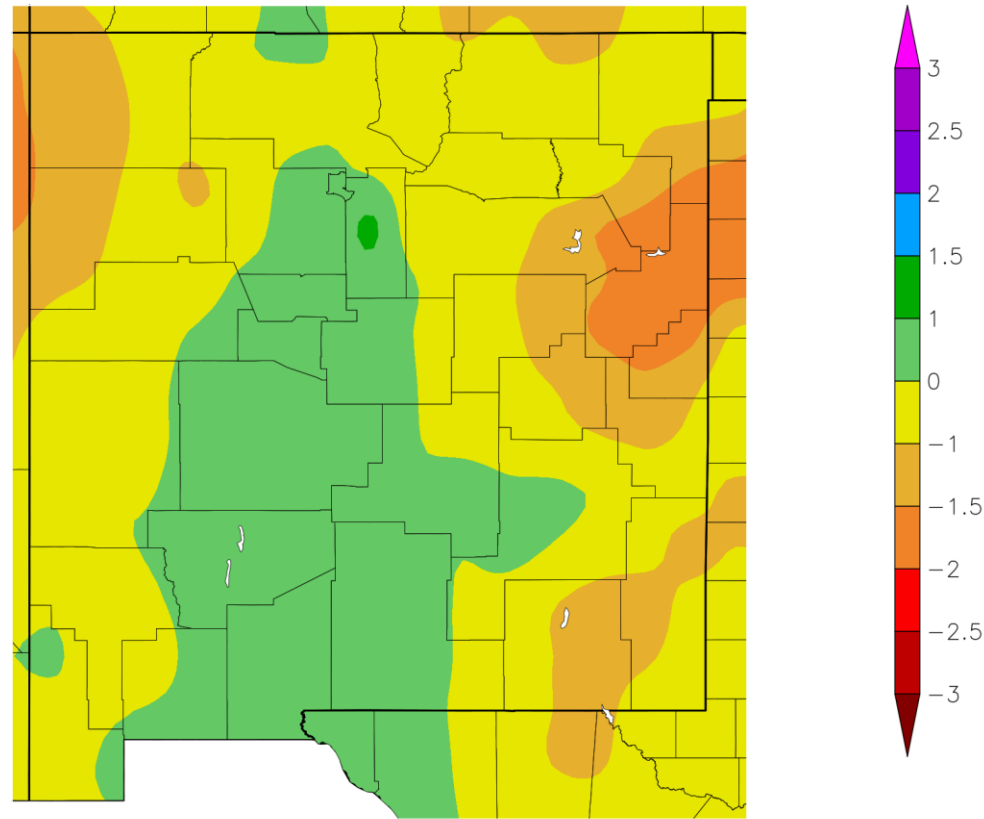
# Other SPI Values



Albuquerque  
WEATHER FORECAST OFFICE

NM Drought Monitor Working Group

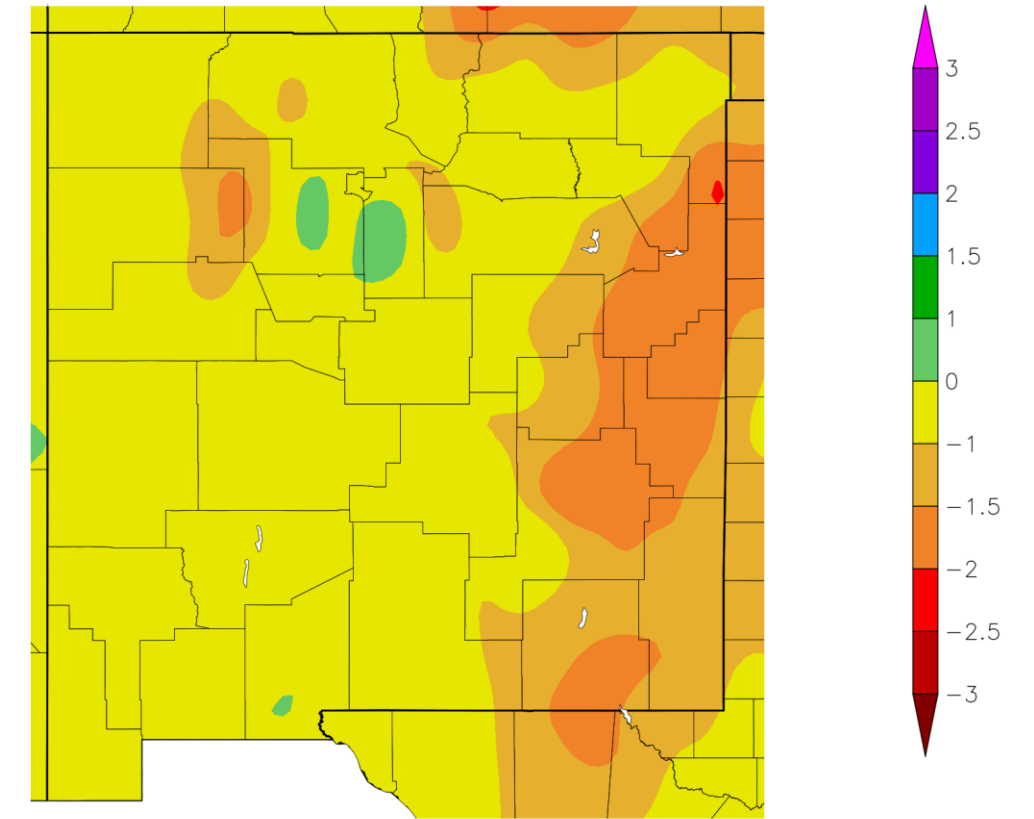
6 Month SPI  
12/27/2021 - 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

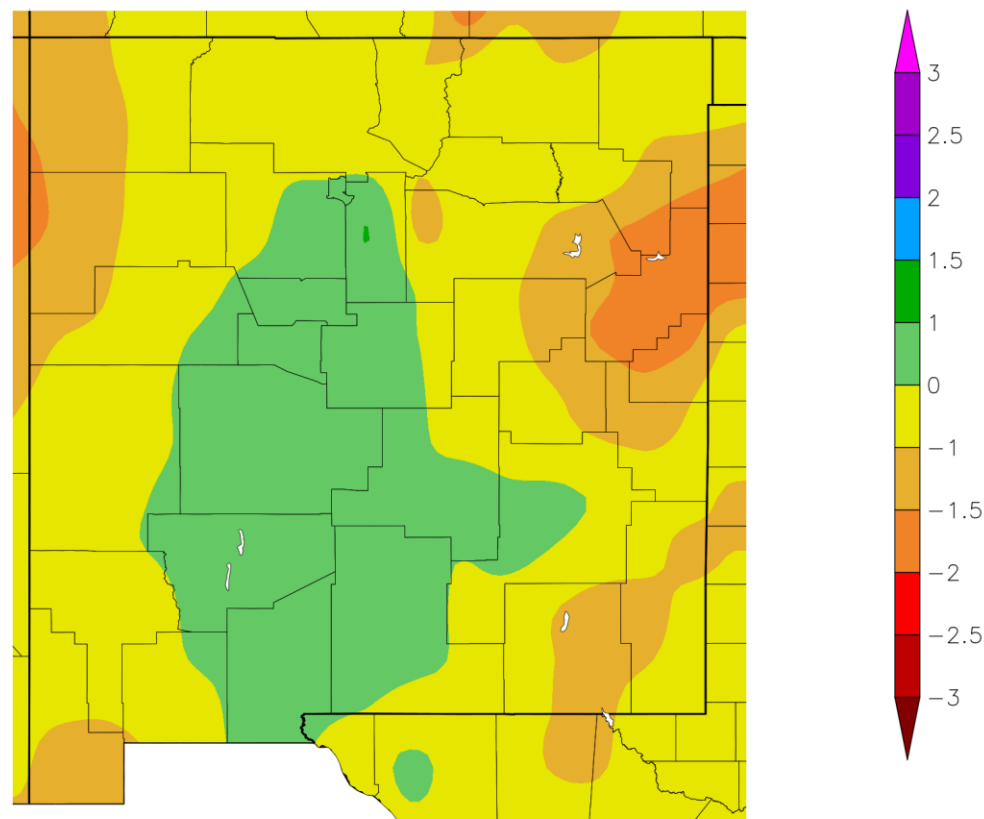
9 Month SPI  
9/27/2021 - 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

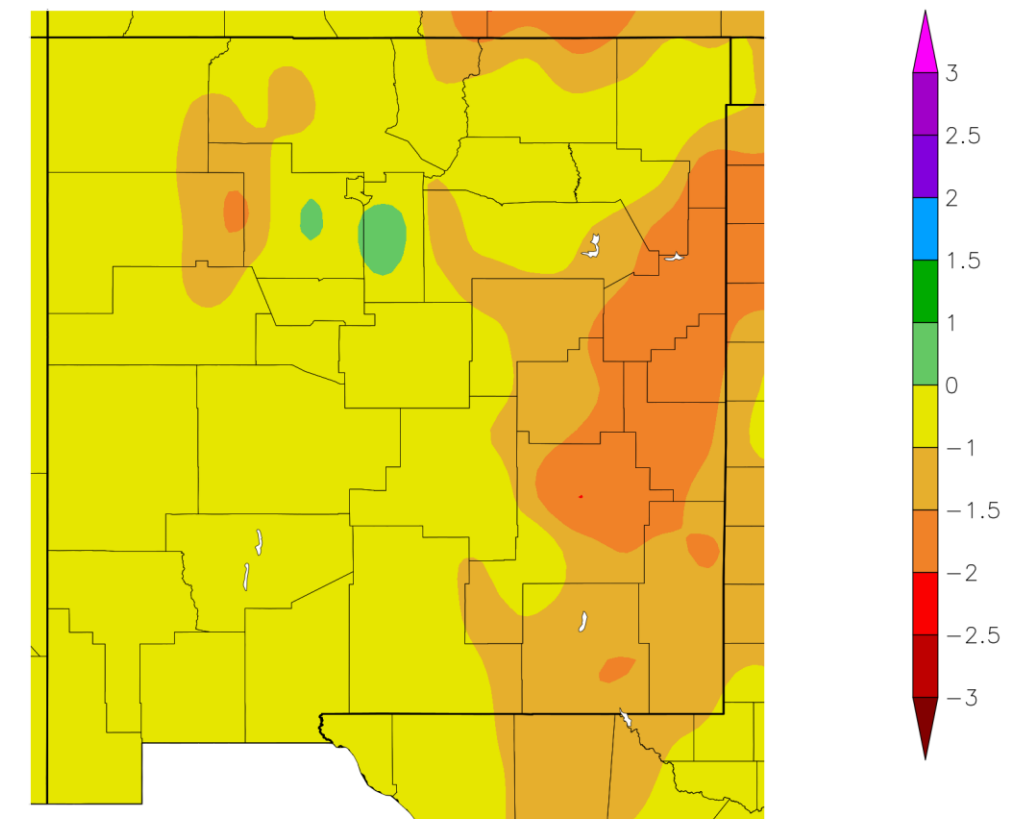
Year-to-Date SPI  
1/1/2022 - 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Water Year SPI  
10/1/2021 - 6/26/2022



Generated 6/27/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

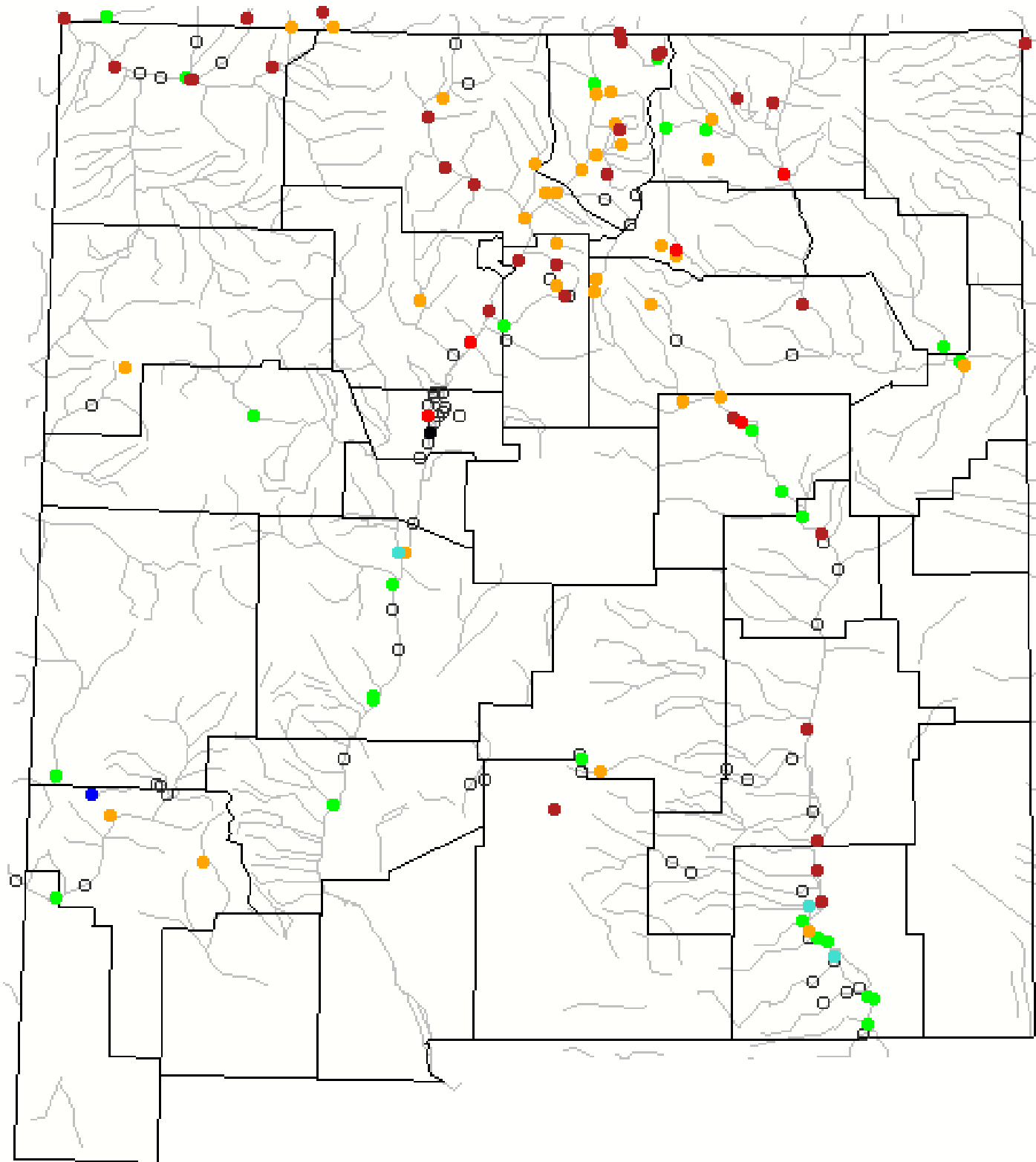
# USGS 28-Day Streamflow

NM Drought Monitor Working Group



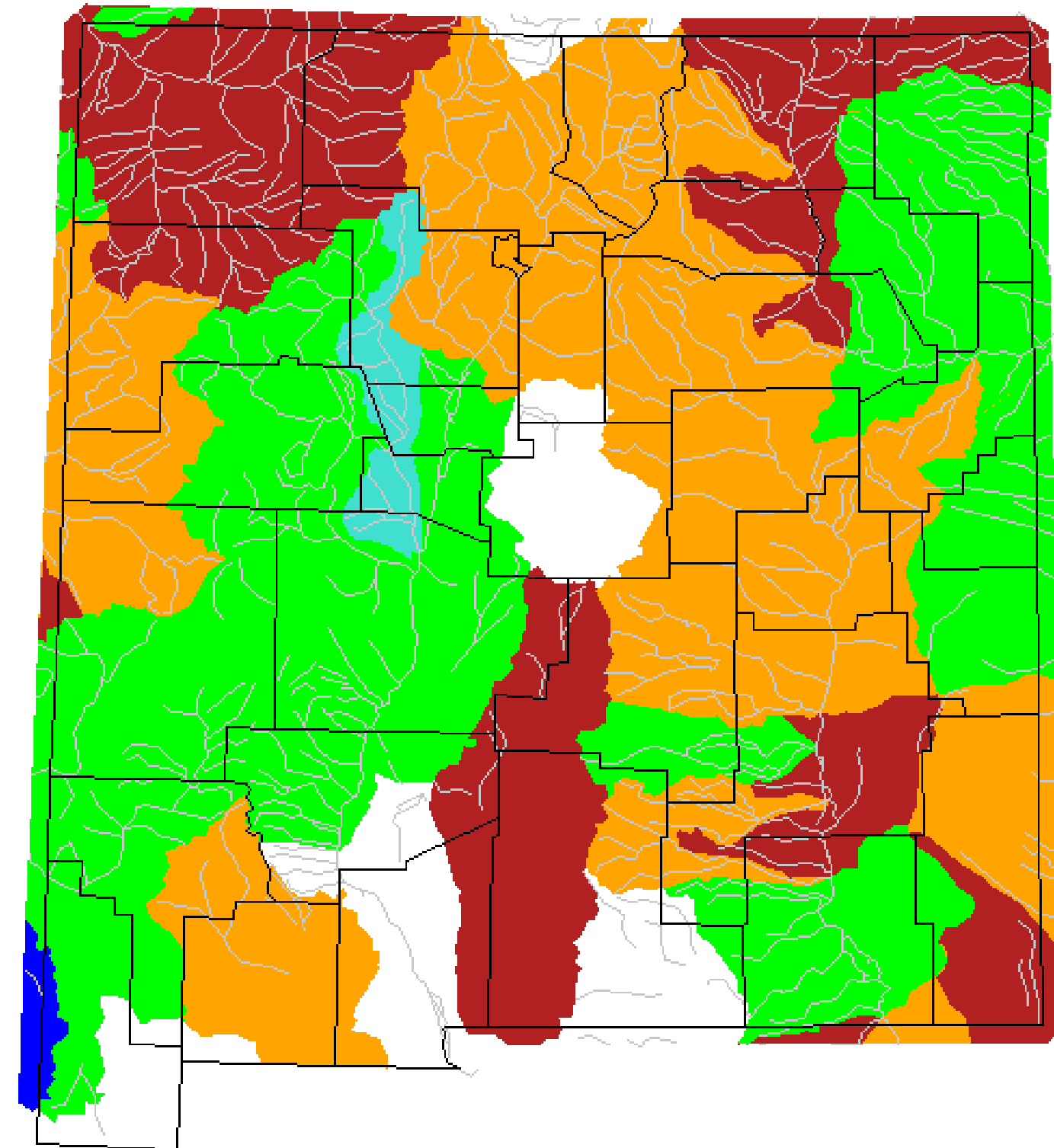
Albuquerque  
WEATHER FORECAST OFFICE

Sunday, June 26, 2022



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Sunday, June 26, 2022



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

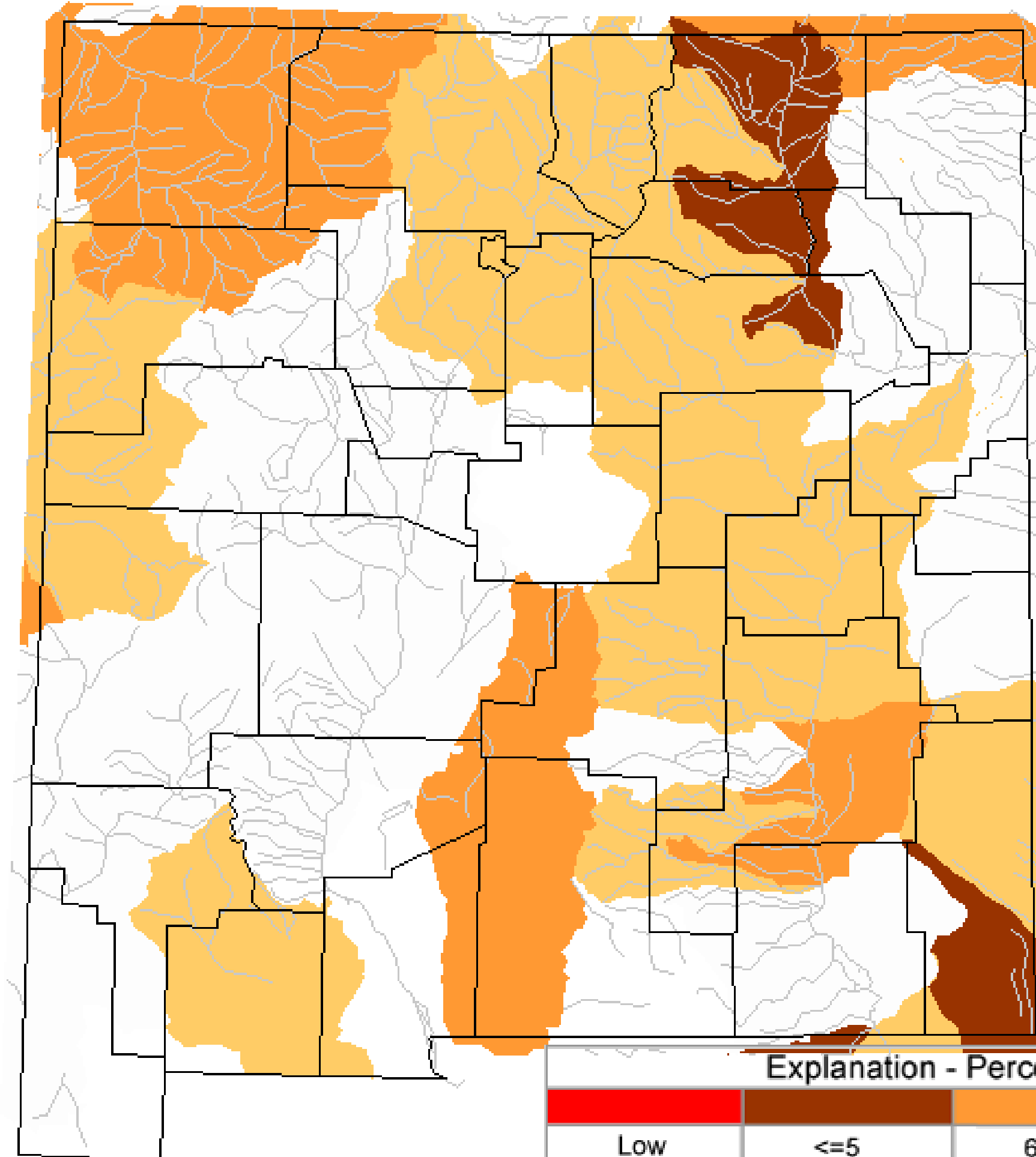
# USGS 28-Day Streamflow

NM Drought Monitor Working Group



Albuquerque  
WEATHER FORECAST OFFICE

Sunday, June 26, 2022



Explanation - Percentile classes				
Low	<=5	6-9	10-24	Insufficient data for a hydrologic region
Extreme hydrologic drought	Severe hydrologic drought	Moderate hydrologic drought	Below normal	



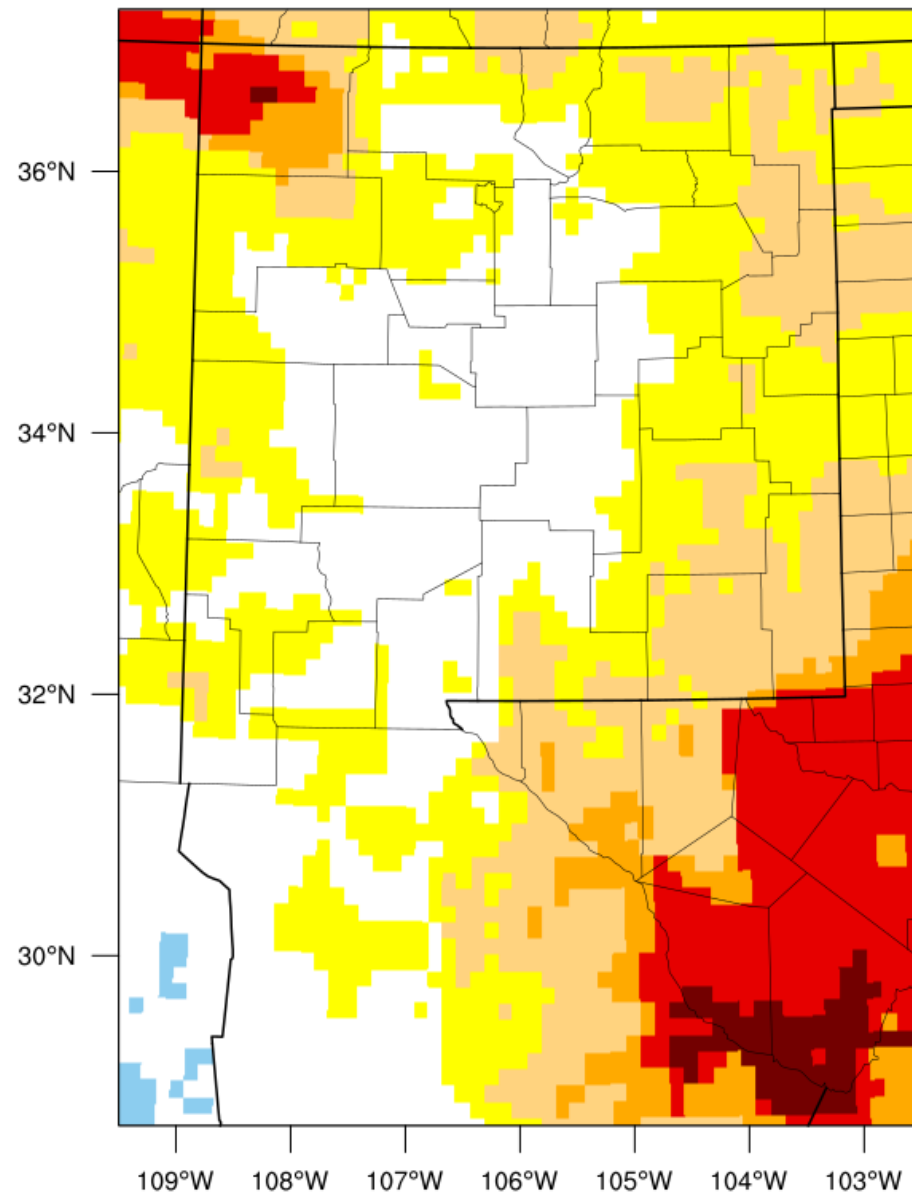
# Evaporative Demand Drought Index (EDDI)



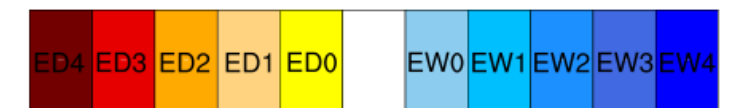
Albuquerque  
WEATHER FORECAST OFFICE

NM Drought Monitor Working Group

1-month EDDI categories for June 22, 2022



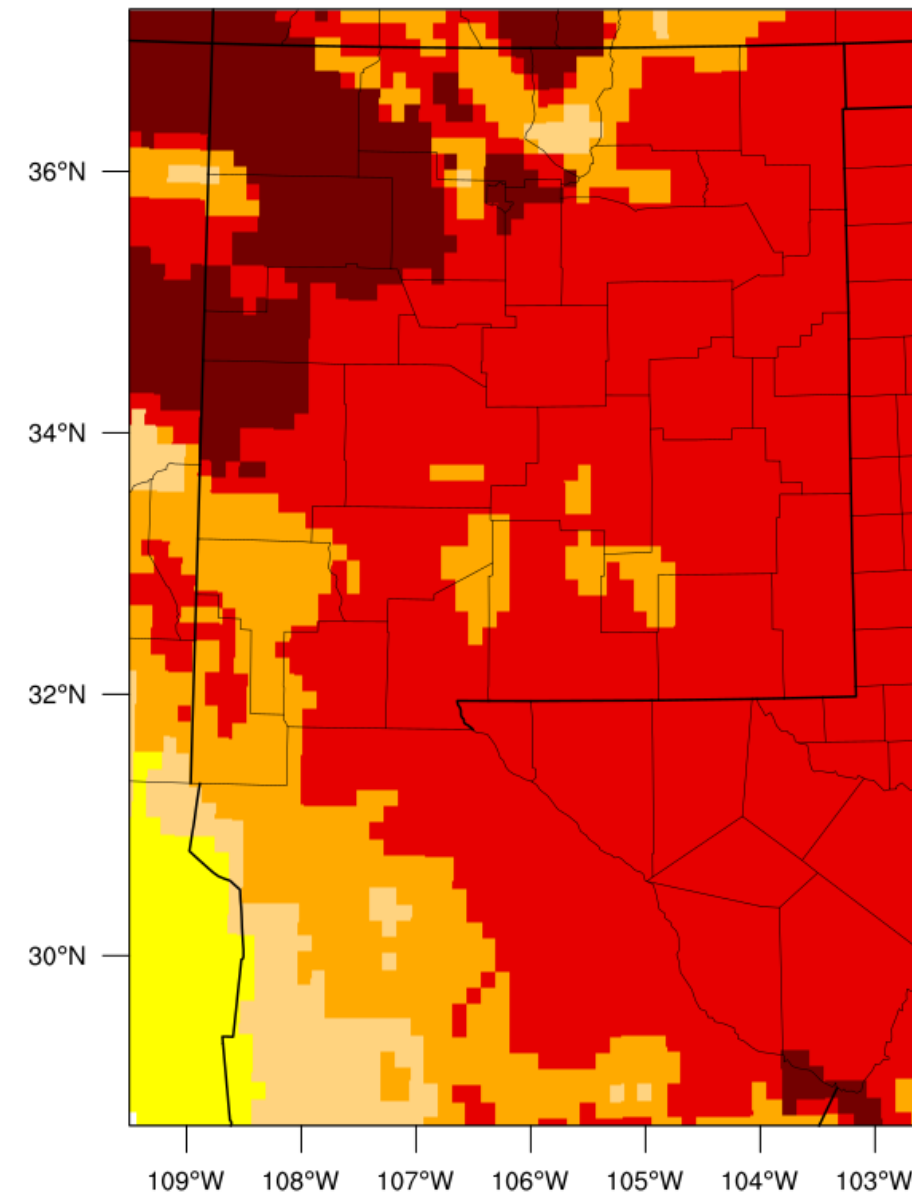
Drought categories      Wetness categories



100% 98% 95% 90% 80% 70% 30% 20% 10% 5% 2% 0%  
(EDDI-percentile category breaks: 100% = driest; 0% = wettest)

Generated by NOAA/ESRL/Physical Sciences Laboratory

3-month EDDI categories for June 22, 2022



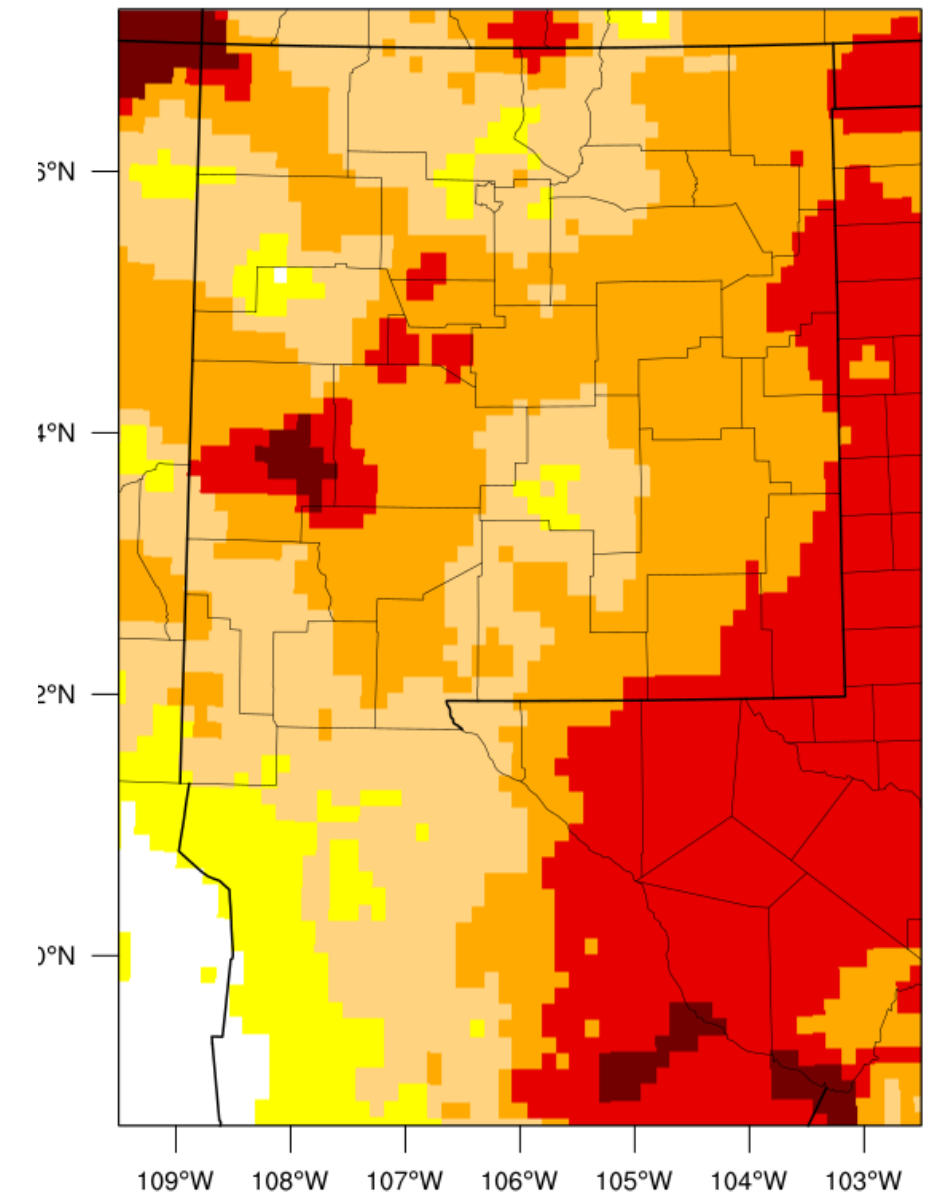
Drought categories      Wetness categories



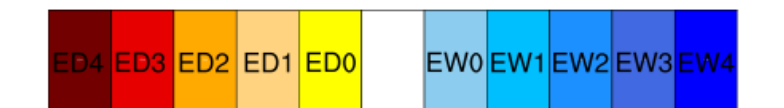
100% 98% 95% 90% 80% 70% 30% 20% 10% 5% 2% 0%  
(EDDI-percentile category breaks: 100% = driest; 0% = wettest)

Generated by NOAA/ESRL/Physical Sciences Laboratory

6-month EDDI categories for June 22, 2022



Drought categories      Wetness categories



100% 98% 95% 90% 80% 70% 30% 20% 10% 5% 2% 0%  
(EDDI-percentile category breaks: 100% = driest; 0% = wettest)

Generated by NOAA/ESRL/Physical Sciences Laboratory

<https://www.esrl.noaa.gov/psd/eddi/>

# Evaporative Demand Drought Index (EDDI)

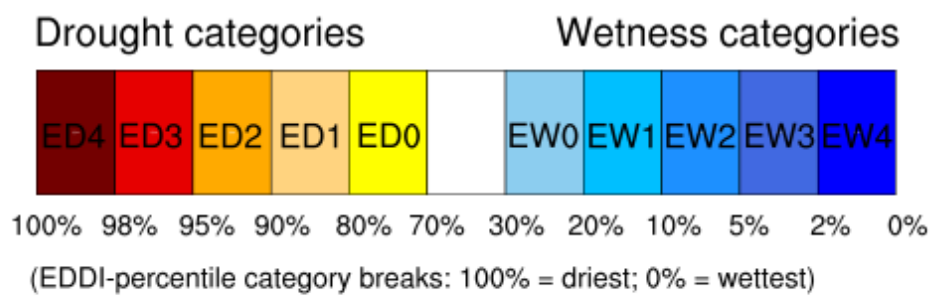
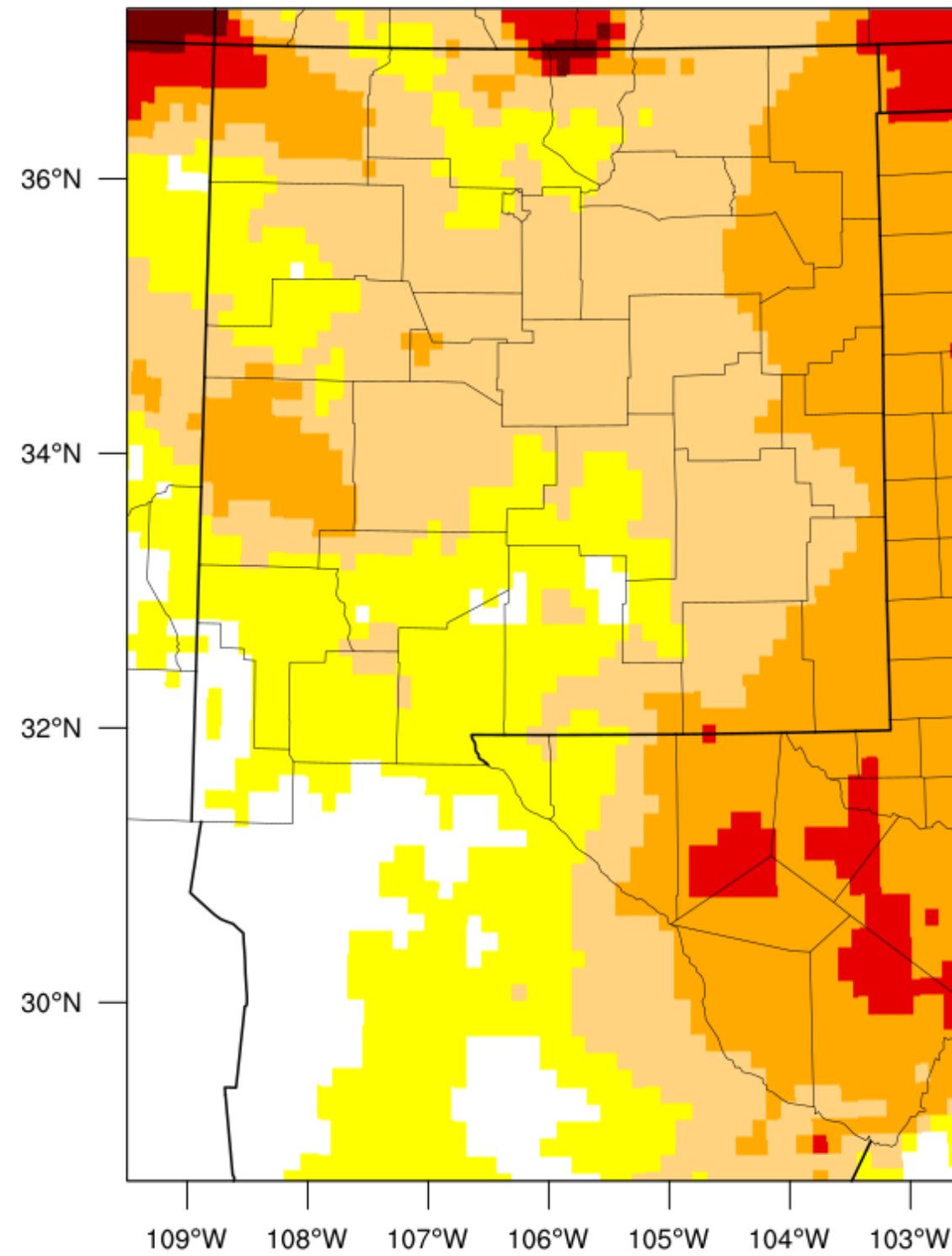


Albuquerque

WEATHER FORECAST OFFICE

NM Drought Monitor Working Group

12-month EDDI categories for June 22, 2022



Generated by NOAA/ESRL/Physical Sciences Laboratory

<https://www.esrl.noaa.gov/psd/eddi/>



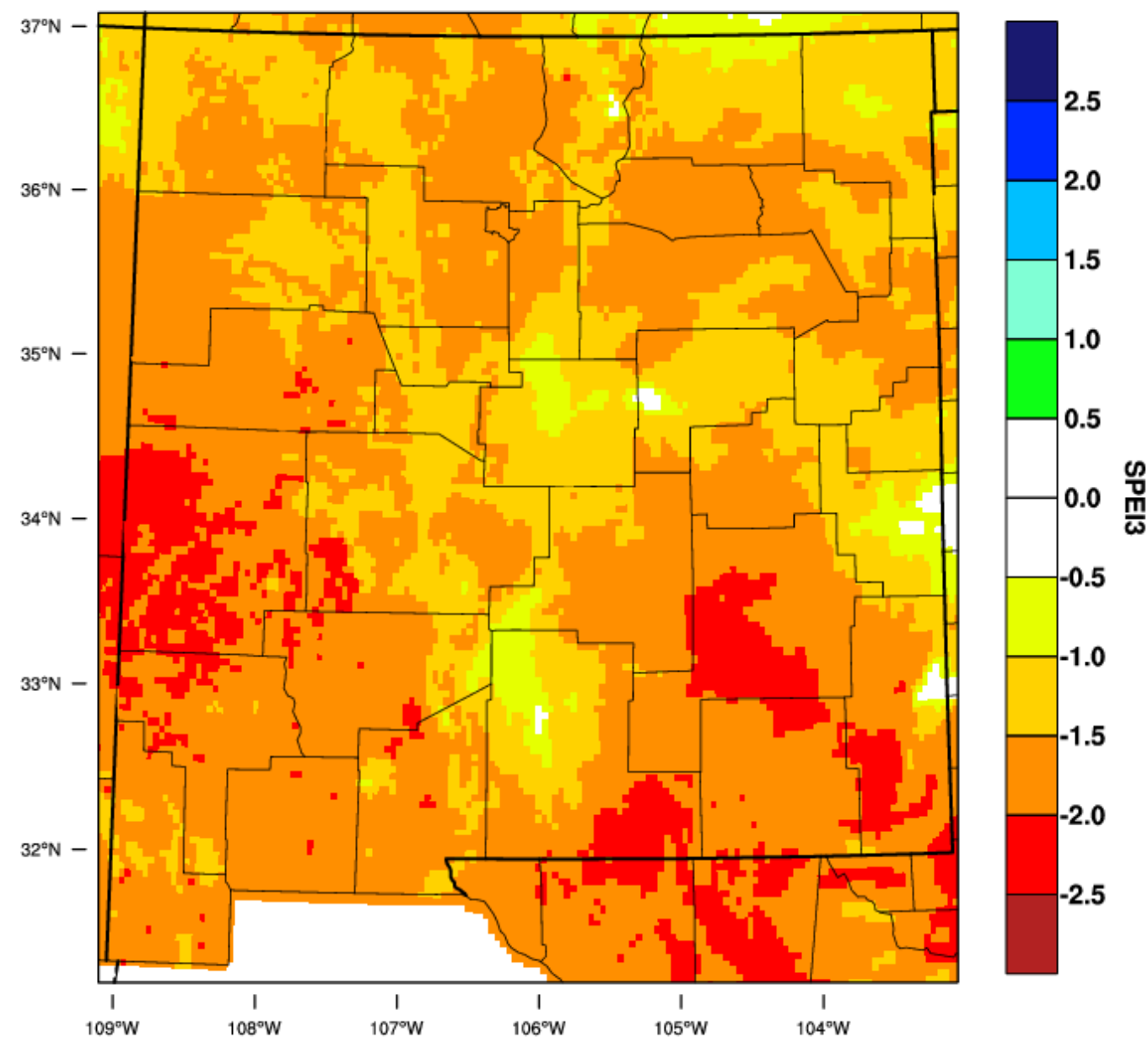
# Standardized Precipitation/ET Index (SPEI)



Albuquerque  
WEATHER FORECAST OFFICE

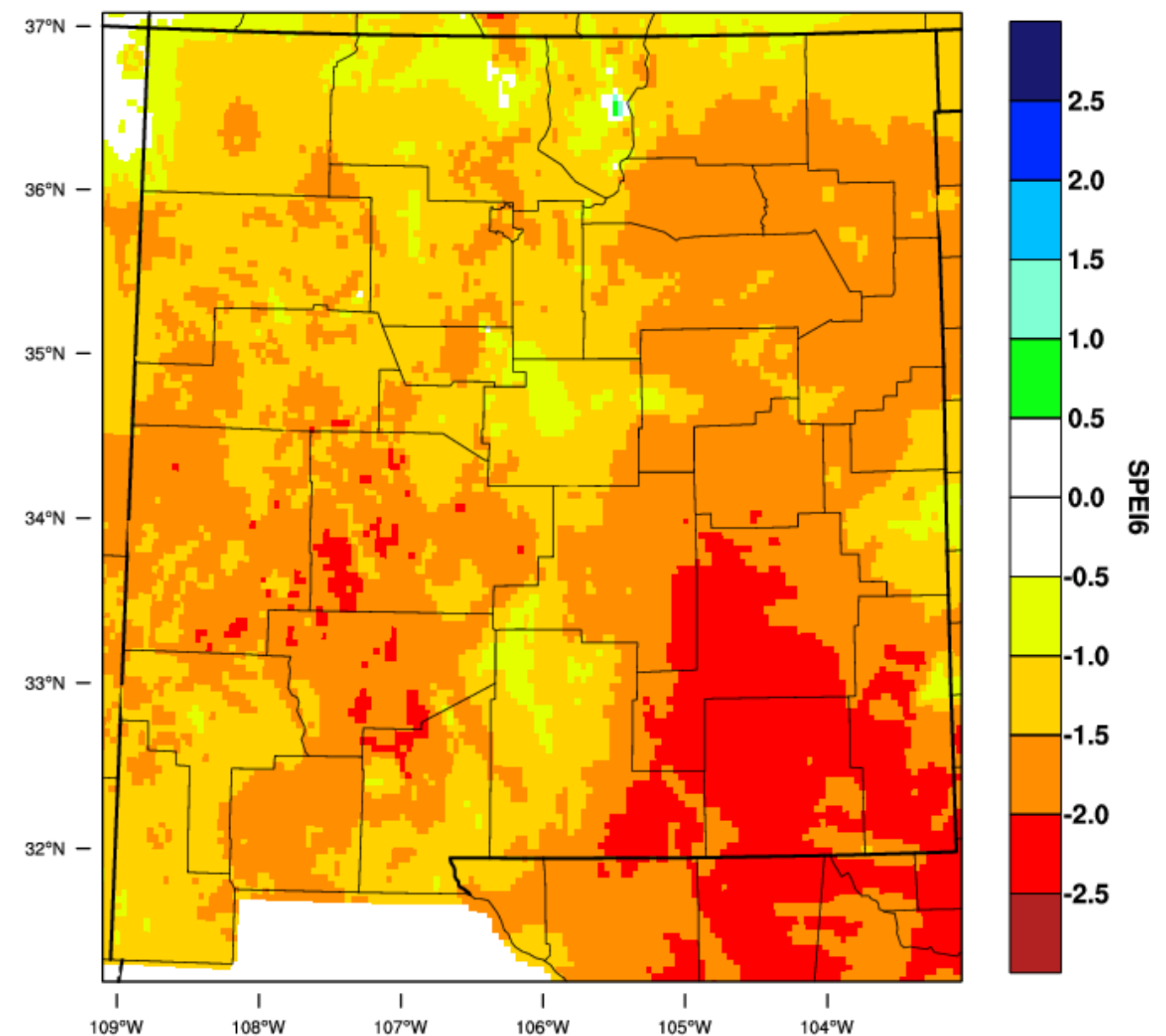
NM Drought Monitor Working Group

New Mexico - 3 month SPEI  
May 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 16 JUN 2022

New Mexico - 6 month SPEI  
May 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 16 JUN 2022



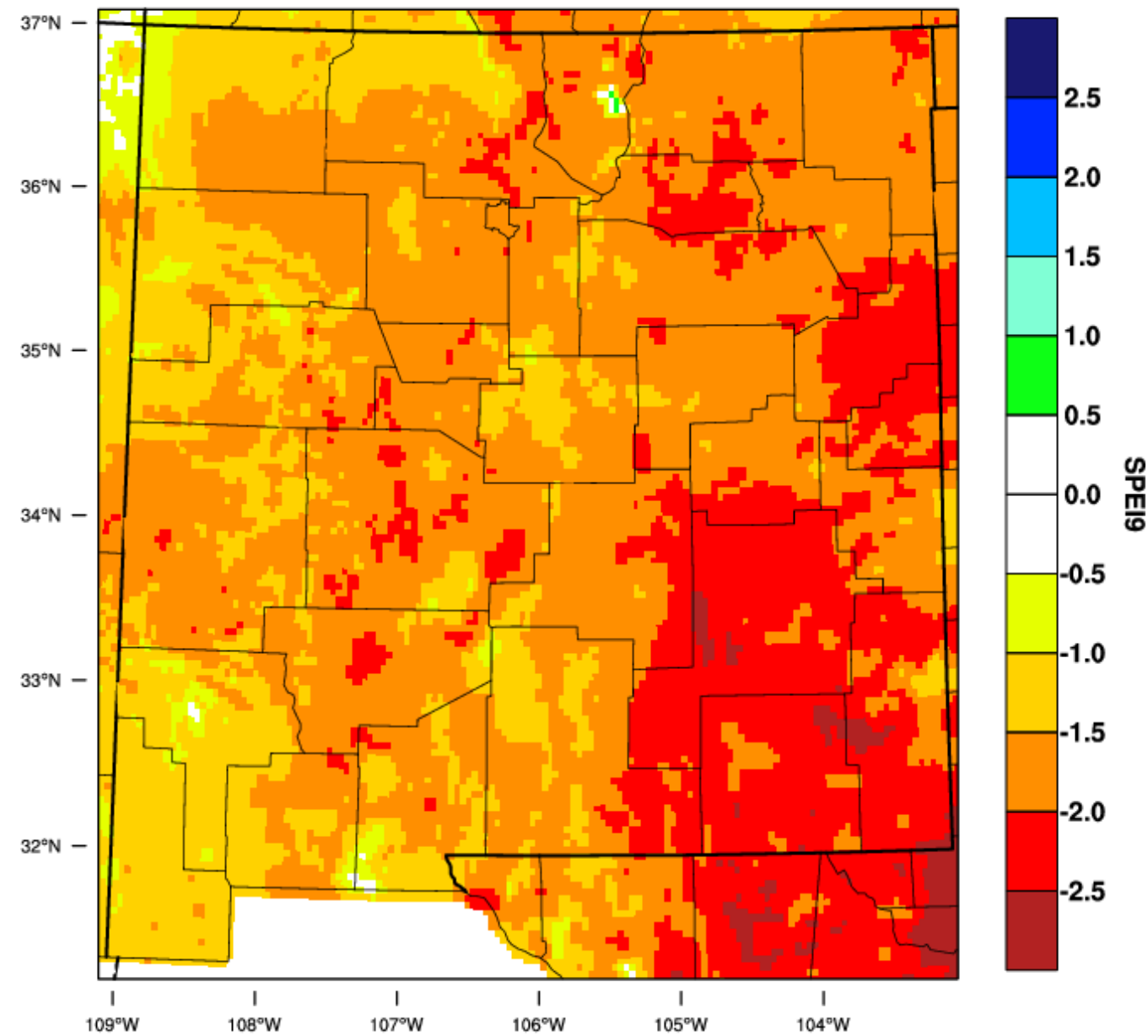
# Standardized Precipitation/ET Index (SPEI)



Albuquerque  
WEATHER FORECAST OFFICE

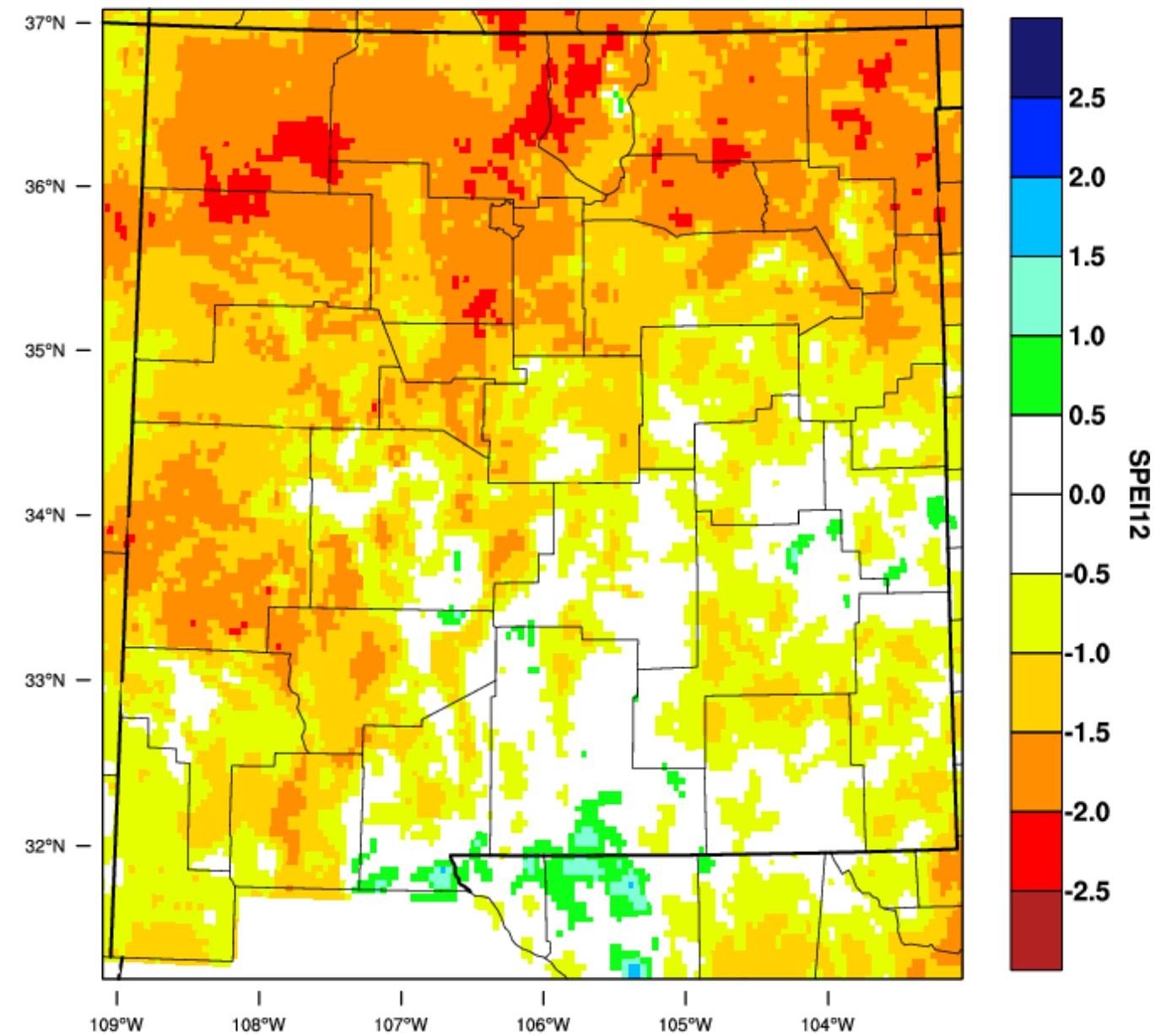
NM Drought Monitor Working Group

New Mexico - 9 month SPEI  
May 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 16 JUN 2022

New Mexico - 12 month SPEI  
May 2022



WestWide Drought Tracker, U Idaho/WRCC Data Source: PRISM (Prelim), created 16 JUN 2022

# Season in Perspective

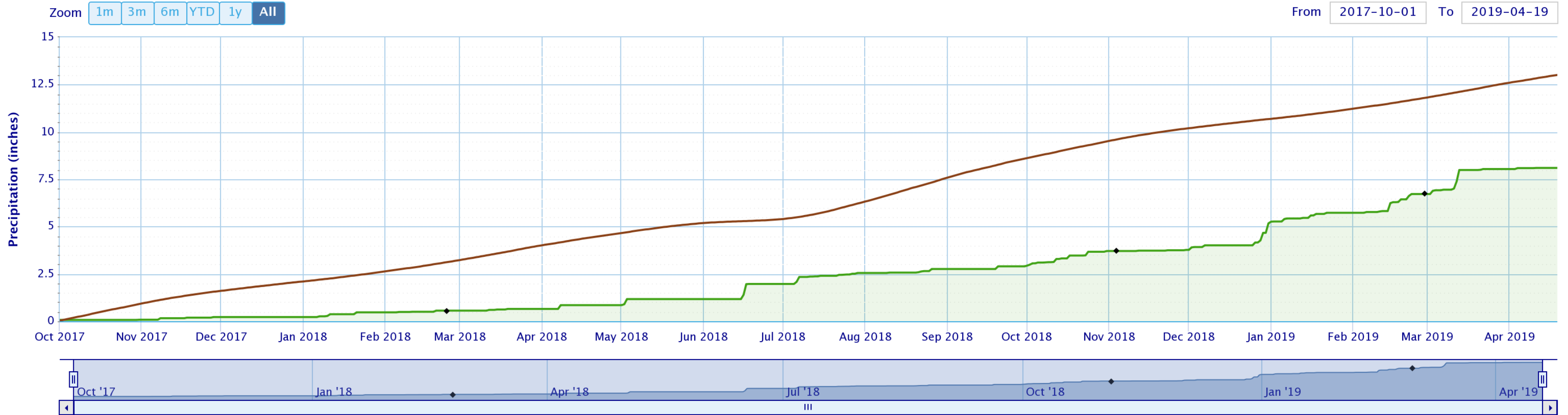
NM Drought Monitor Working Group



Albuquerque  
WEATHER FORECAST OFFICE

Accumulated Precipitation – FARMINGTON AG SCIENCE CNT, NM

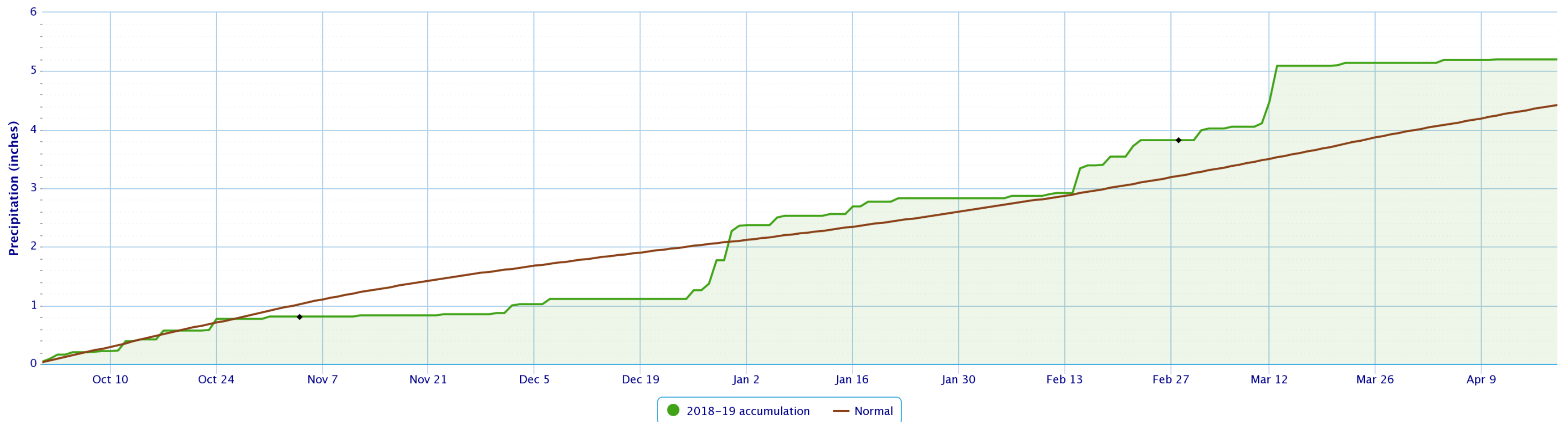
Use navigation tools above and below chart to change displayed range; green/black diamonds represent subsequent/missing values



Powered by ACIS

Accumulated Precipitation – FARMINGTON AG SCIENCE CNT, NM

Click and drag to zoom to a shorter time interval; green/black diamonds represent subsequent/missing values



Powered by ACIS



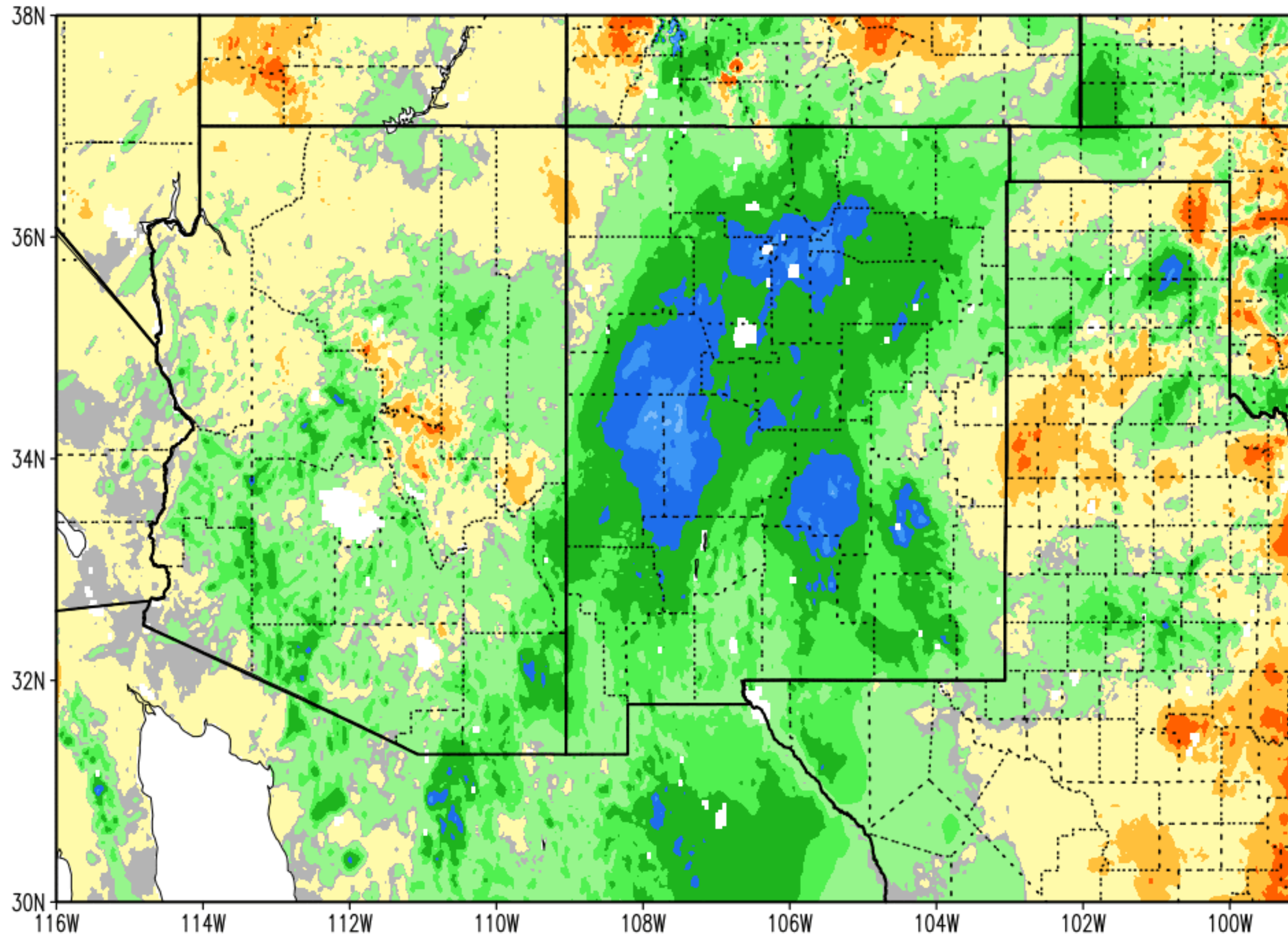
# Soil Moisture Change

NM Drought Monitor Working Group

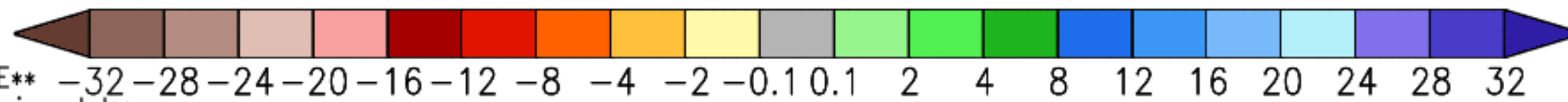


Albuquerque  
WEATHER FORECAST OFFICE

1-Month Difference in Column Relative Soil Moisture (%) valid 12z 27 Jun 2022



\*\*NOTE\*\*  
\*\*Experimental\*\*



# Niño Region SST Departures (°C)

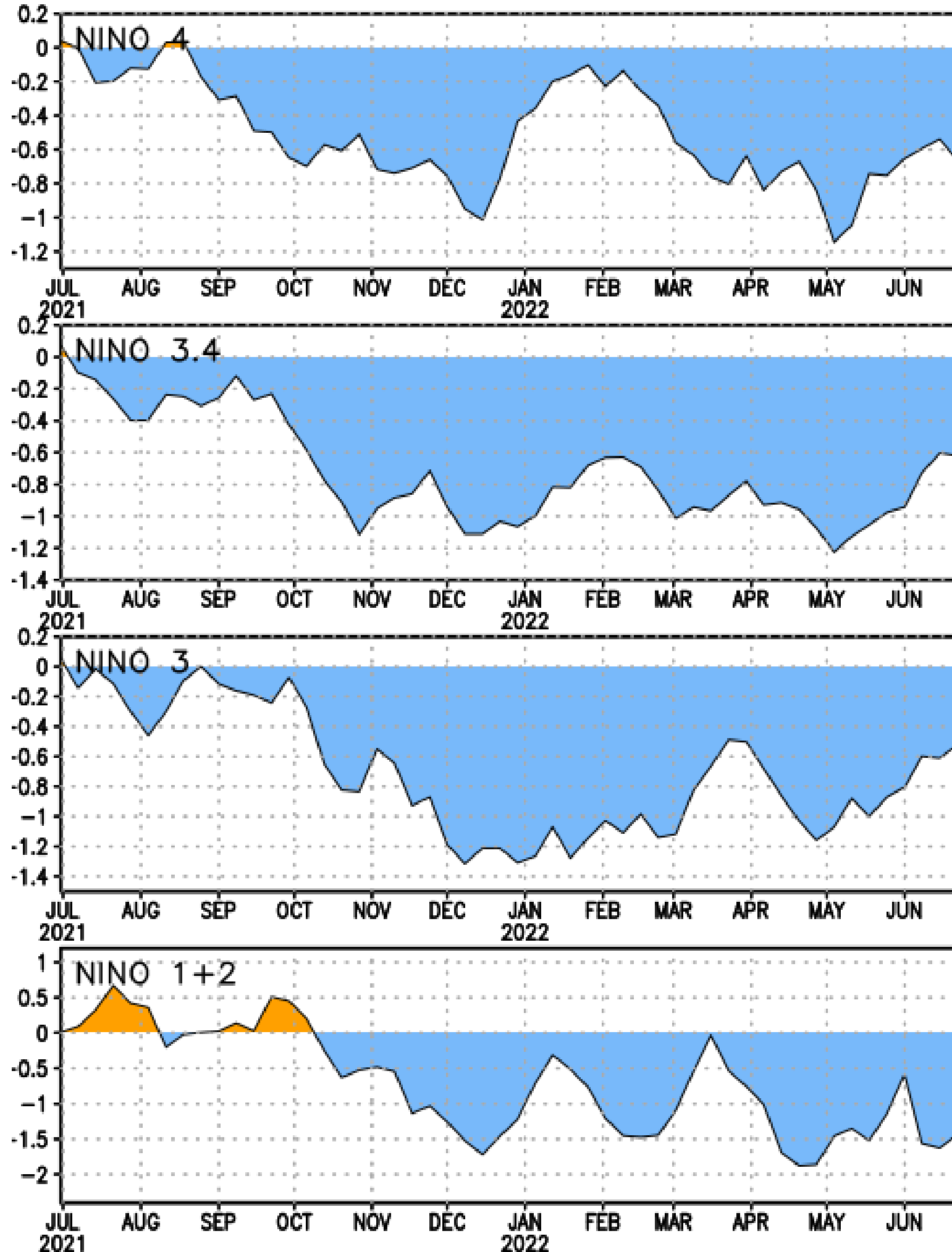


Albuquerque

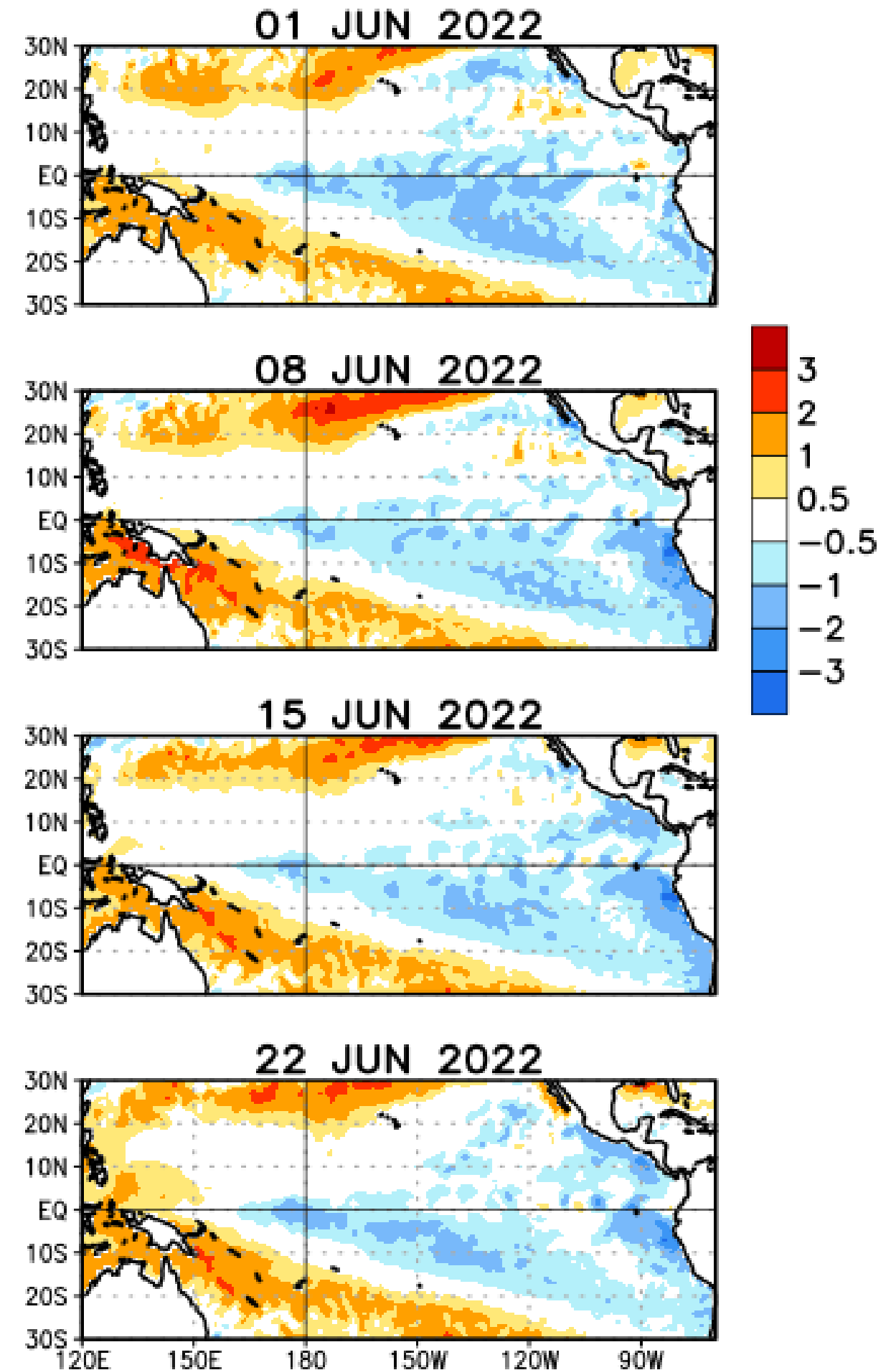
WEATHER FORECAST OFFICE

NM Drought Monitor Working Group

SST Anomalies



Weekly SST Anomalies (DEG C)



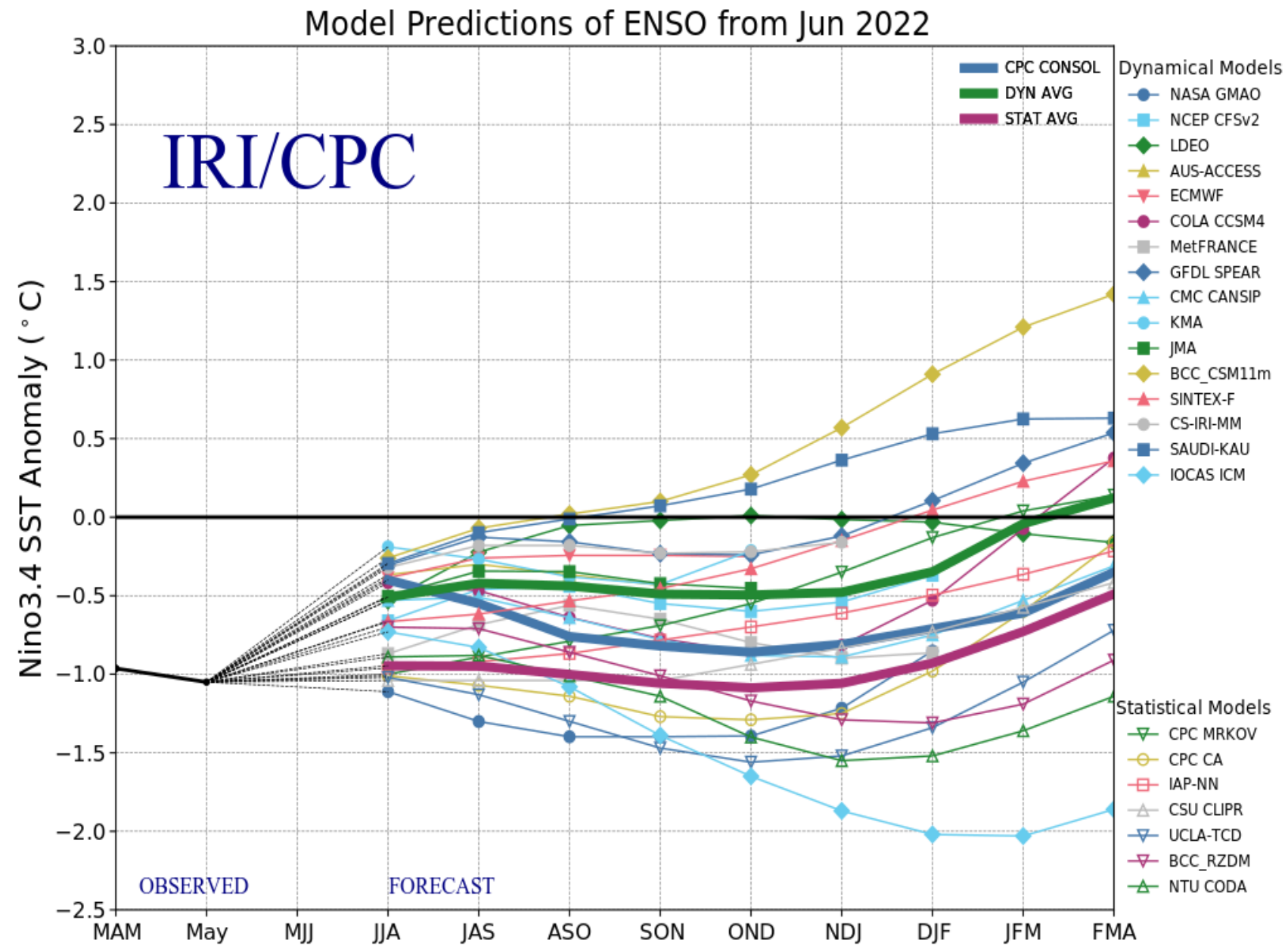


# ENSO Models

NM Drought Monitor Working Group



Albuquerque  
WEATHER FORECAST OFFICE



Signals for Triple Dip La Nina increasing in strength for the winter.

Early-June 2022 CPC/IRI Official Probabilistic ENSO Forecasts

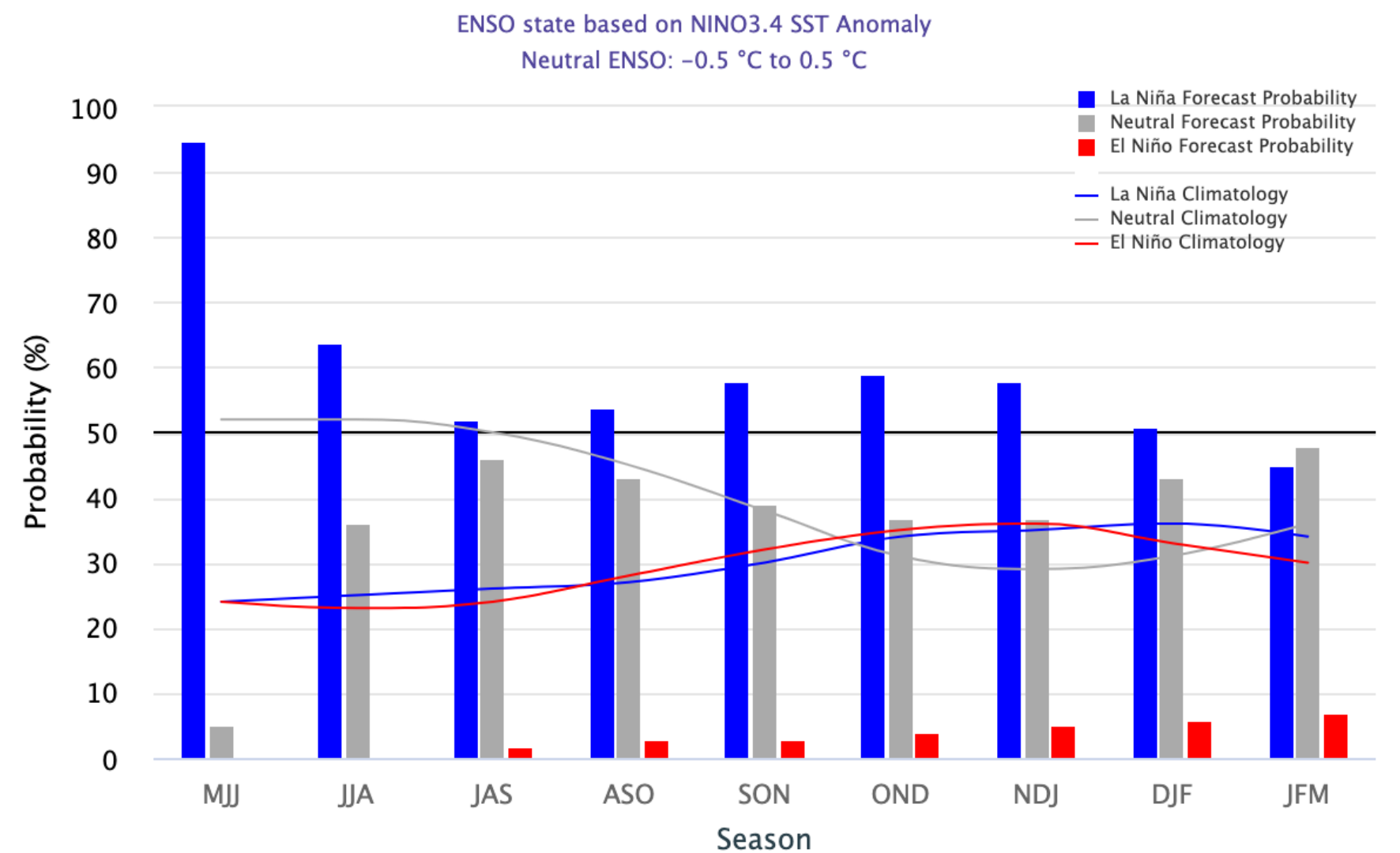


Figure provided by the International Research Institute (IRI) for Climate and Society (updated June 2022).



# 8-14 Day Outlook

NM Drought Monitor Working Group



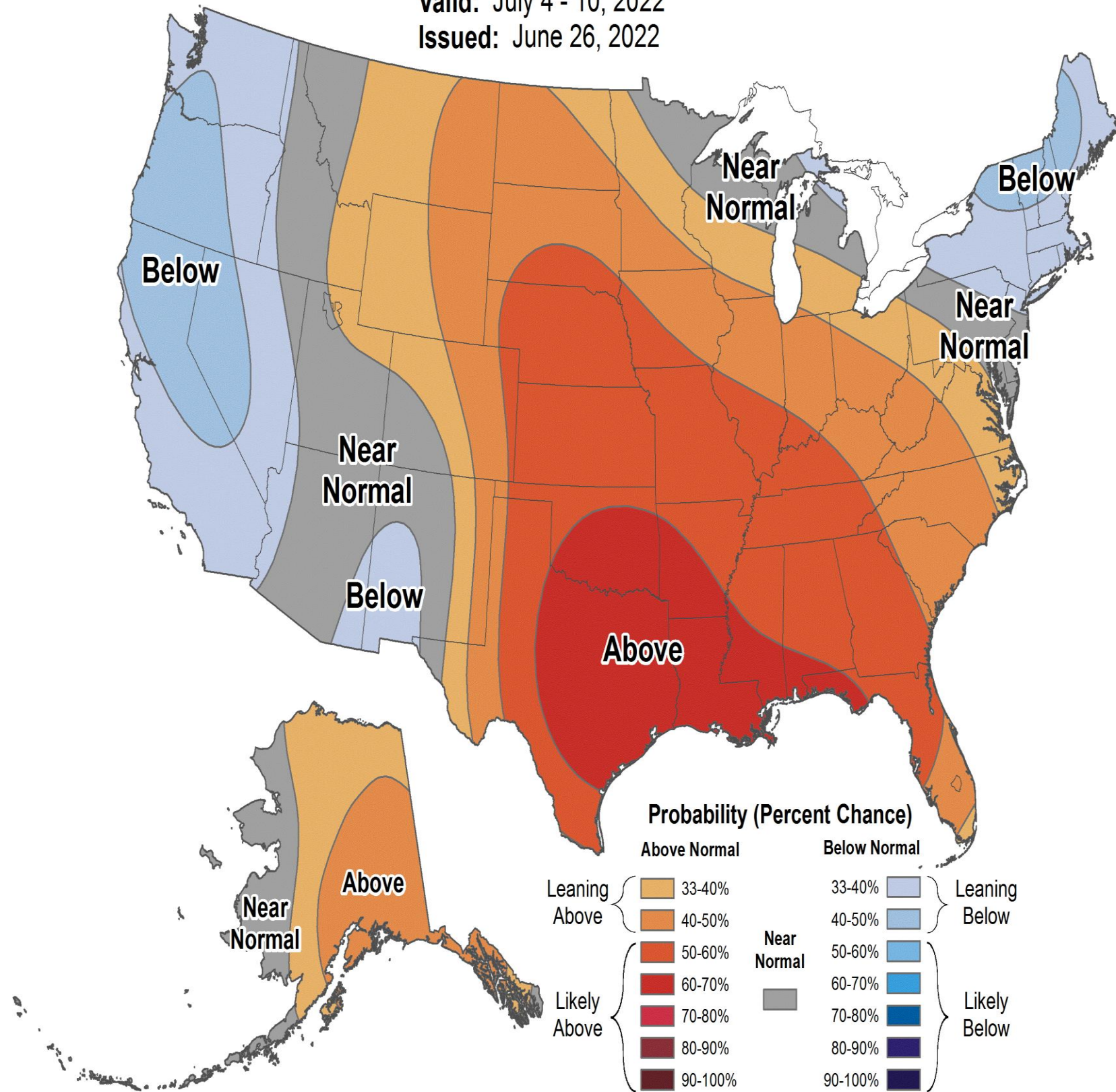
Albuquerque  
WEATHER FORECAST OFFICE



## 8-14 Day Temperature Outlook



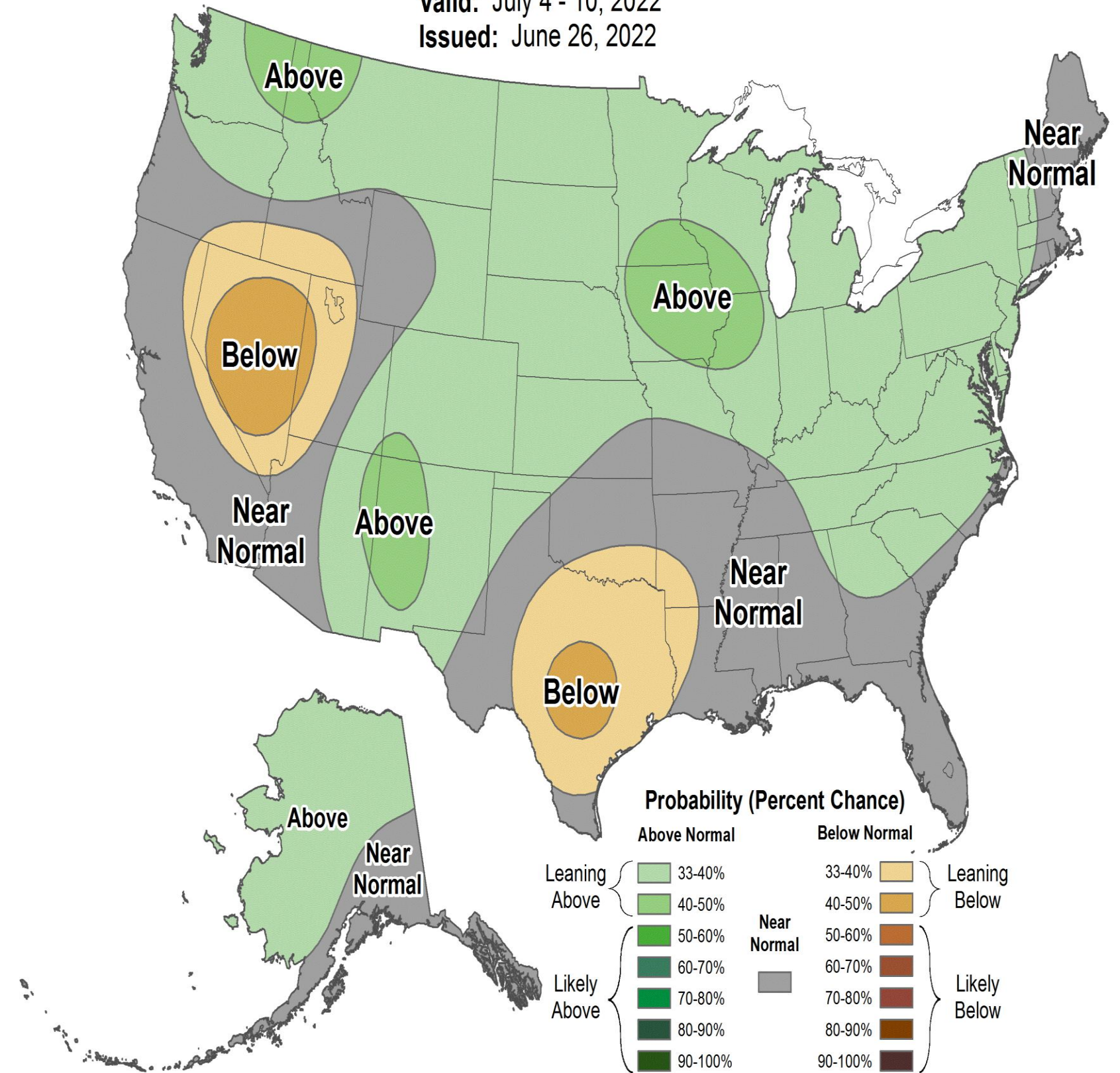
Valid: July 4 - 10, 2022  
Issued: June 26, 2022



## 8-14 Day Precipitation Outlook



Valid: July 4 - 10, 2022  
Issued: June 26, 2022





# One Month Outlook

NM Drought Monitor Working Group



# Albuquerque

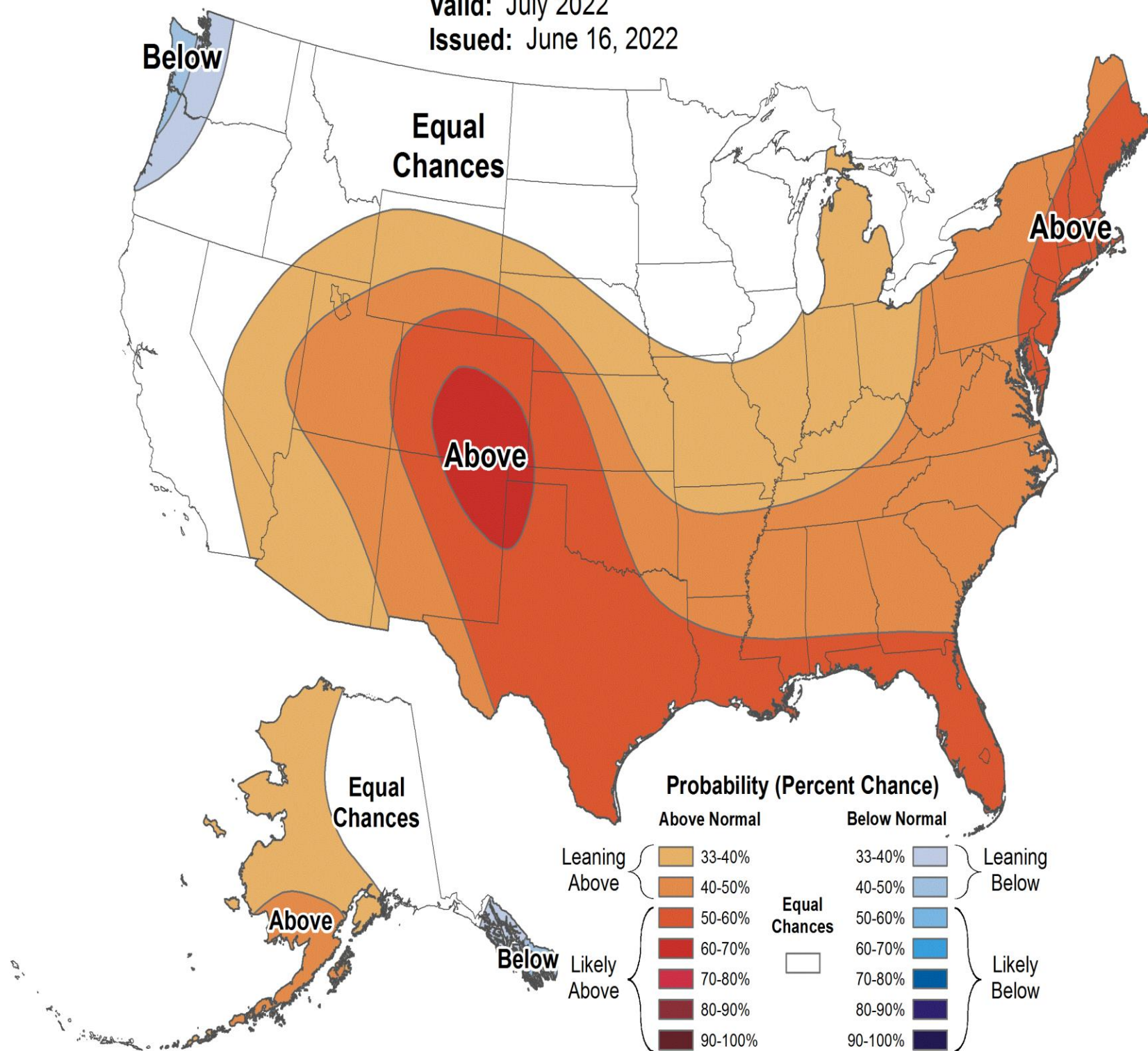
WEATHER FORECAST OFFICE



## Monthly Temperature Outlook



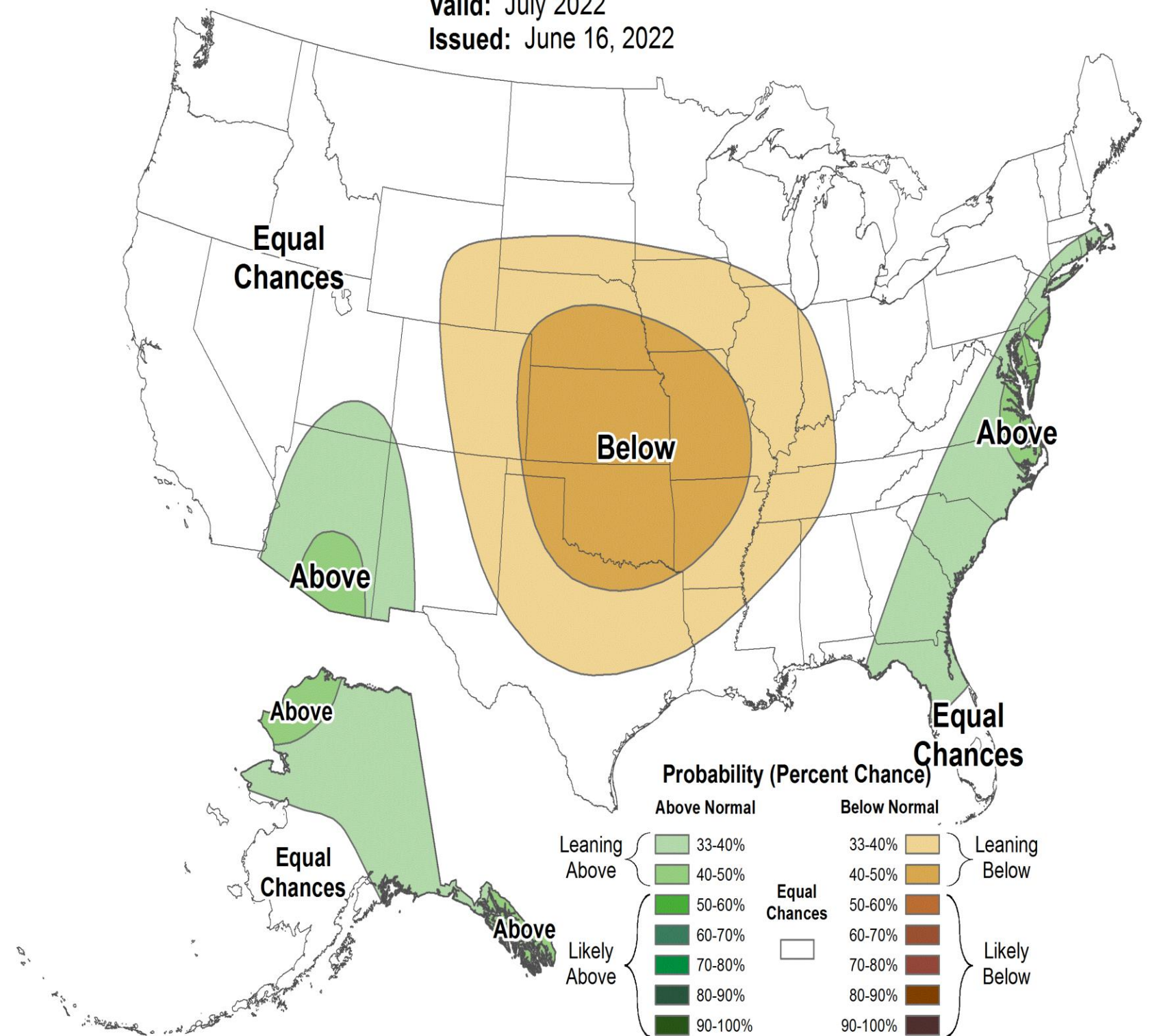
Valid: July 2022  
Issued: June 16, 2022



## Monthly Precipitation Outlook



Valid: July 2022  
Issued: June 16, 2022





# Three Month Outlook

NM Drought Monitor Working Group



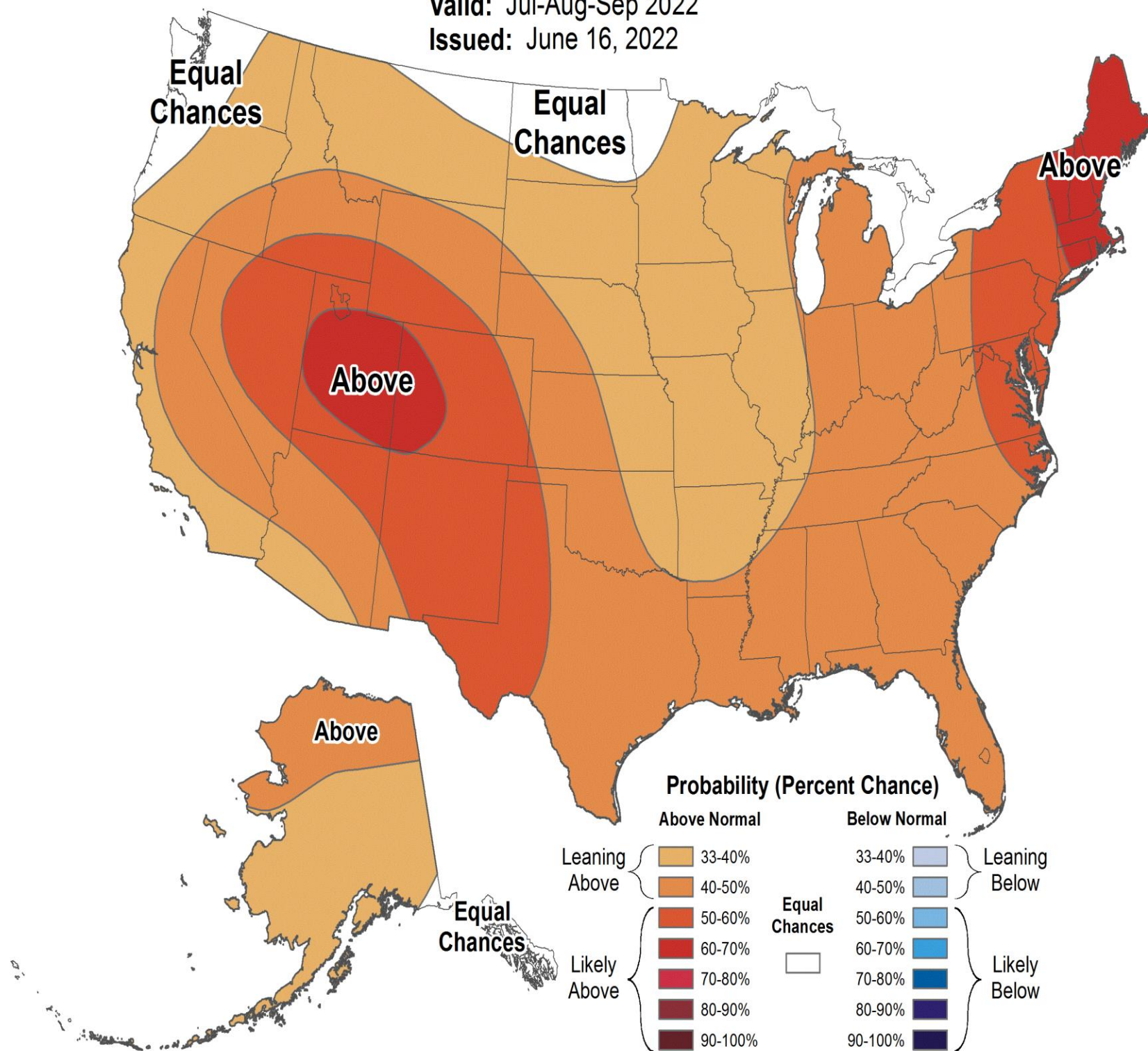
Albuquerque  
WEATHER FORECAST OFFICE



## Seasonal Temperature Outlook



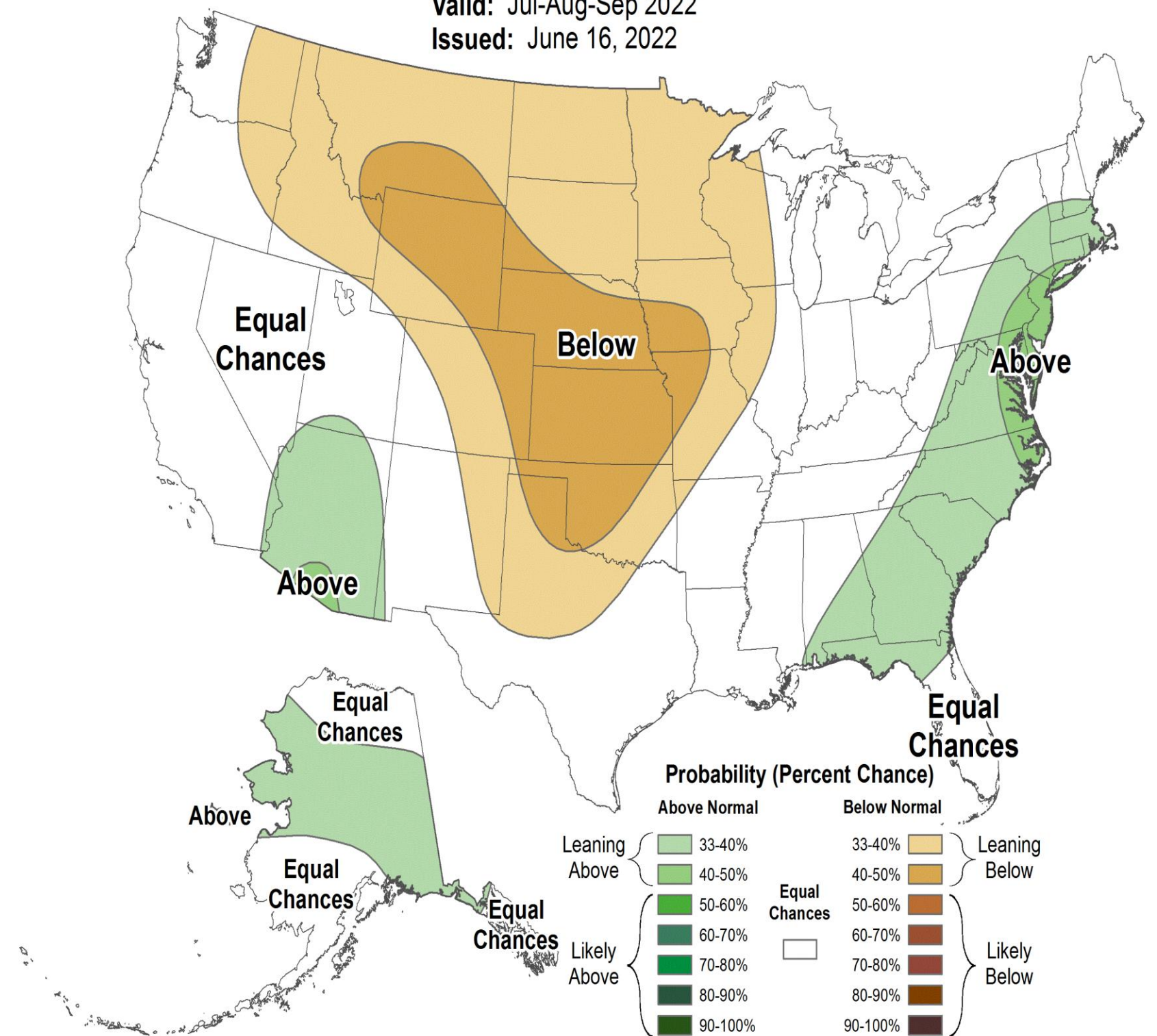
Valid: Jul-Aug-Sep 2022  
Issued: June 16, 2022



## Seasonal Precipitation Outlook



Valid: Jul-Aug-Sep 2022  
Issued: June 16, 2022





# Extended Outlook

NM Drought Monitor Working Group



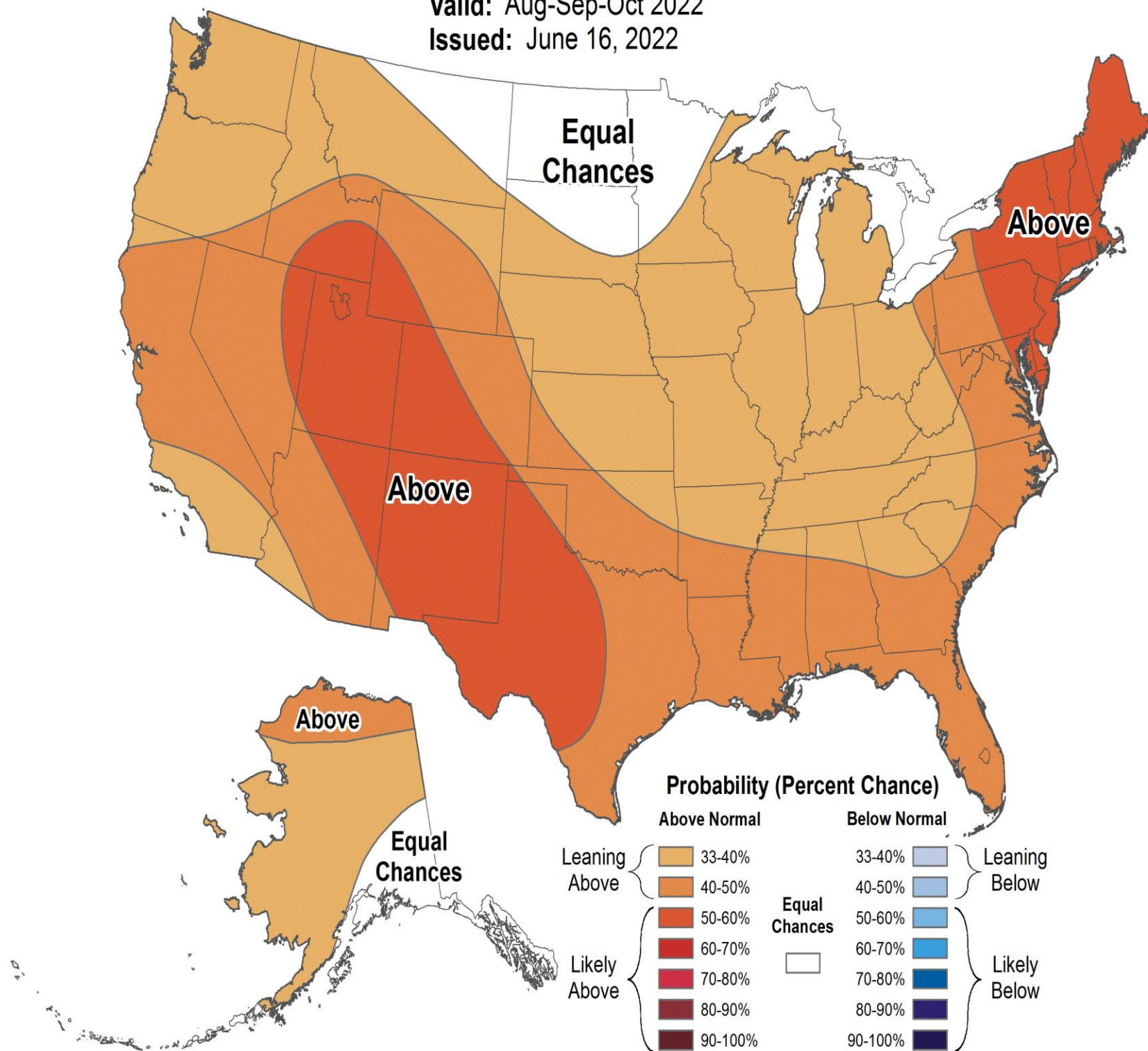
Albuquerque  
WEATHER FORECAST OFFICE



## Seasonal Temperature Outlook



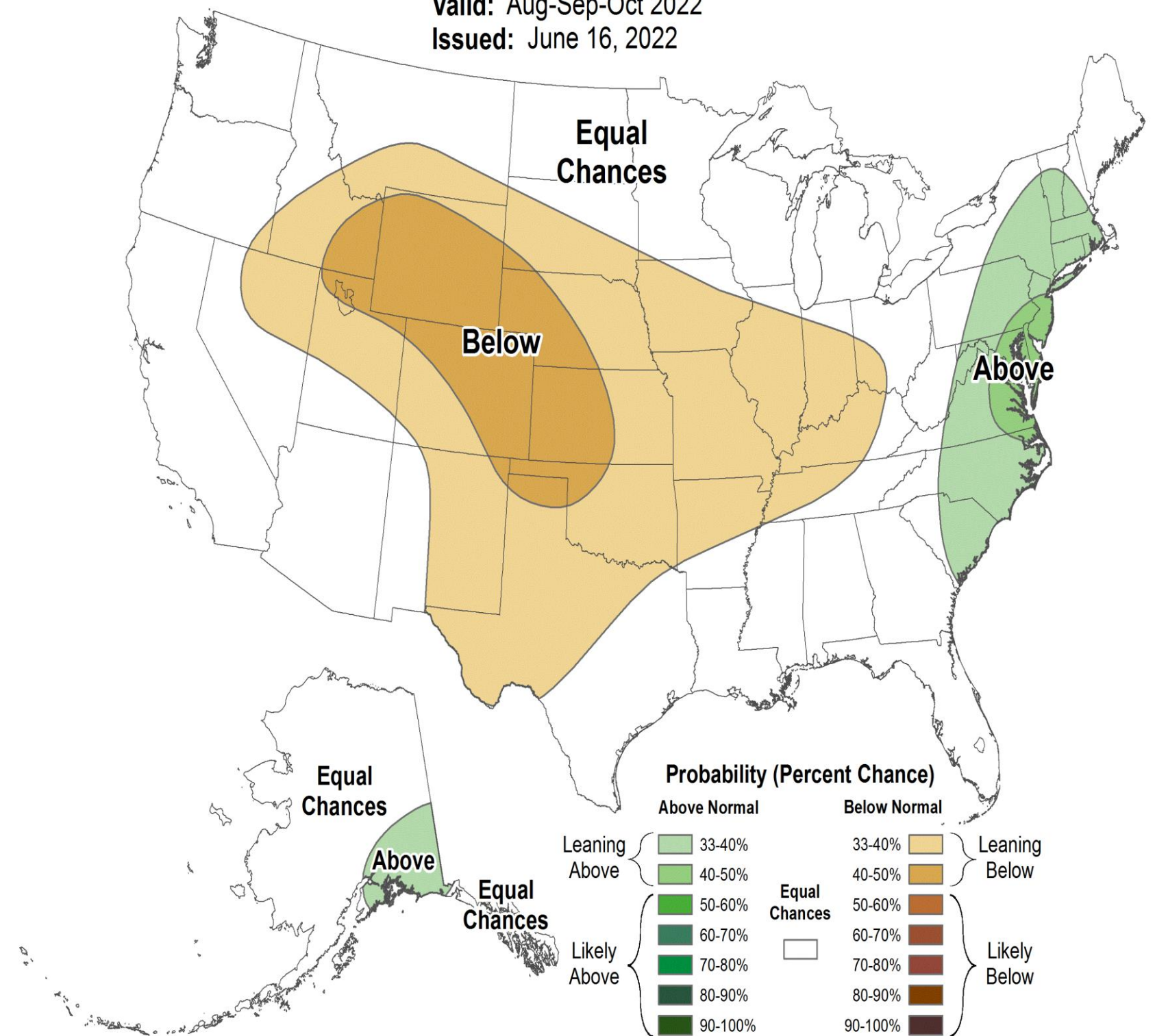
Valid: Aug-Sep-Oct 2022  
Issued: June 16, 2022



## Seasonal Precipitation Outlook



Valid: Aug-Sep-Oct 2022  
Issued: June 16, 2022





# Drought Outlook

NM Drought Monitor Working Group

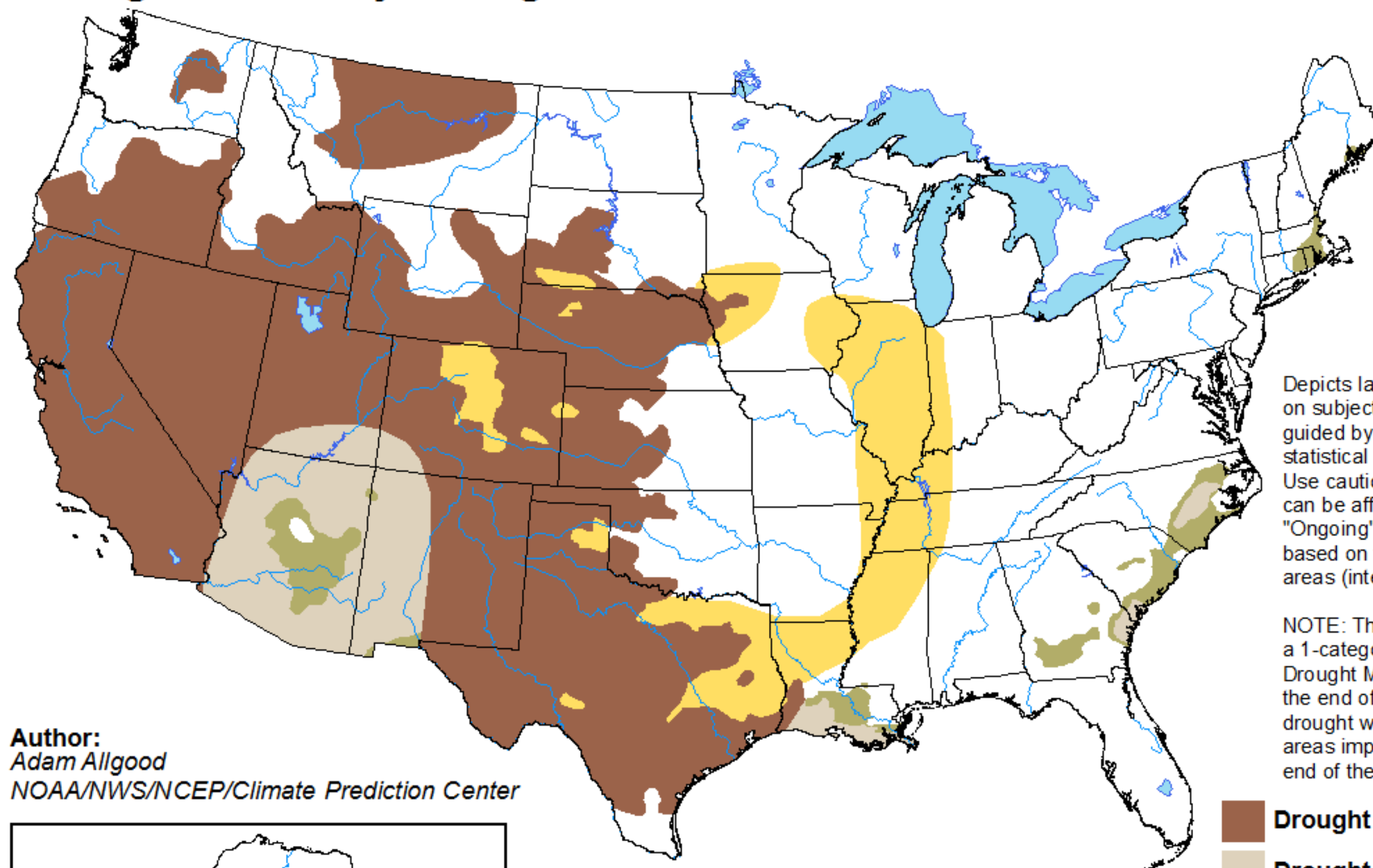


## Albuquerque

WEATHER FORECAST OFFICE

### U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for June 16 - September 30, 2022  
Released June 16

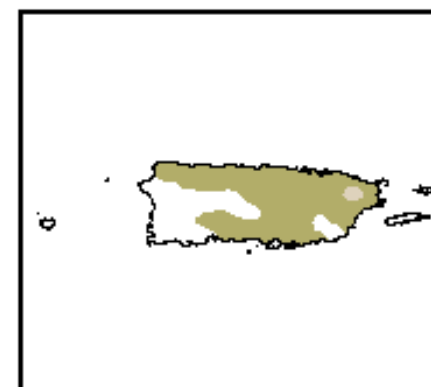
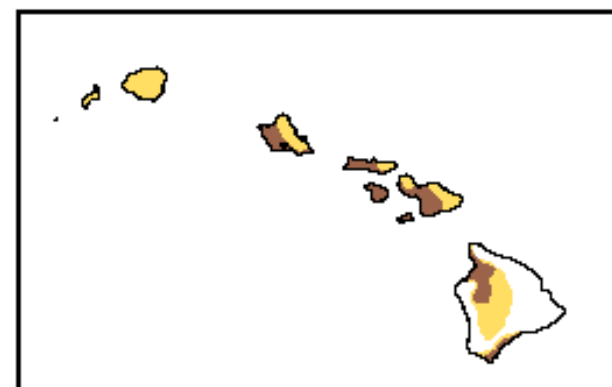
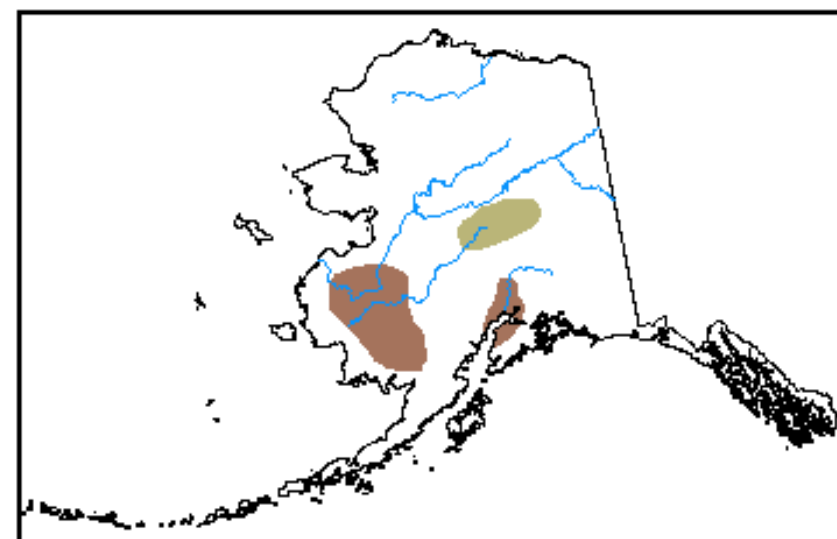


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author:  
Adam Allgood  
NOAA/NWS/NCEP/Climate Prediction Center

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely



<http://go.usa.gov/3eZ73>

# More Information



Albuquerque  
WEATHER FORECAST OFFICE

NM Drought Monitor Working Group

- US Drought Monitor:  
<http://droughtmonitor.unl.edu/CurrentMap.aspx>
- NWS Forecast Offices:
  - <http://www.weather.gov/abq> Albuquerque
  - <http://www.weather.gov/epz> El Paso/Santa Teresa
  - <http://www.weather.gov/maf> Midland/Odessa
- USGS Streamflow Conditions:  
<https://nm.water.usgs.gov/infodata/waterwatch.html>
- New Mexico Climate Center:  
<https://weather.nmsu.edu/>
- Western Regional Climate Center:  
<https://wrcc.dri.edu/>
- [Drought.gov](https://drought.gov)
- USDA/NRCS Snow Data:  
<https://www.wcc.nrcs.usda.gov/gis/snow.html>