

Drought Status Update and Outlook

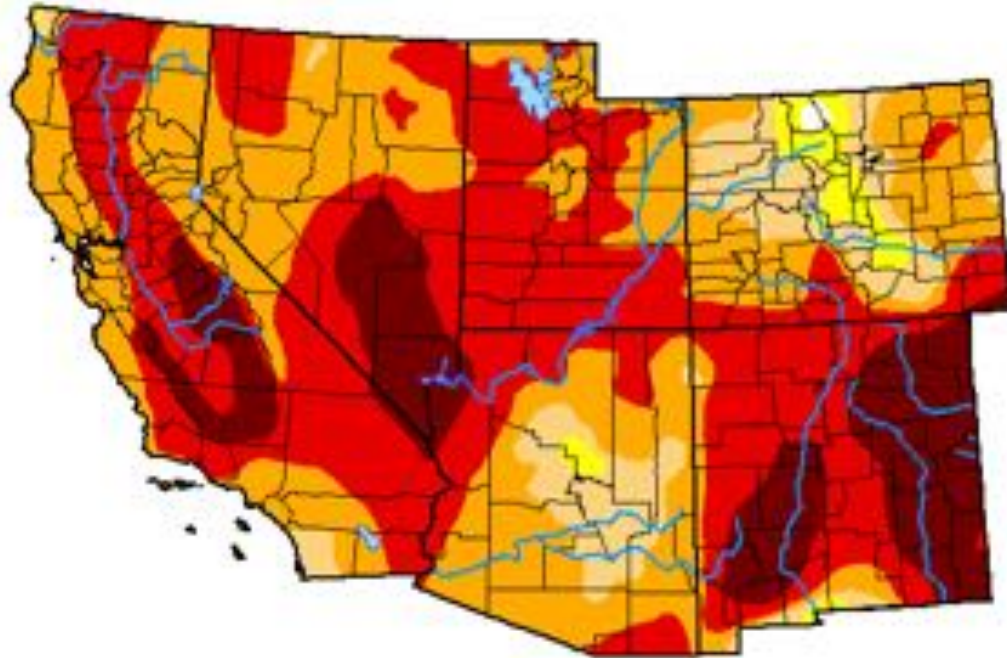
**Dr. Dave DuBois
NM State Climatologist**

**Presented at the Southwest Drought Learning Network Annual Meeting
June 7, 2022**



U.S. Drought Monitor Southwest

May 31, 2022
(Released Thursday, Jun. 2, 2022)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.15	99.84	97.71	98.77	53.74	14.72
Last Week 05-24-2022	0.00	100.00	98.05	89.23	54.18	14.97
3 Months Ago 03-01-2022	0.00	100.00	94.17	75.30	20.81	1.70
Start of Calendar Year 01-04-2022	0.00	100.00	91.50	65.43	19.65	1.39
Start of Water Year 09-28-2021	3.79	95.21	85.13	68.02	49.47	17.45
One Year Ago 06-01-2021	7.68	92.32	91.16	86.10	71.72	39.12

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>

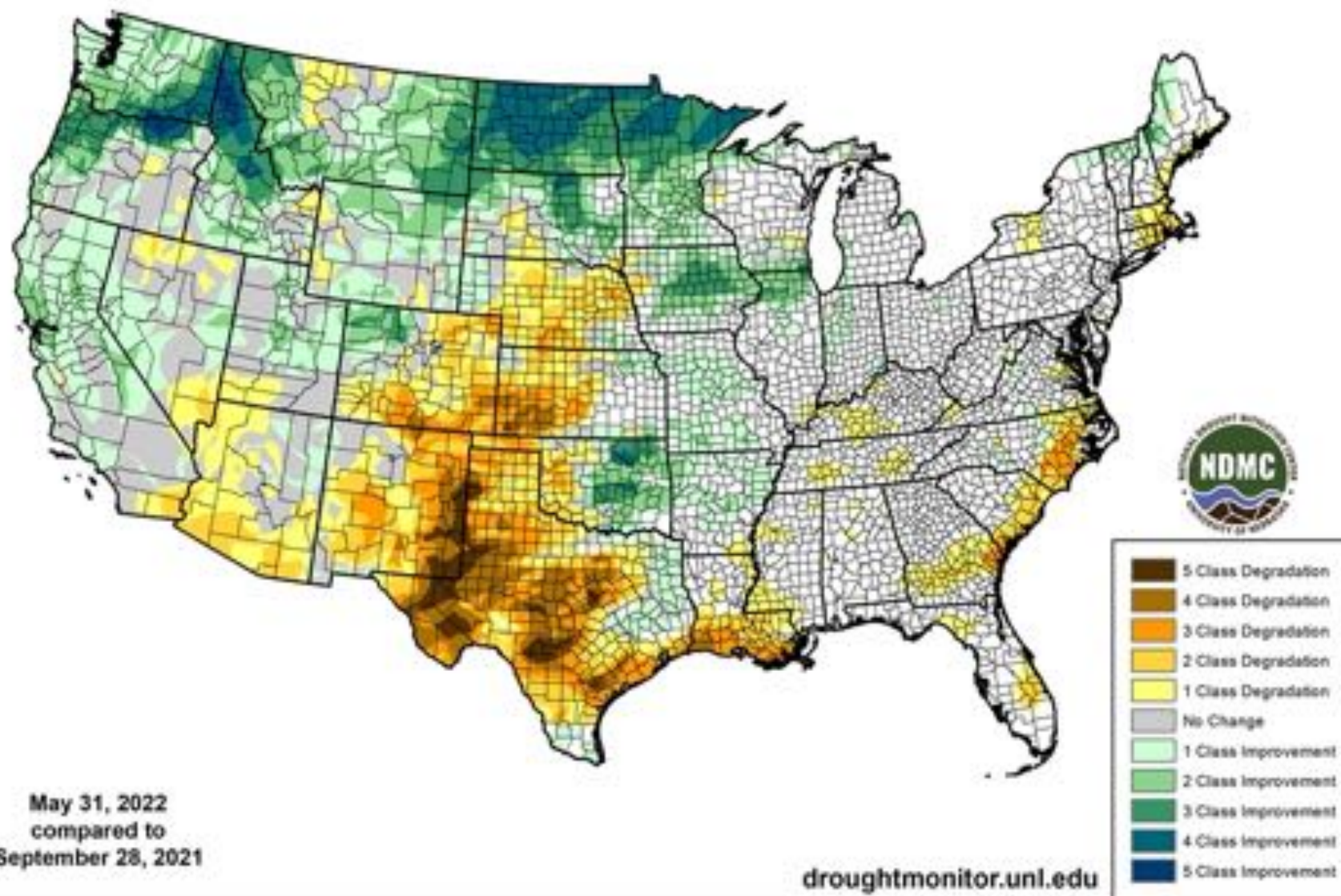
Author:

Curtis Riganti
National Drought Mitigation Center



droughtmonitor.unl.edu

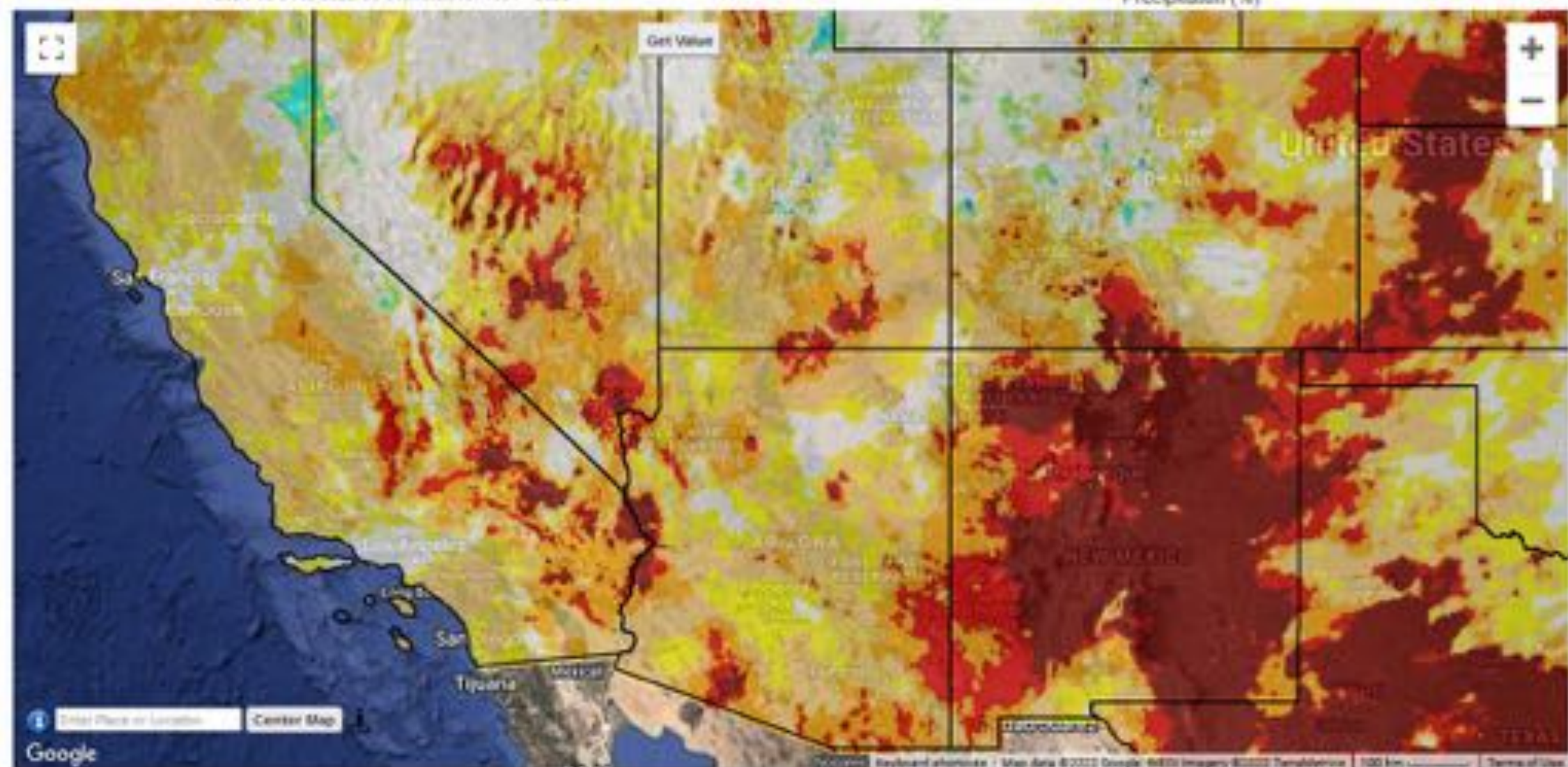
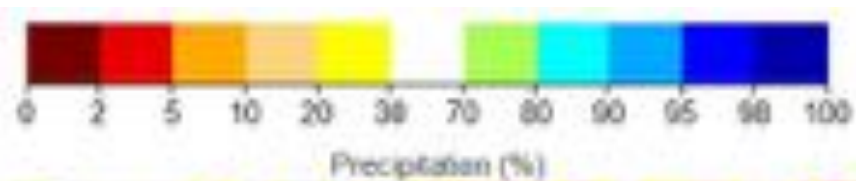
U.S. Drought Monitor Class Change - Contiguous U.S. (CONUS)
Start of Water Year



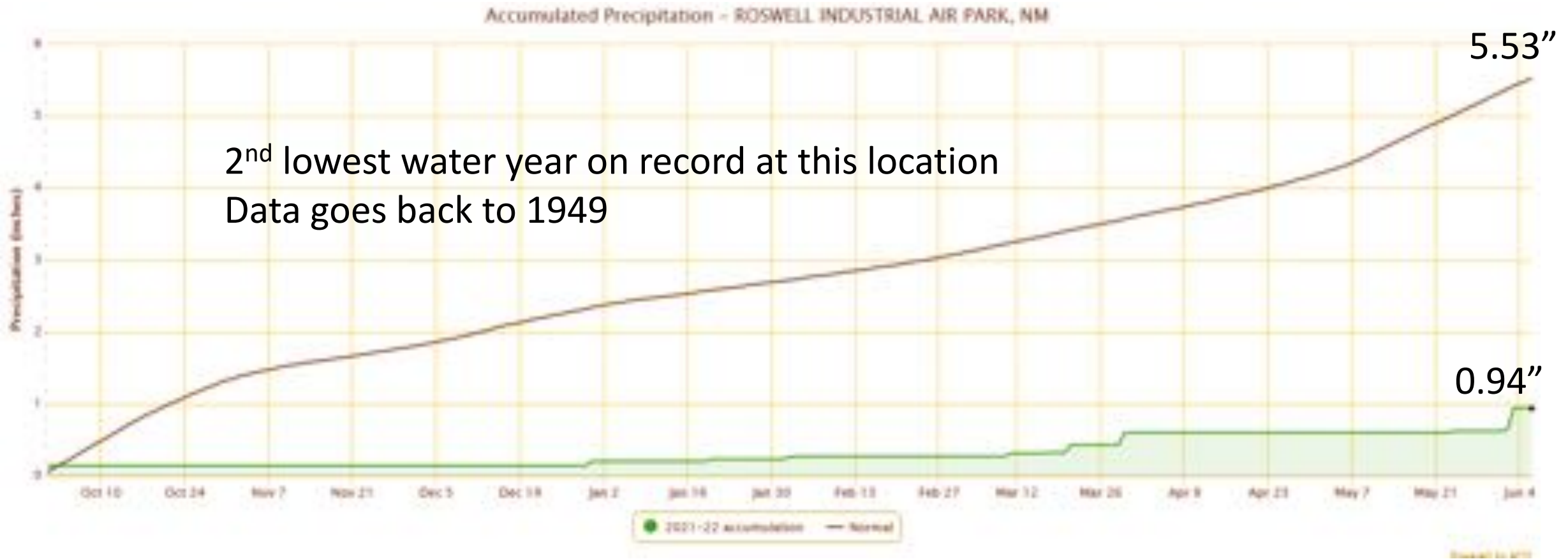
Precipitation Percentile from Distribution of Past

Observations (gridMET)

2021-10-01 to 2022-06-01, Total, vs. 1991 - 2020

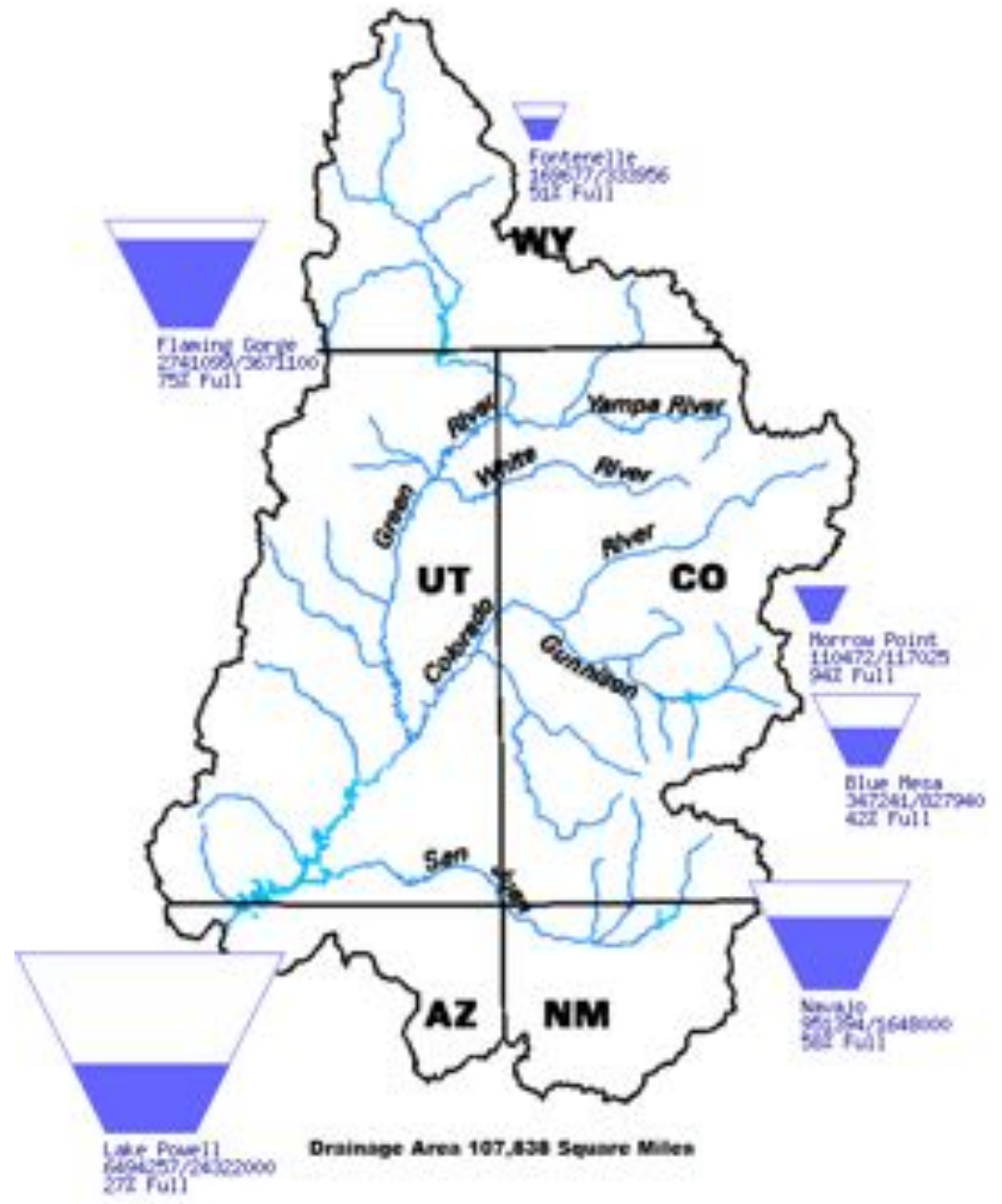
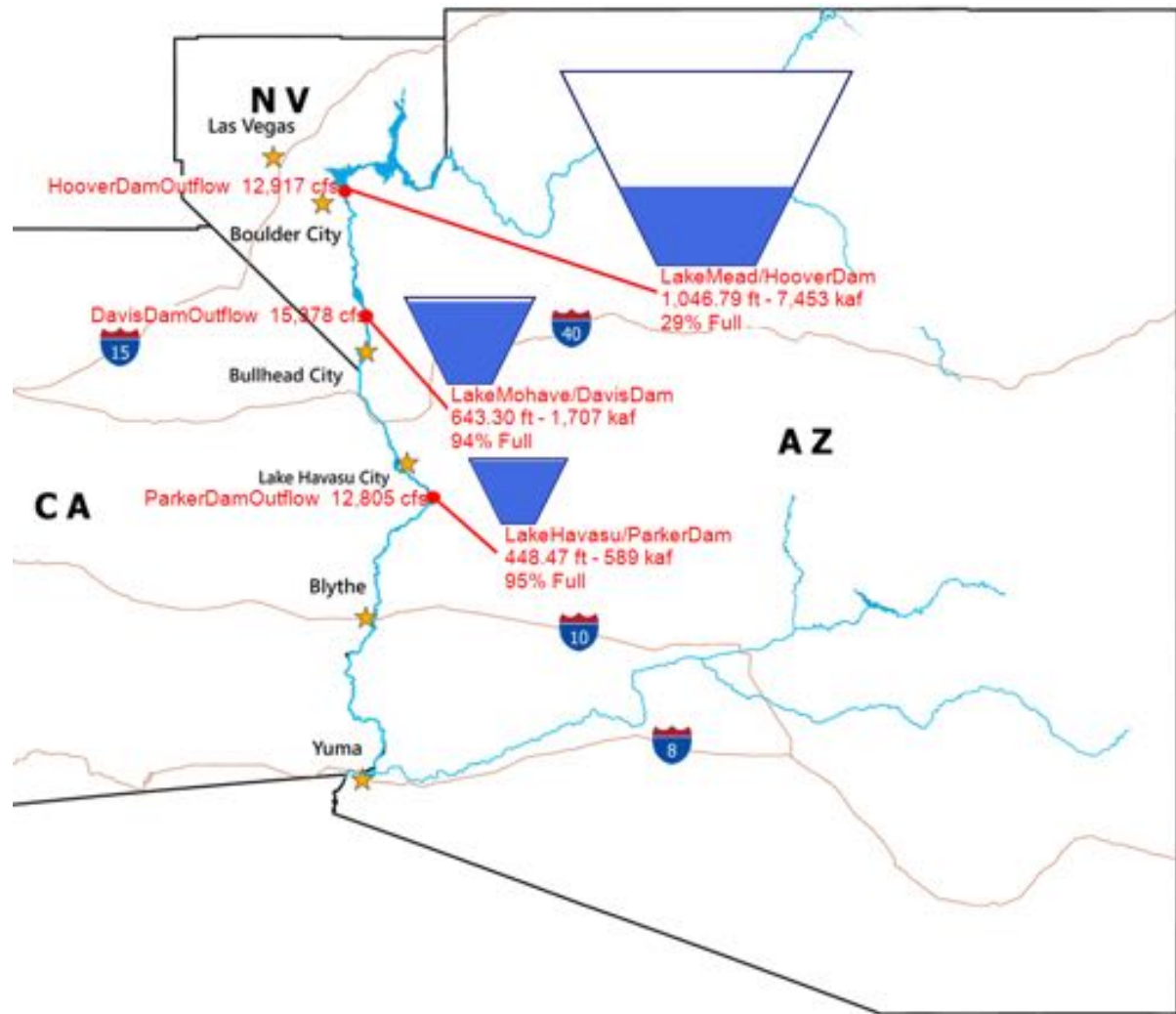


Accumulated precipitation in Roswell since Oct 1



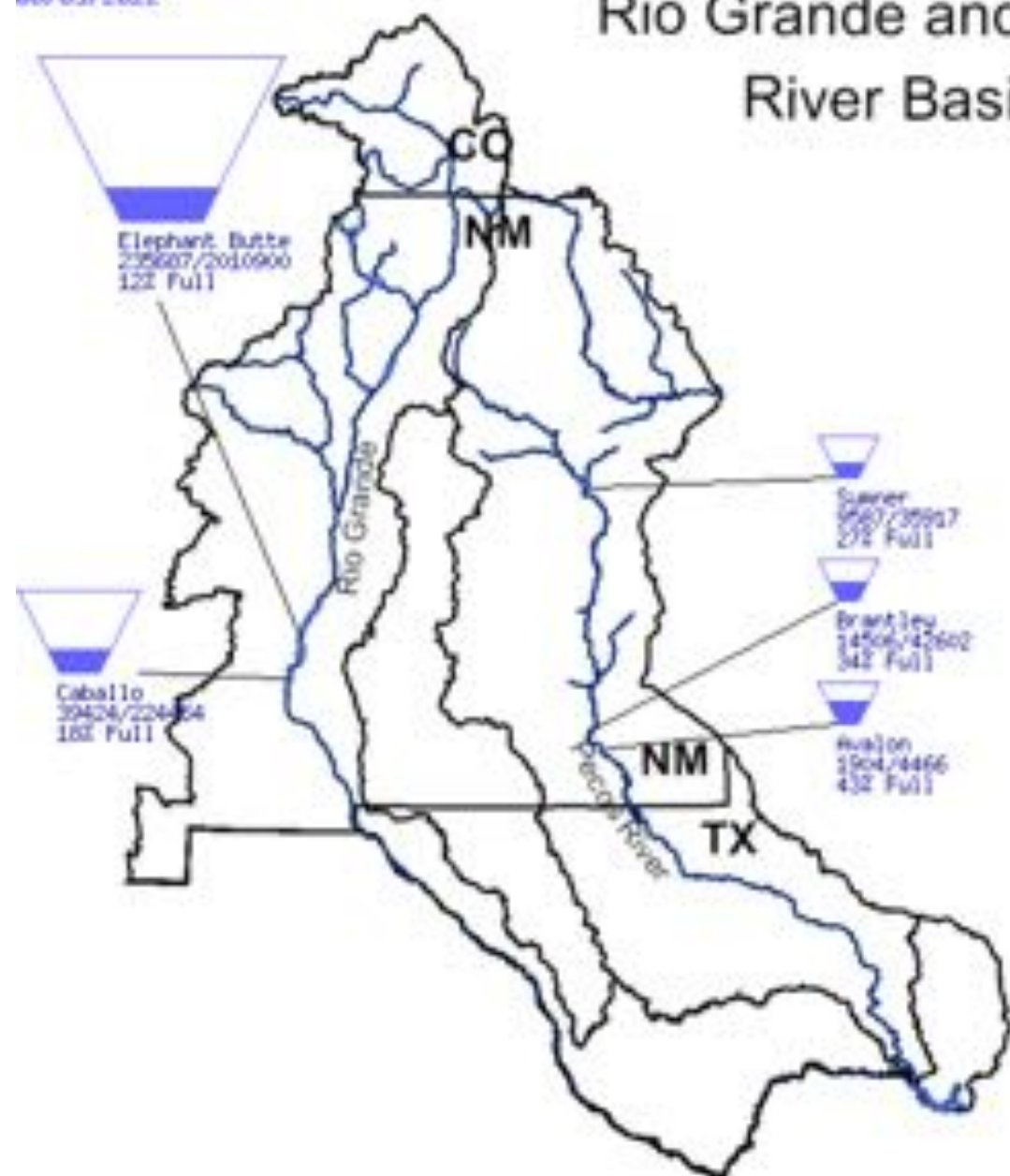
Upper Colorado River Drainage Basin

June 5, 2022



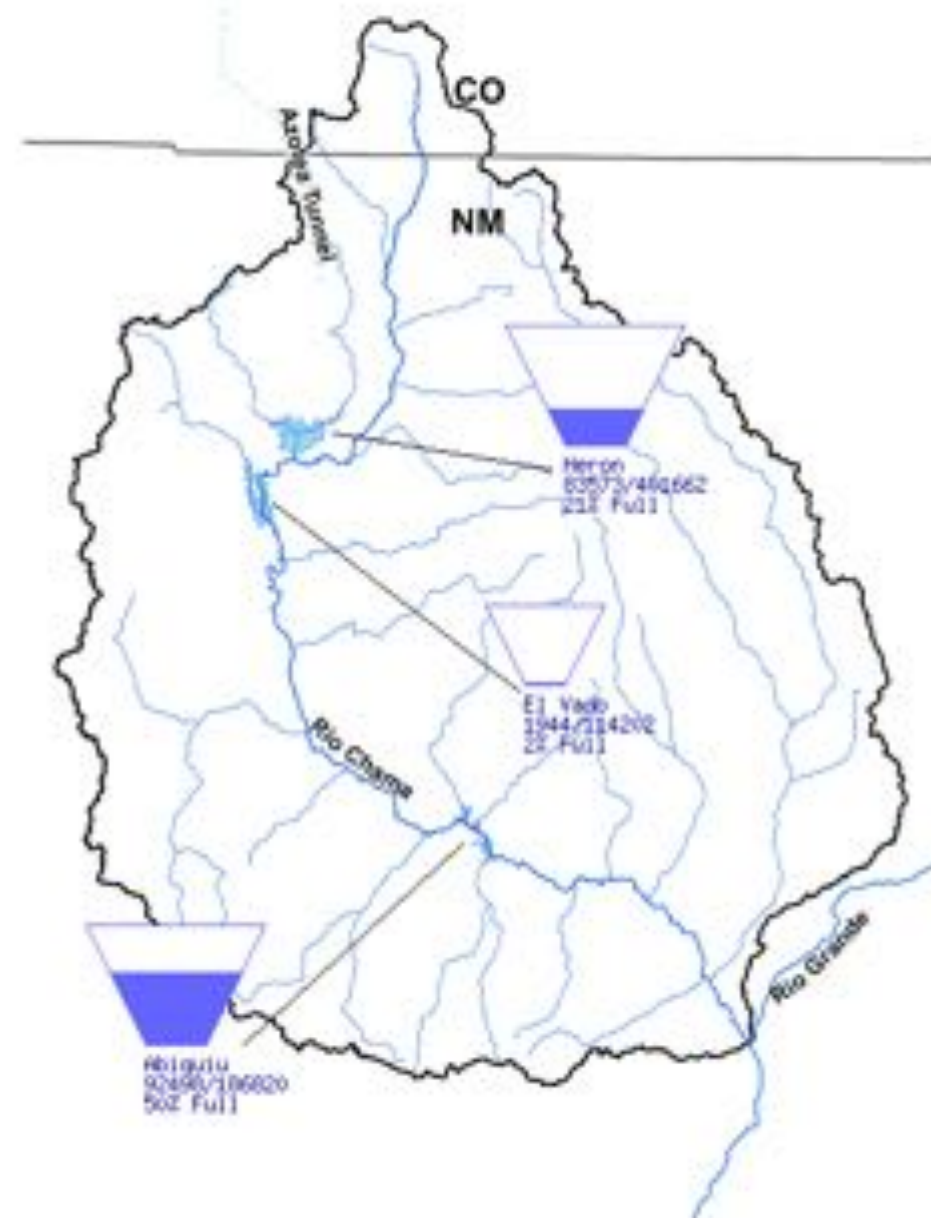
Data Current as of:
06/05/2022

Rio Grande and Pecos River Basins



Data Current as of:
06/05/2022

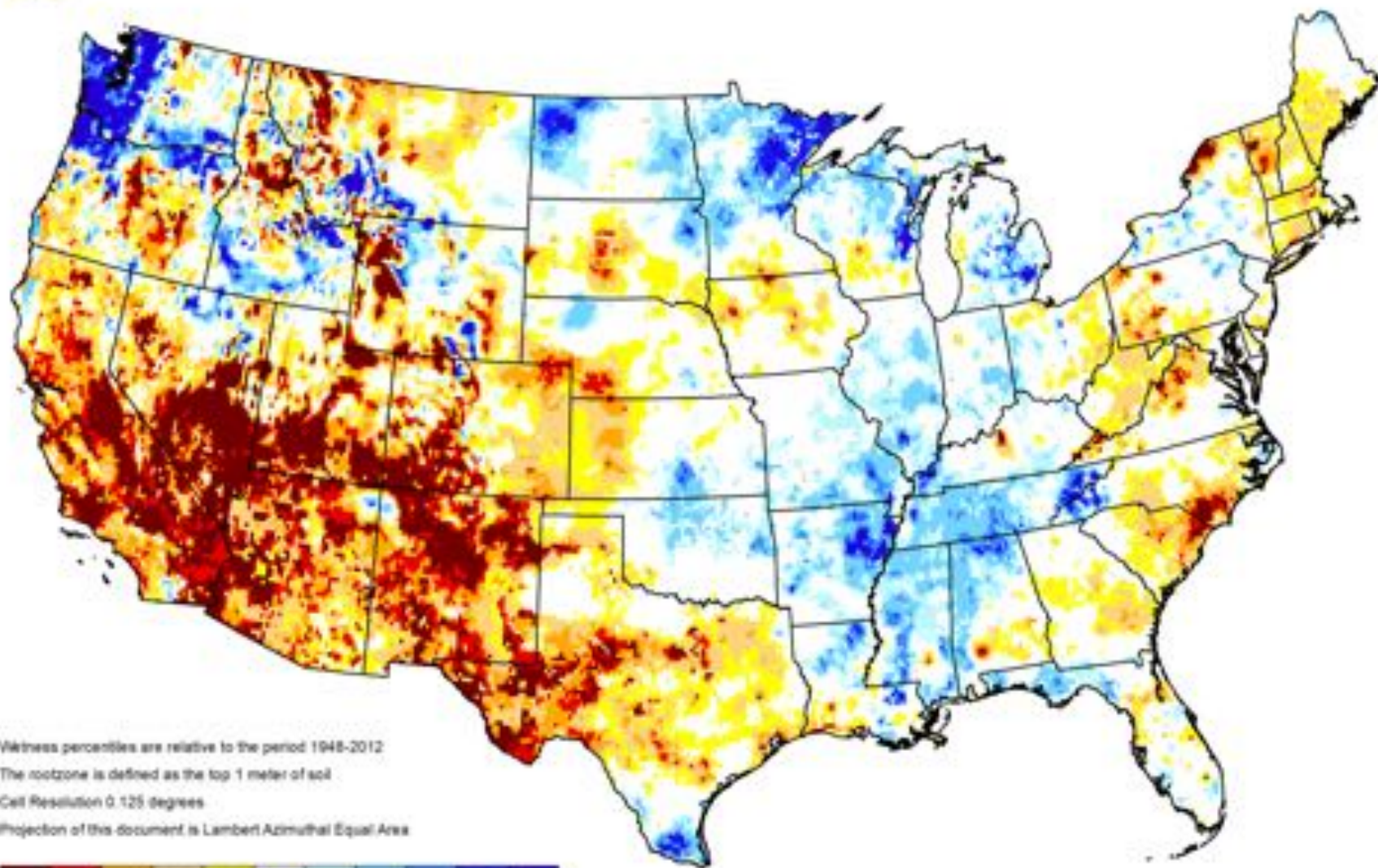
Rio Chama Basin





GRACE-Based Root Zone Soil Moisture Drought Indicator

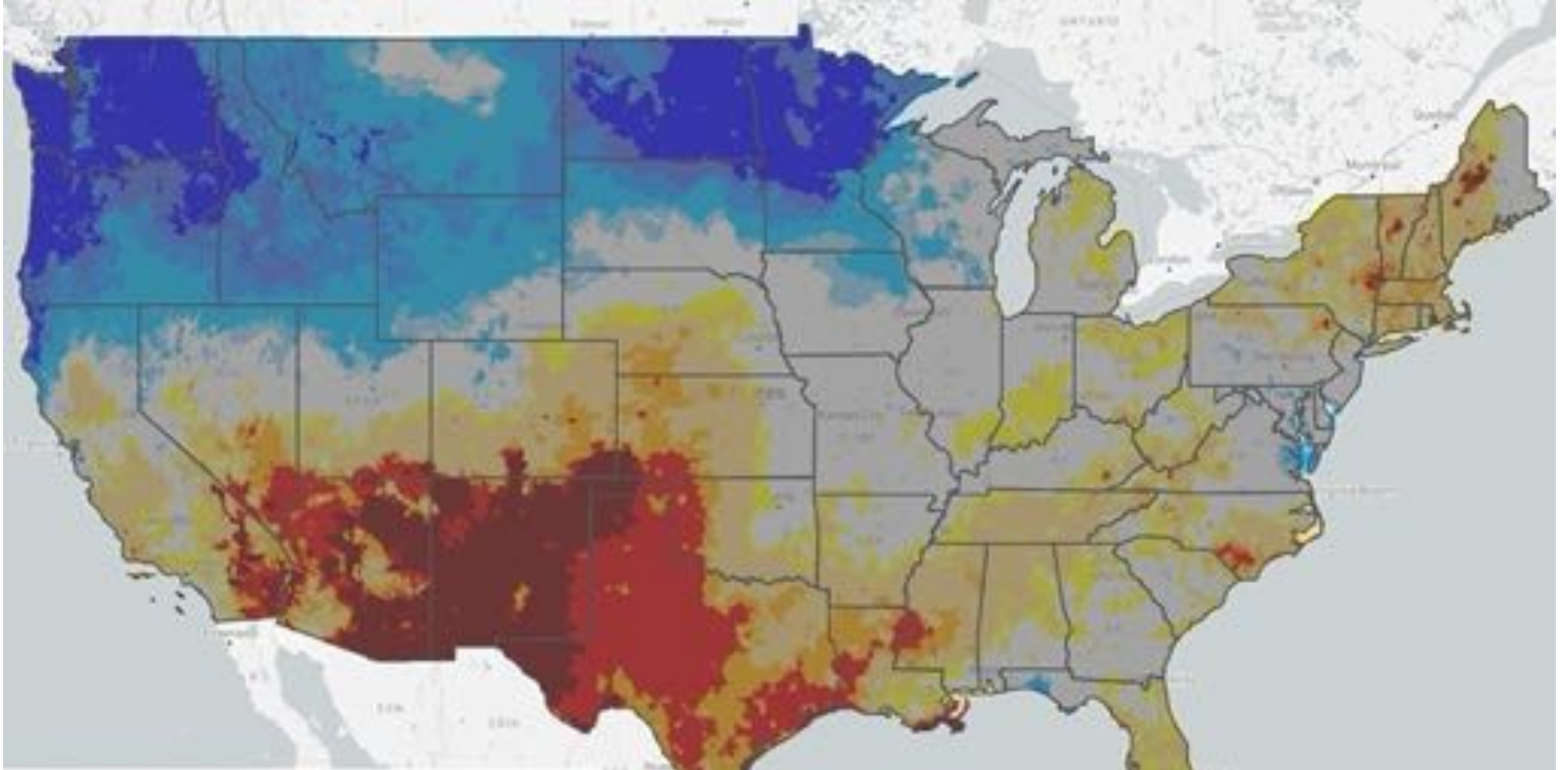
May 30, 2022



Wetness percentiles are relative to the period 1948-2012
The rootzone is defined as the top 1 meter of soil
Cell Resolution 0.125 degrees
Projection of this document is Lambert Azimuthal Equal Area



<https://hasagrace.unl.edu>



Evaporative Demand Drought Index (EDDI)

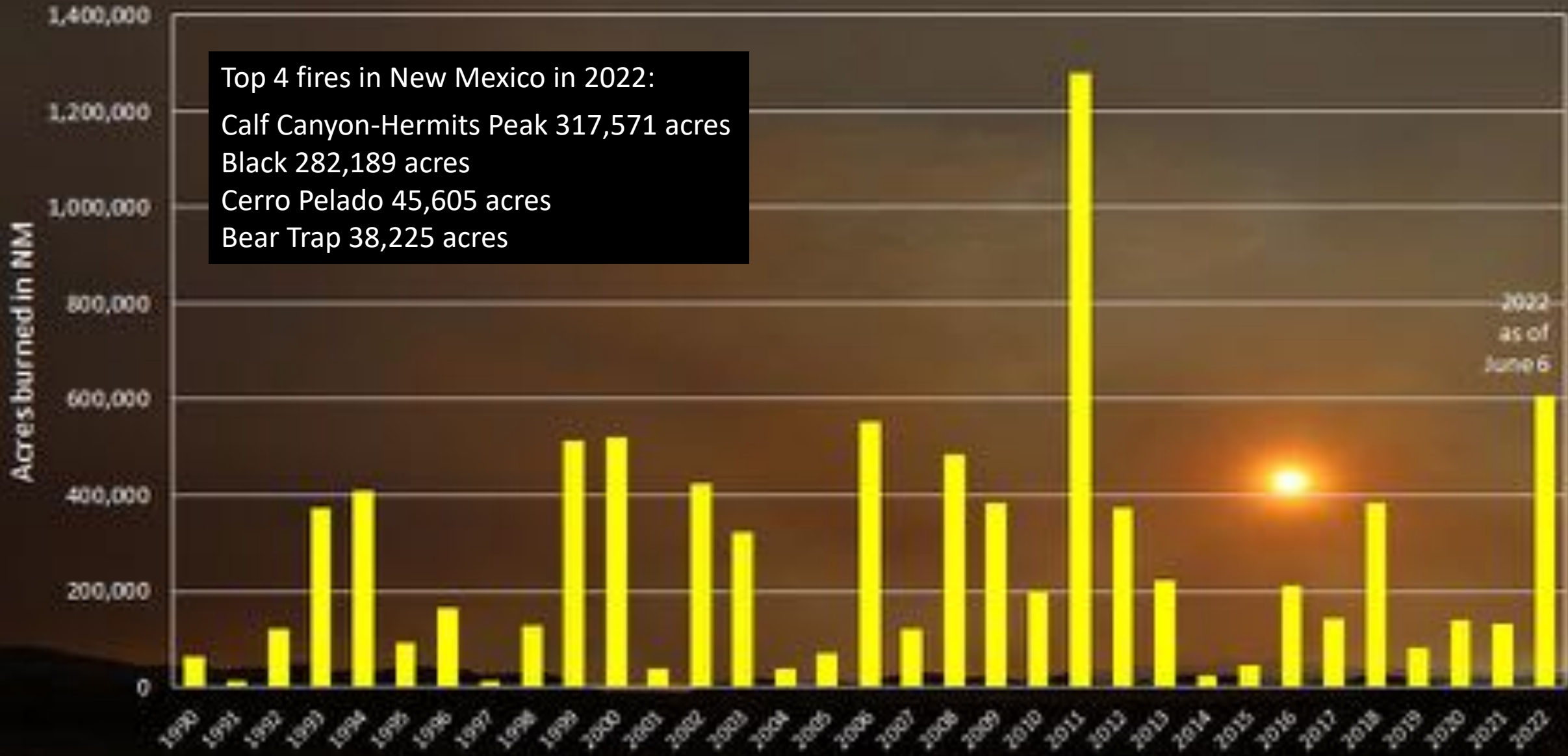


60 day aggregation 2022-06-03

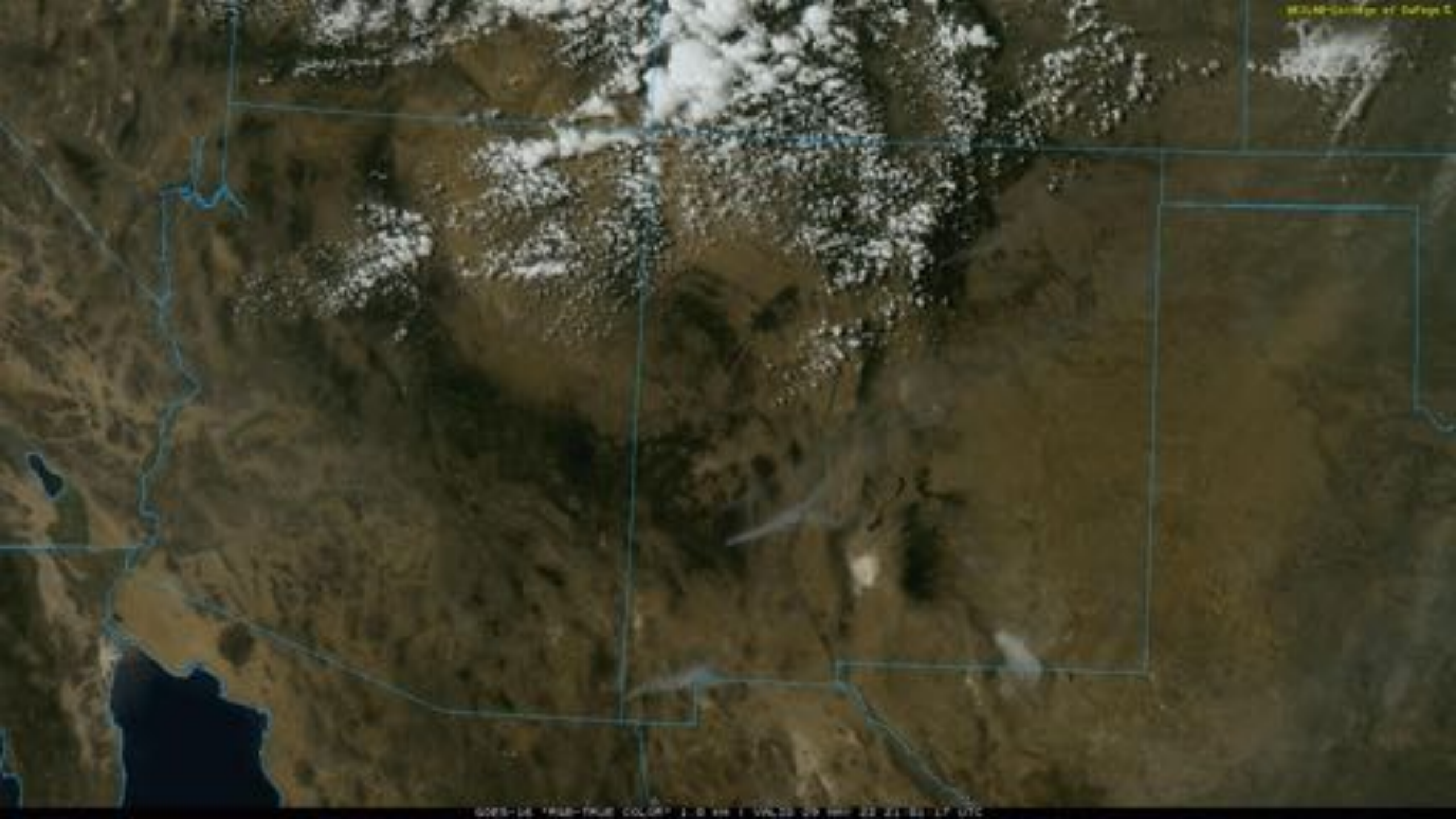


<https://eddi-dri.appspot.com/>

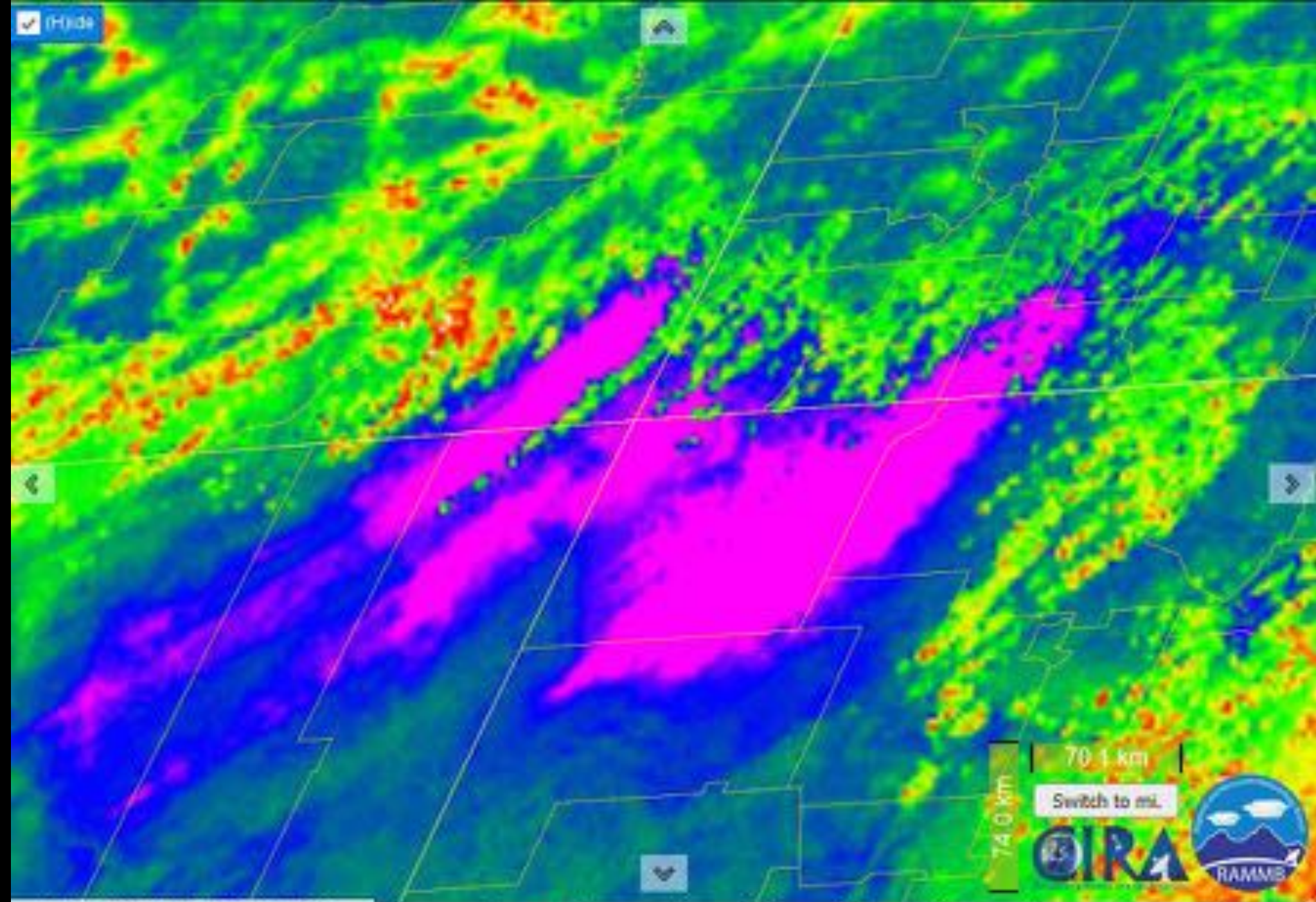
Top 4 fires in New Mexico in 2022:
Calf Canyon-Hermits Peak 317,571 acres
Black 282,189 acres
Cerro Pelado 45,605 acres
Bear Trap 38,225 acres



Numbers from https://geo.nrc.gov/inco/predictive/intelligence/historical/fire_and_resource_data/historical_fires_acres.htm



Hide



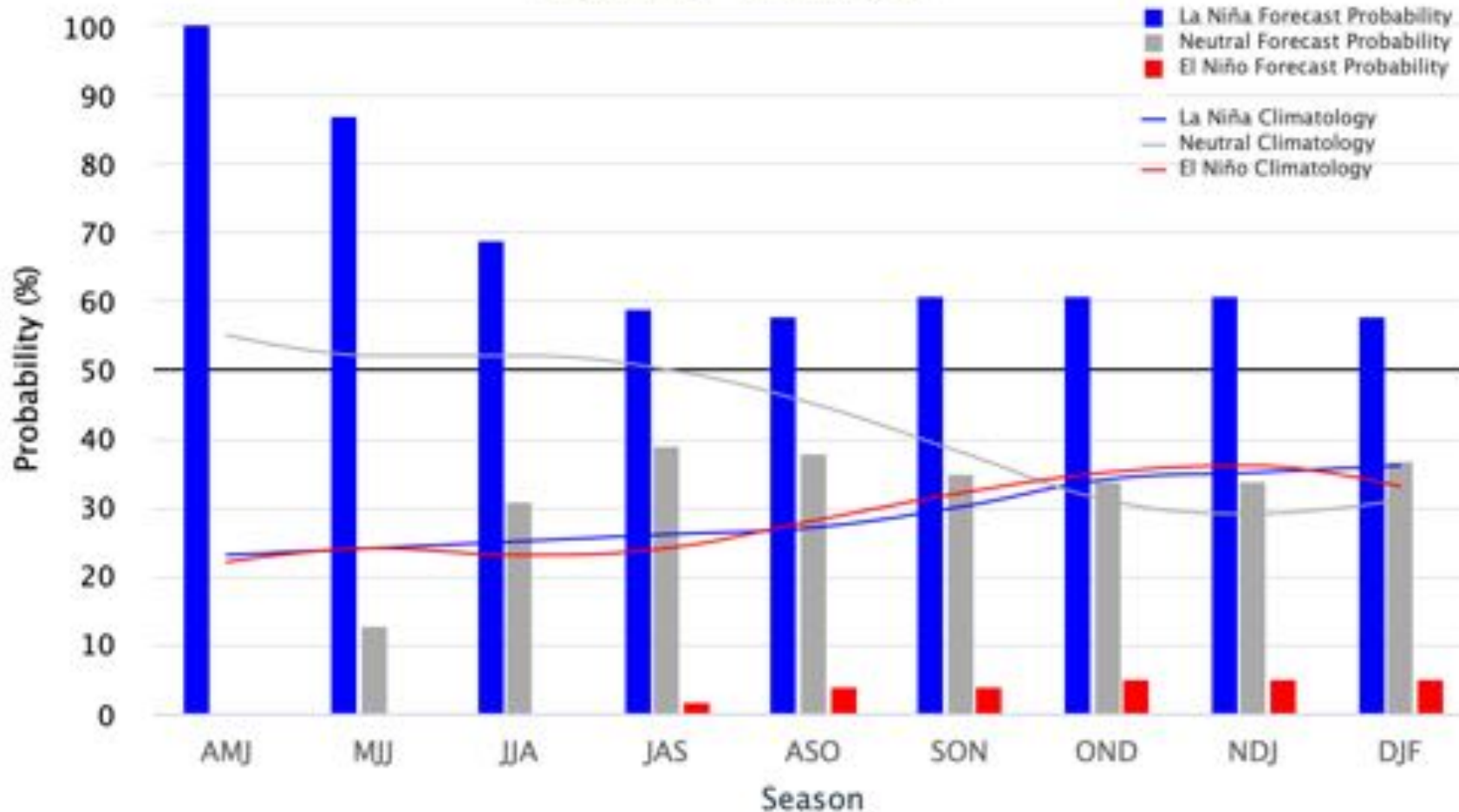
2022-05-01 22:20:20 UTC



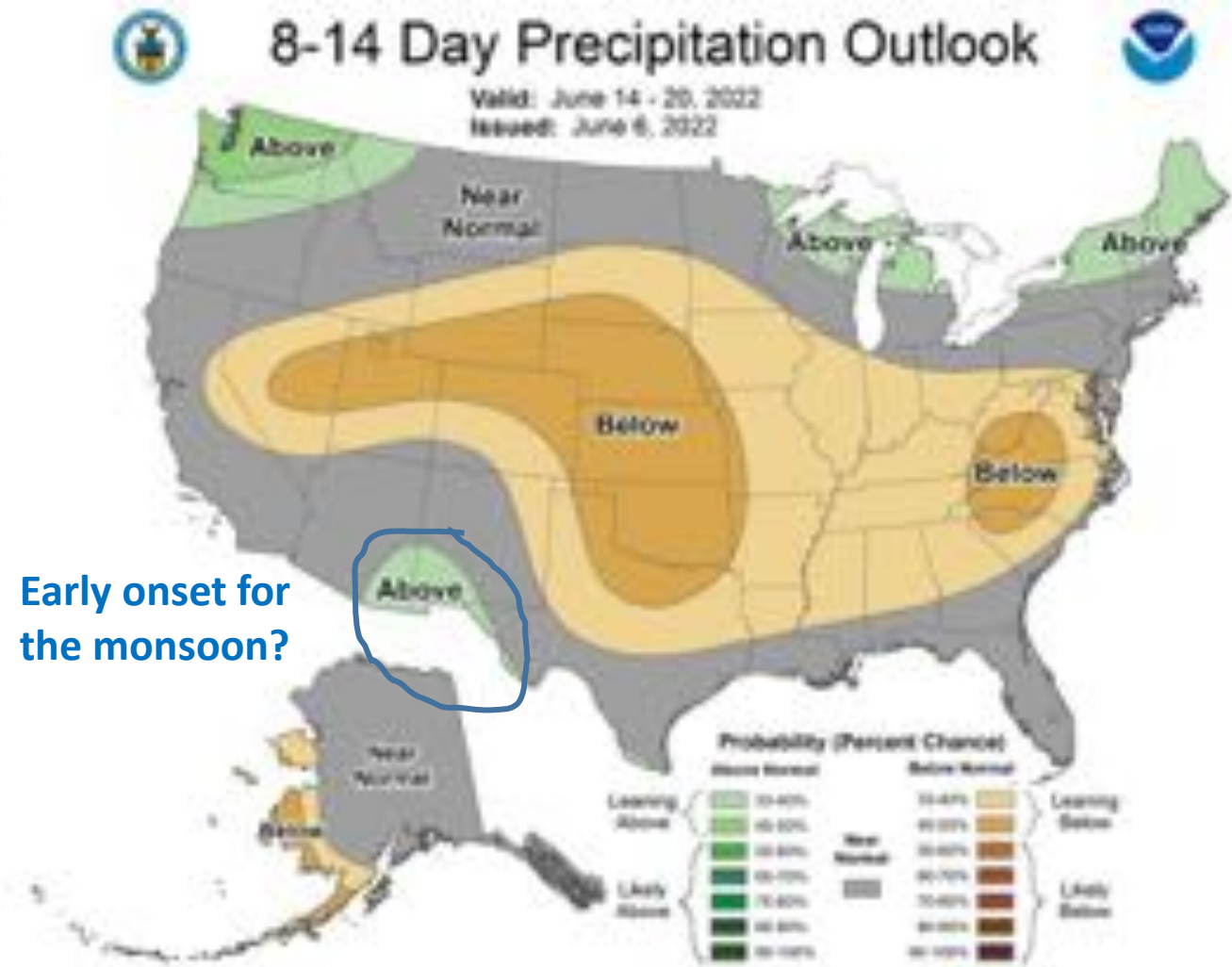
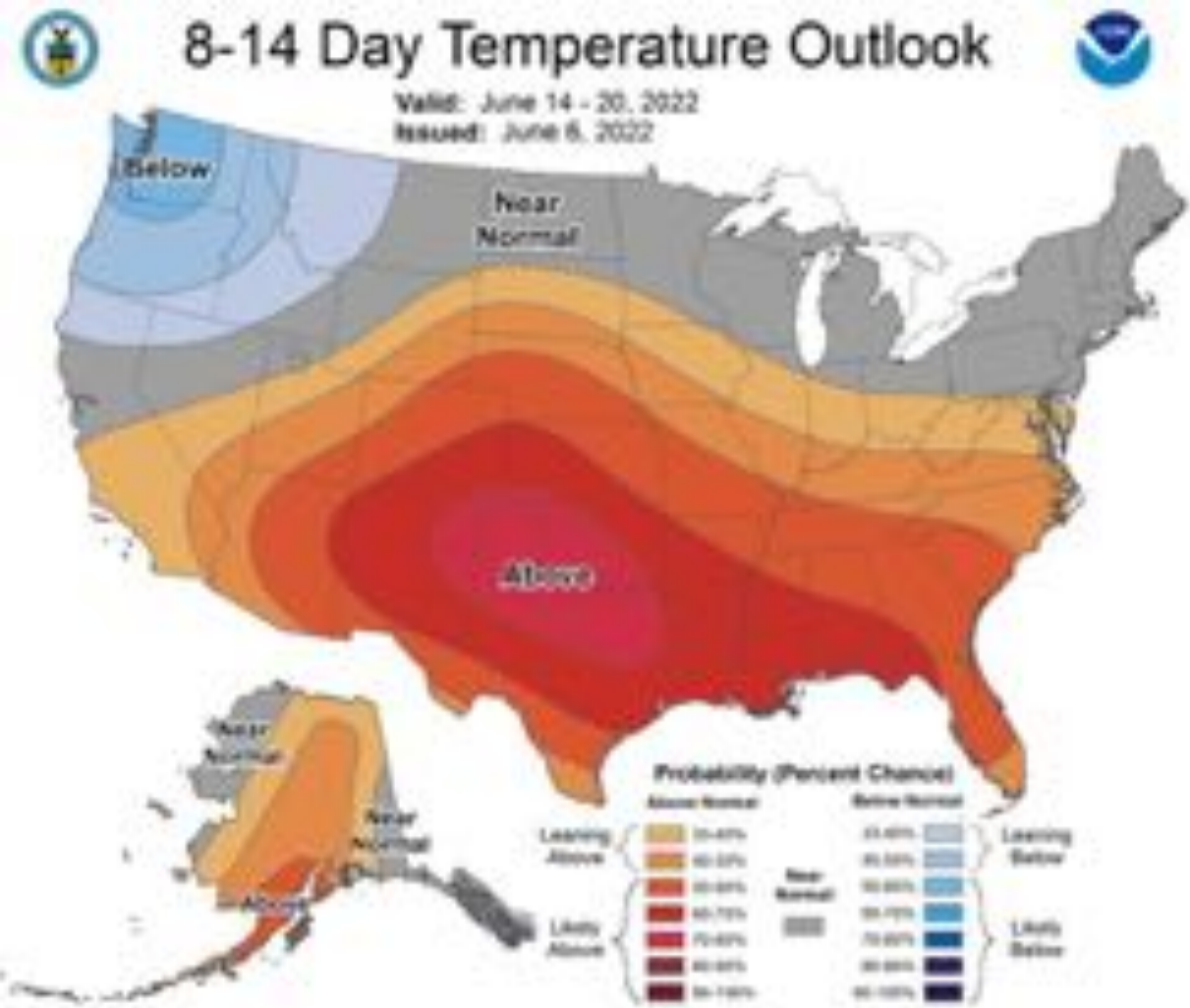
Seasonal Forecast Probabilities

Early-May 2022 CPC/IRI Official Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly
Neutral ENSO: $-0.5\text{ }^{\circ}\text{C}$ to $0.5\text{ }^{\circ}\text{C}$

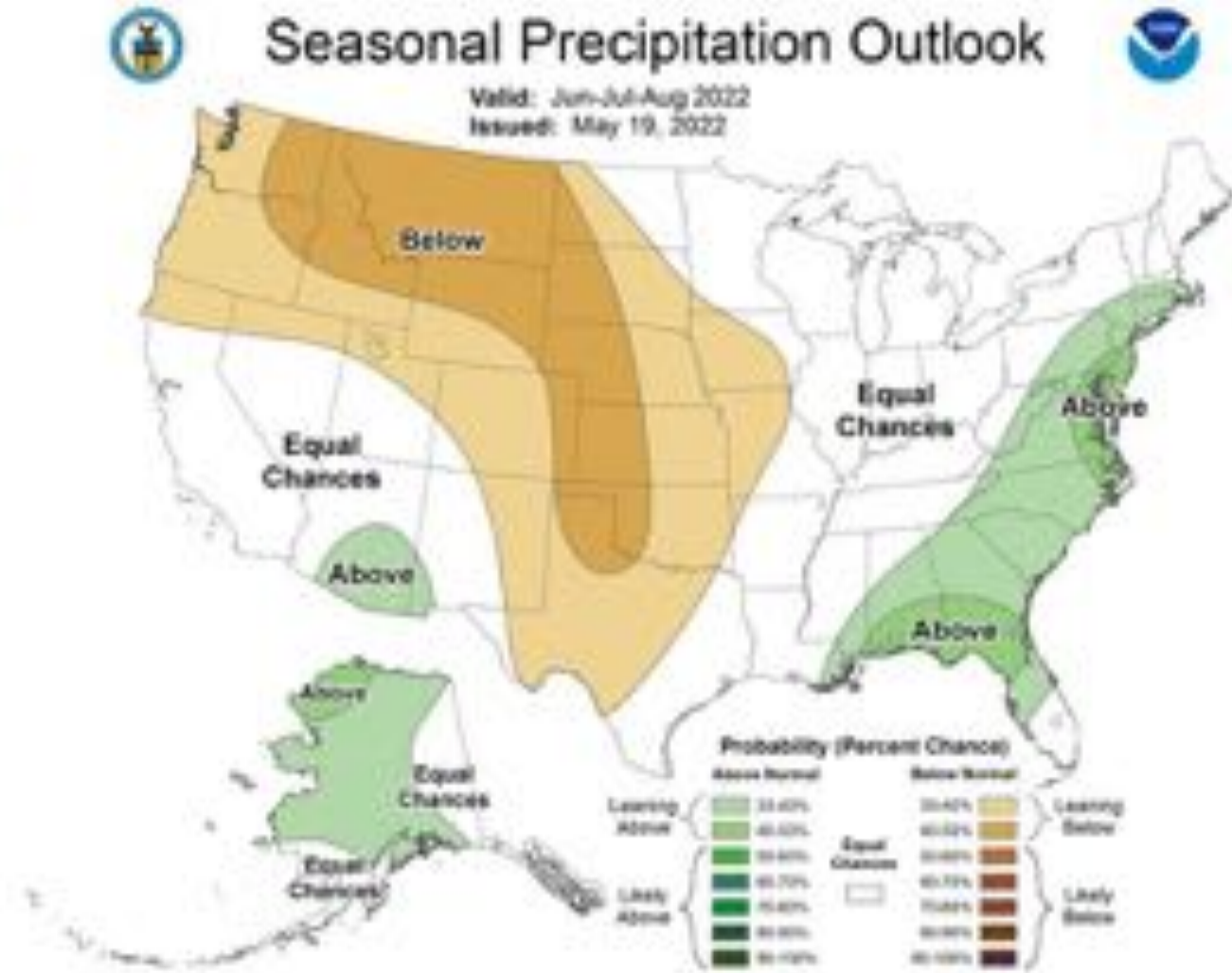
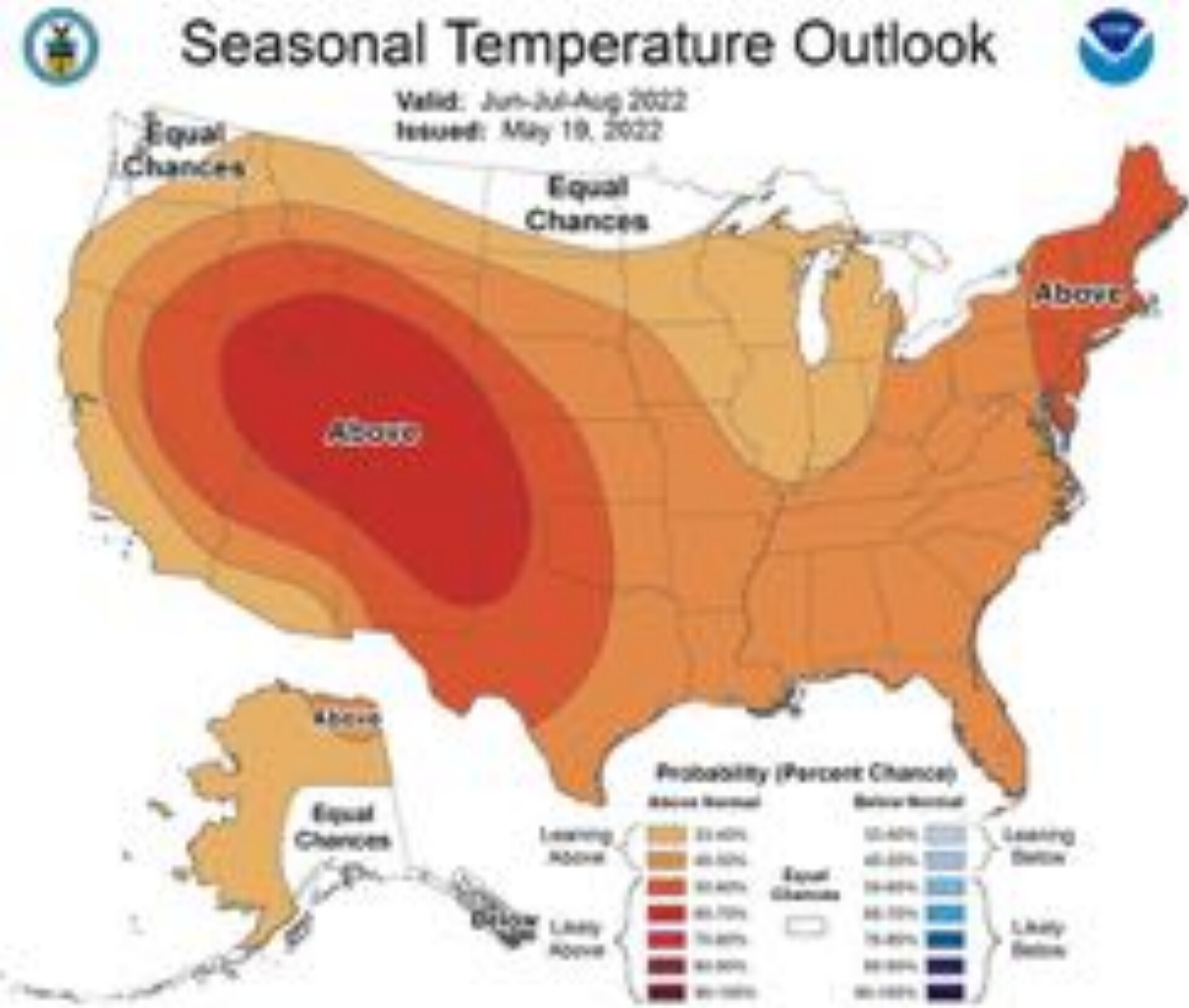


The latest objective or model based predictions are similar but show a slightly decreased probability of La Niña later in the year



Early onset for the monsoon?

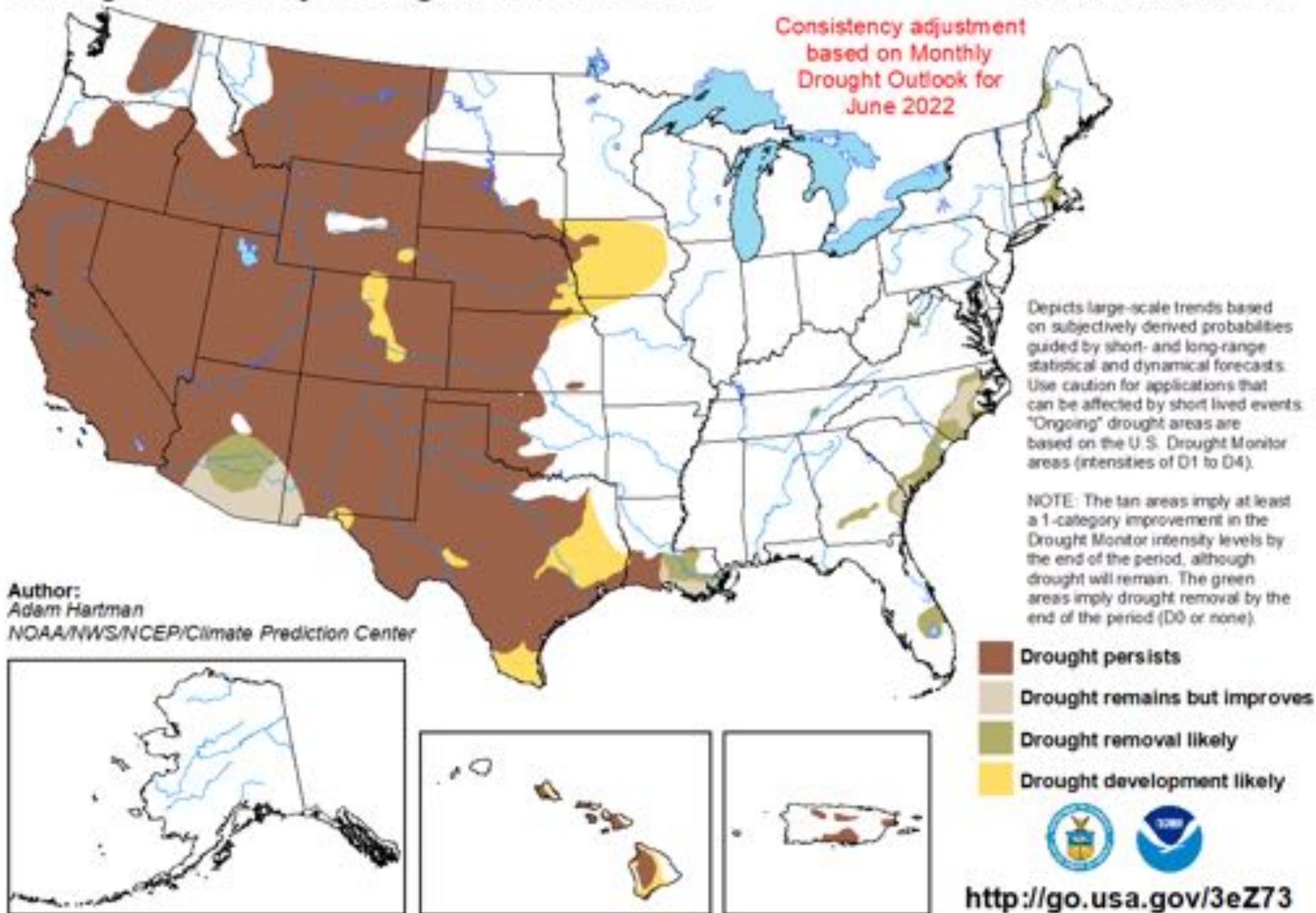
Summer outlook



U.S. Seasonal Drought Outlook

Drought Tendency During the Valid Period

Valid for June 1 - August 31, 2022
Released May 31, 2022





Thank you!

Dave DuBois, dwdubois@nmsu.edu