



2024 Fire Season Considerations and Outlook

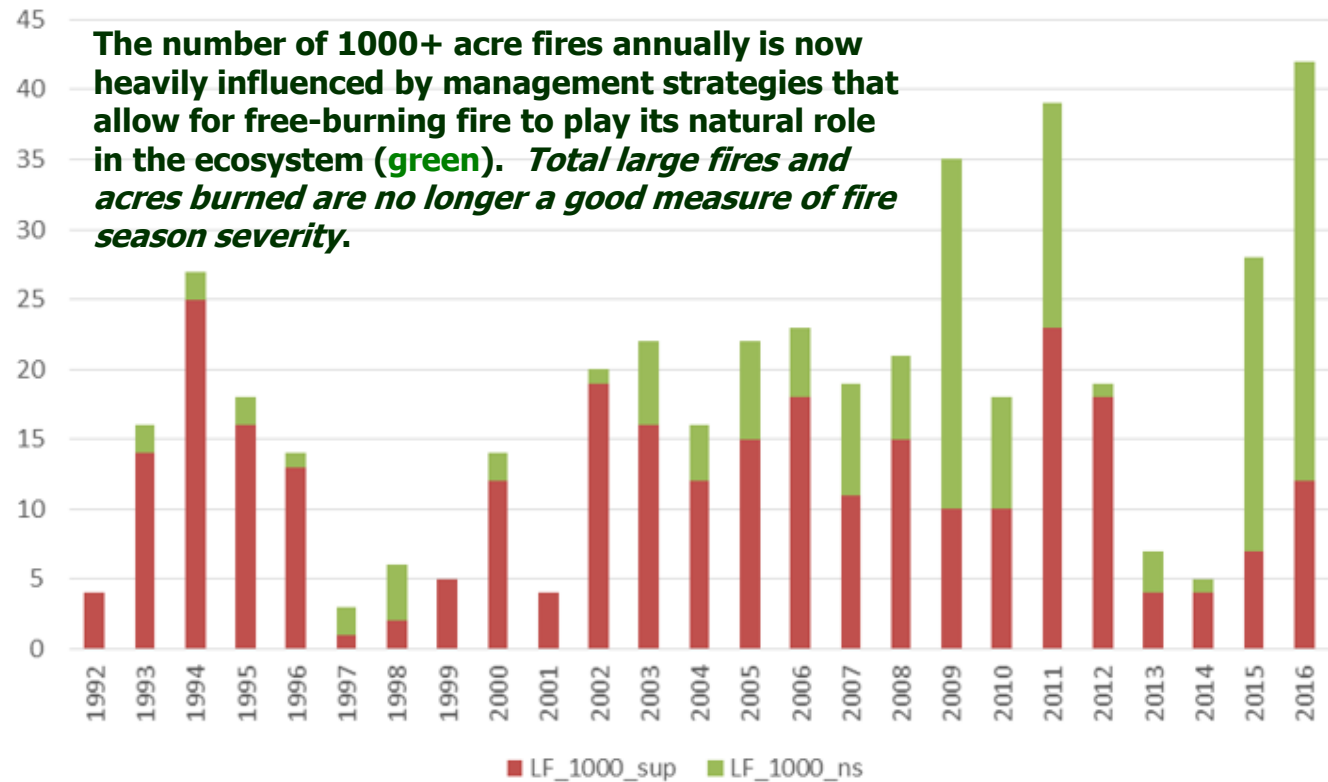
SWCC Predictive Services

Updated: 5/2/24

Historical Southwest Area Fire Activity

Southwest Mountains - Count 1000+ Acre Fires

(Suppression vs. Multi-Objective/Multi-Strategy)



- Fires about a 50/50 split between human & lightning caused
- Human caused fires more prevalent in the spring, coincident with windy & dry conditions
- Lightning caused fires more prevalent from June onward, coincident with the approaching monsoon

Seasonal Fire Potential Main Factors

1. Drought

Big Picture Fuels Complex Conditions

2. Fine Fuels Condition

Fine Fuels Component

3. Seasonal Temperature & Precipitation

Season Setup

4. Spring & early Summer Weather Patterns

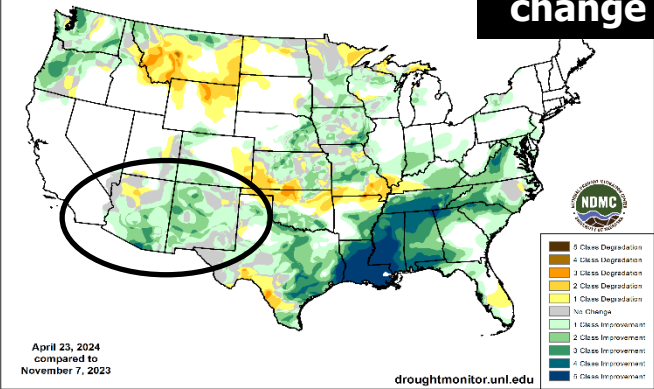
Fire Ignition &
Spread

5. Monsoon

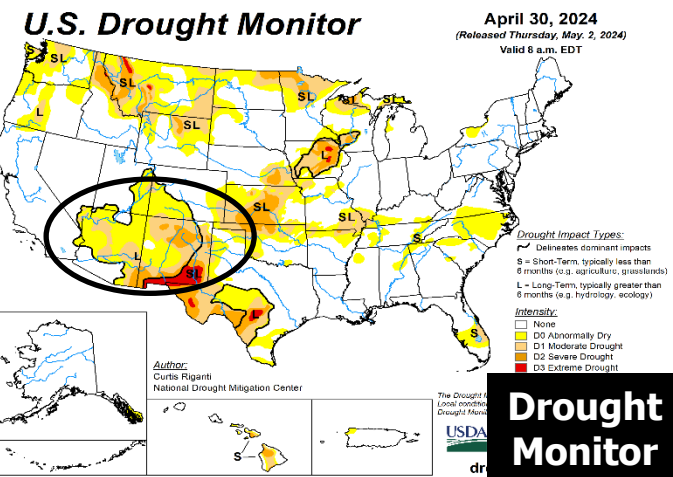
Season End

Fire Season 2024: Drought

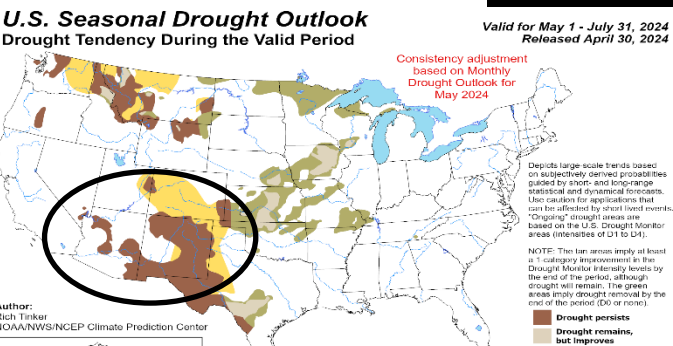
Both improving/worsening drought conditions over the past 6 months



- Areas of “**Extreme Drought**”, south/east. “**Severe drought**” more widespread across both northern/southern NM and near eastern Mogollon rim. “**Moderate Drought**” bordering these areas. Least drought southwest and far northeast



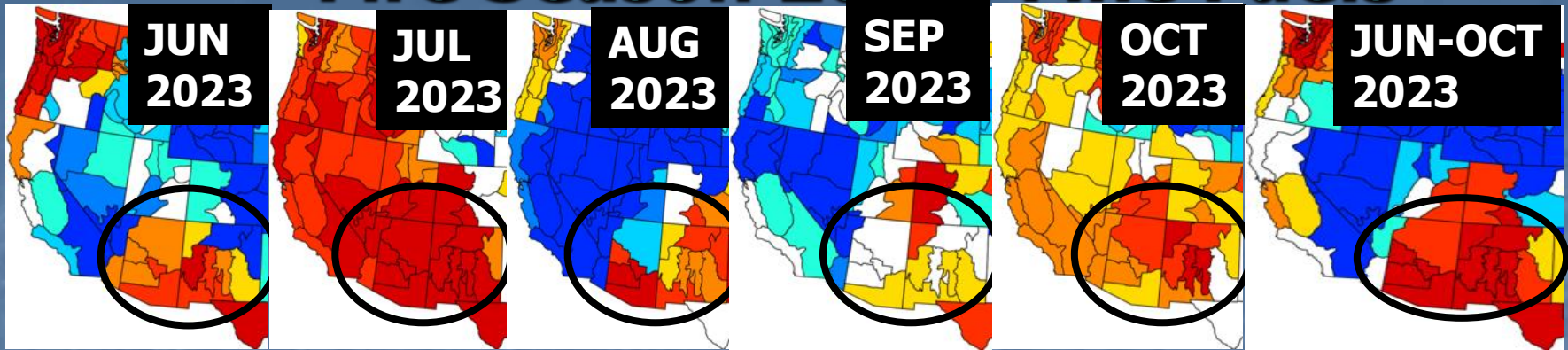
Drought Monitor



Drought Outlook

- Official Drought outlook – Drought likely to persist/develop through July areawide.

Fire Season 2024: Fine Fuels

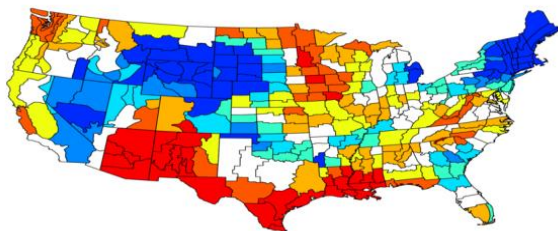


- Poor to record poor 2023 warm season precipitation totals nearly area-wide. Many areas experienced record to near record low amounts of precipitation last summer/fall.

- Fine fuel loading and continuity ranges from Below Normal to Above Normal, with Above Normal areas - *across eastern into northeastern NM and parts of southern into south-central AZ*

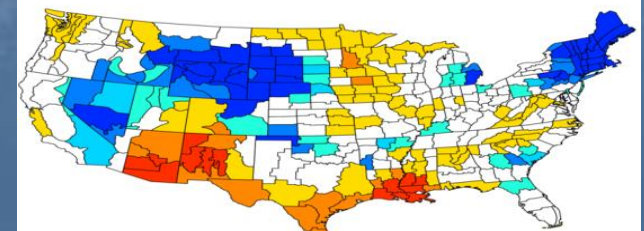
- *Per coordination with units/agencies as spring arrives...will provide specific unit updates when provided info...*

NOAA/NCEI Climate Division Precipitation Percentile Relative to 1895–2019
Jun to Oct 2023

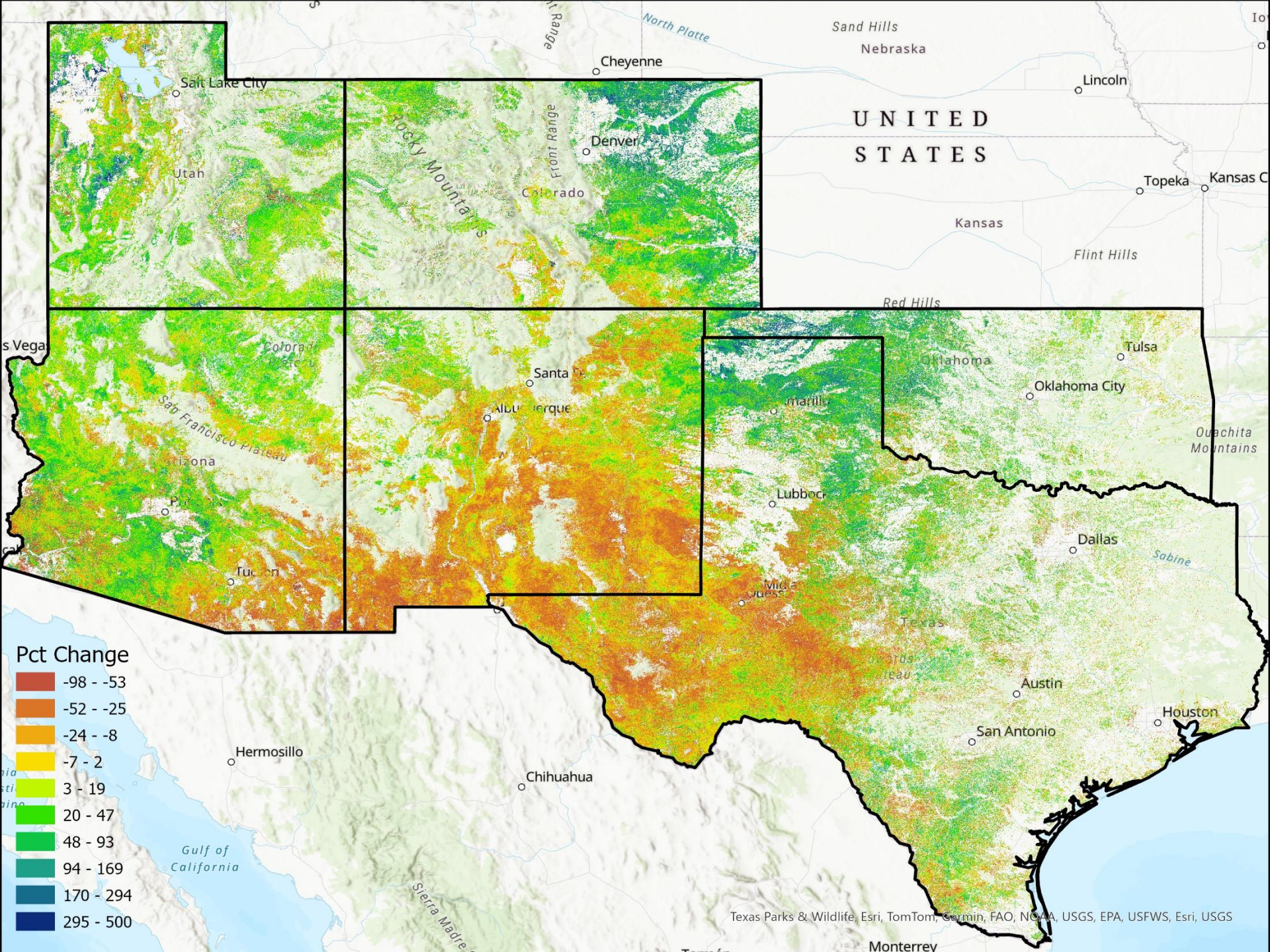


Percentile

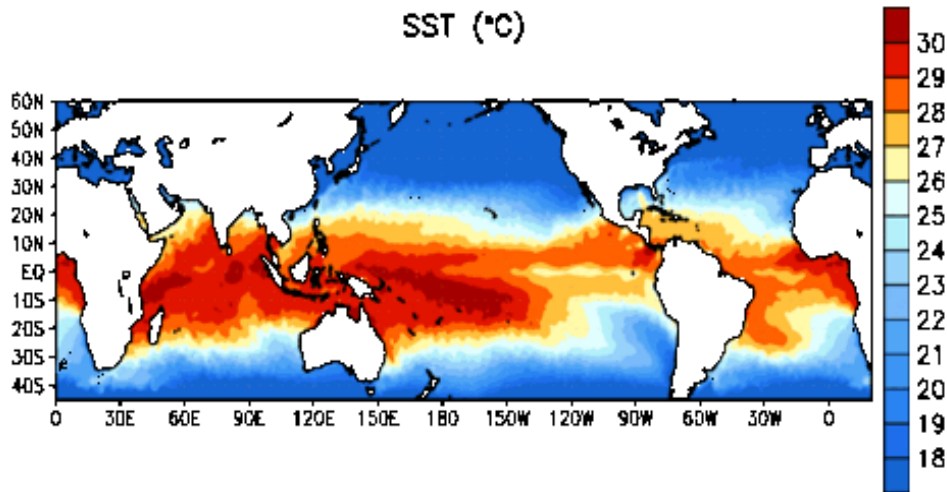
NOAA/NCEI Climate Division Precipitation Rank Relative to 1895–2019
Jun to Oct 2023



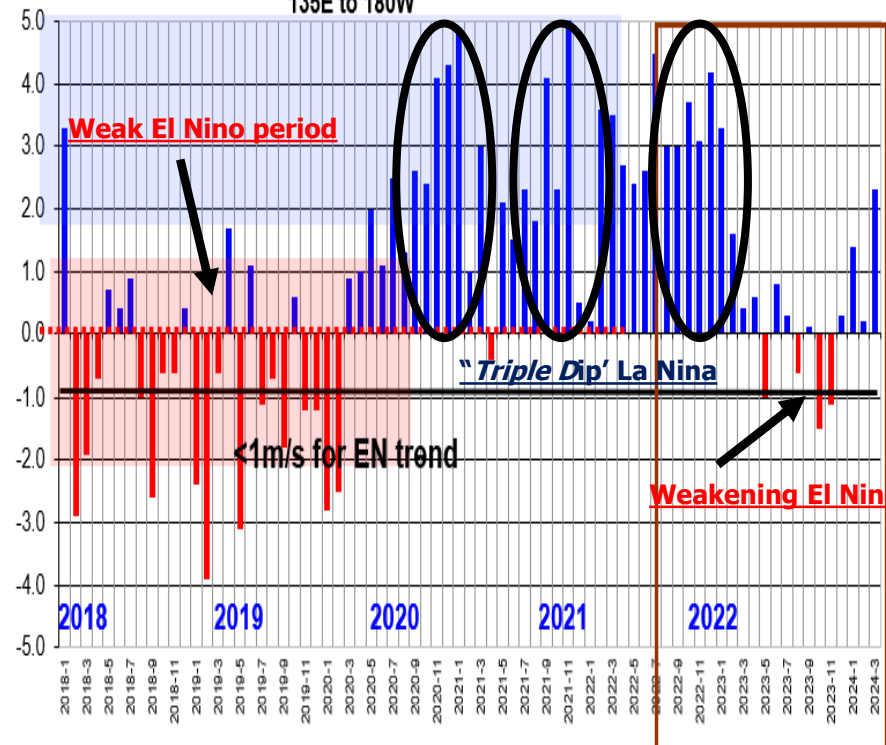
Rank



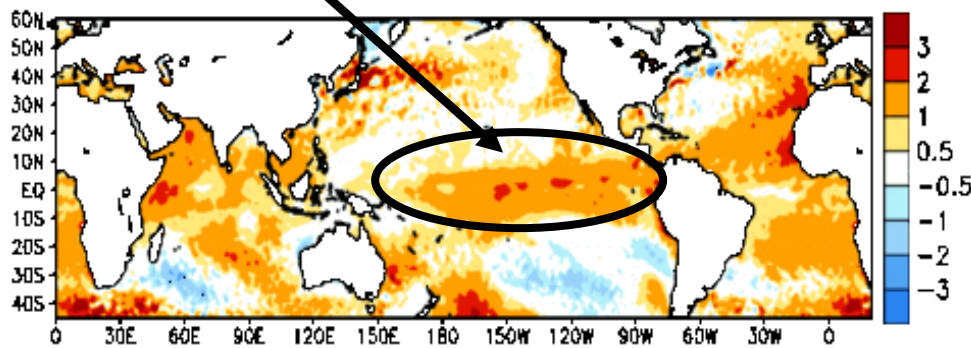
Week centered on 07 FEB 2024
SST (°C)



850 WEST PAC EQ WIND TRADE INDEX ANOMALY
135E to 180W

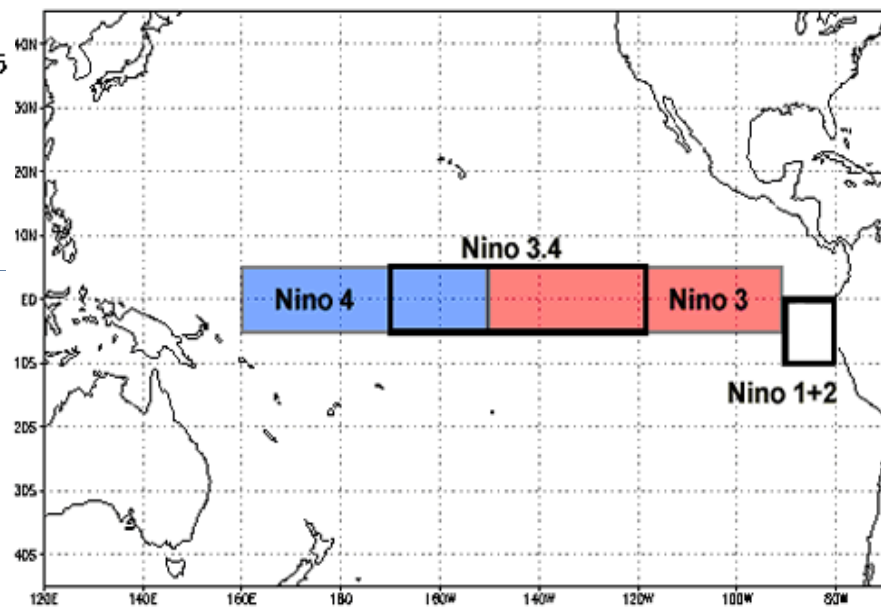
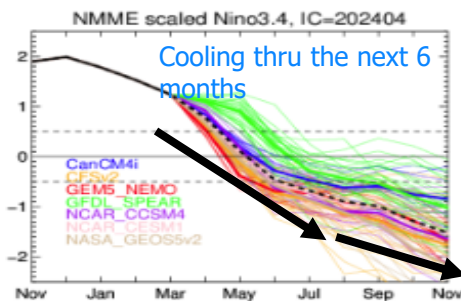
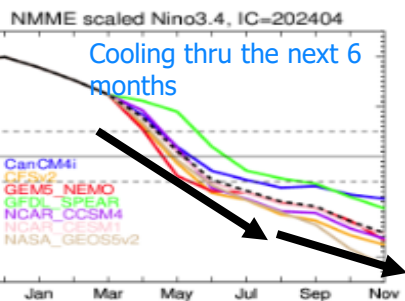


ENSO Neutral
Anomalies (°C)

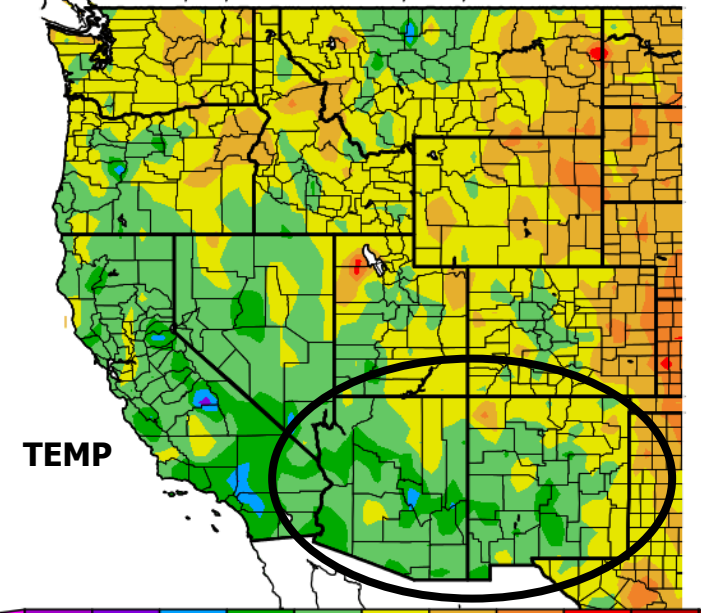


Ensemble Mean

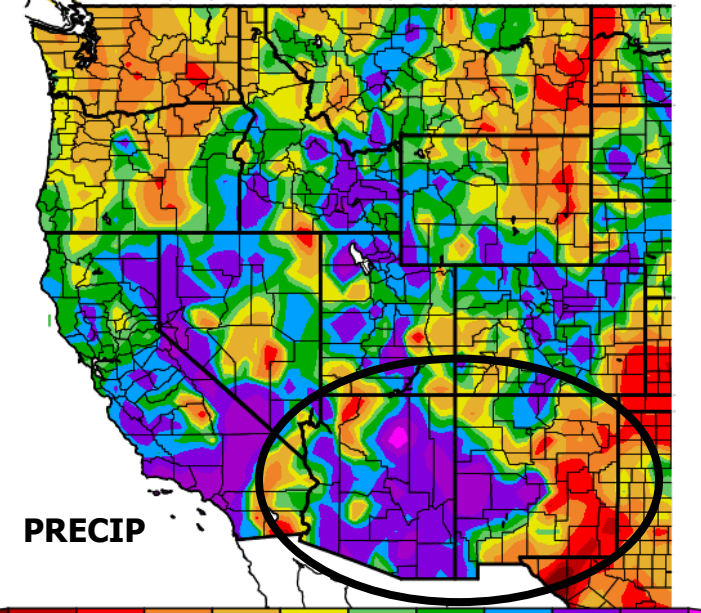
All Members



Av. Max. Temperature dep from Ave (deg F)
2/1/2024 - 4/30/2024



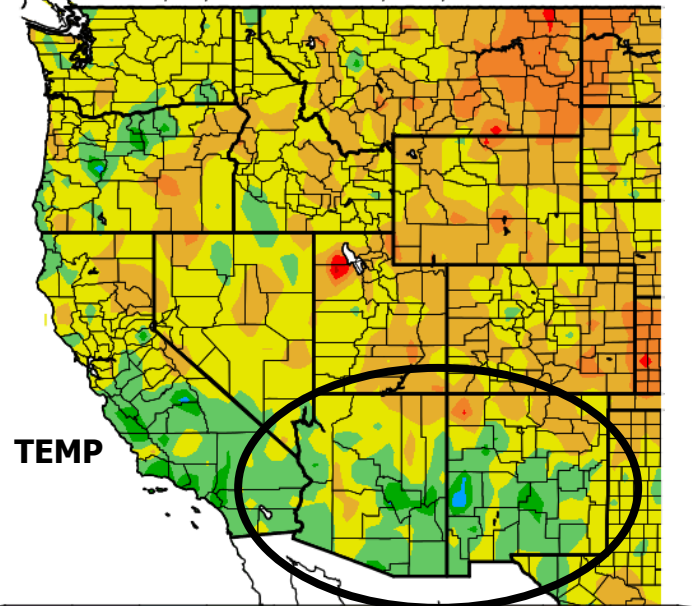
Percent of Average Precipitation (%)
2/1/2024 - 4/30/2024



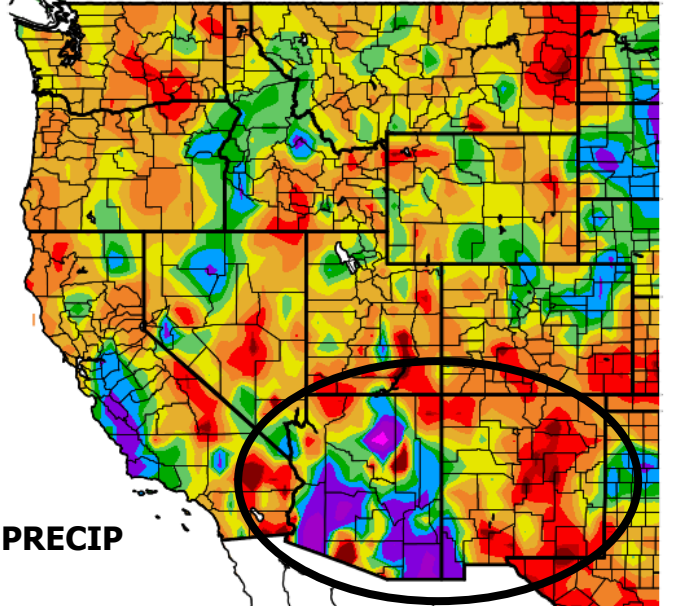
Fire Season 2024: Last 90 Days (FEB '24 thru APR '24) Temperature & Precipitation

- Overall, a quite active winter/spring period, after a quiet fall timeframe
- High temperatures have averaged from 1-2 degrees warmer than normal from the Four Corners across far northern NM and over the far east to from 1-6 degrees cooler than normal most of the rest of the area, esp. Mogollon rim region into southwest NM
- Wetter than normal southern/eastern AZ and across western NM and drier than normal northwestern AZ and across the eastern 1/2 or so NM the past 3 months

Av. Max. Temperature dep from Ave (deg F)
4/1/2024 - 4/30/2024



Percent of Average Precipitation (%)
4/1/2024 - 4/30/2024

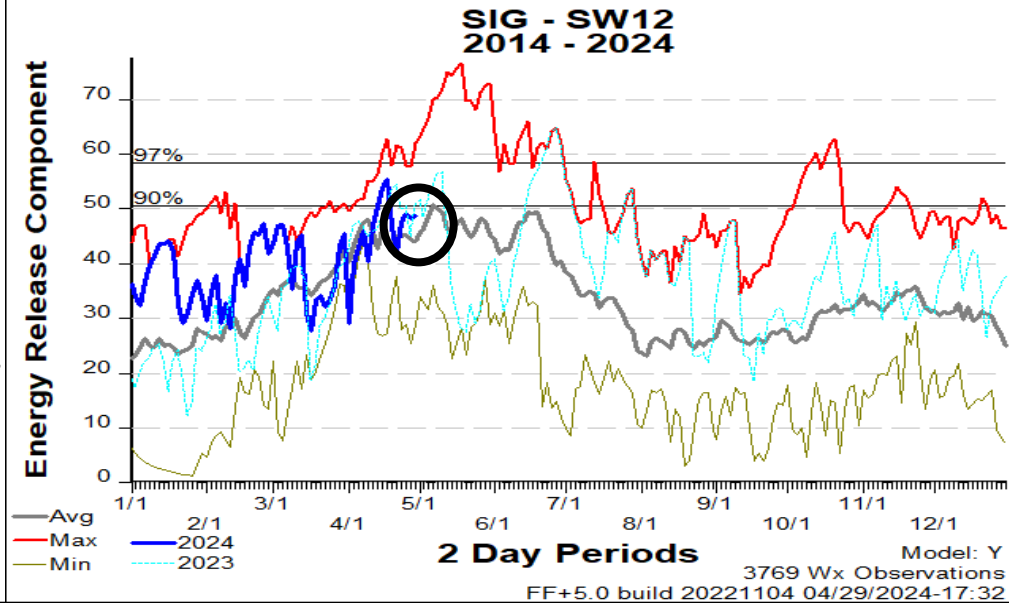
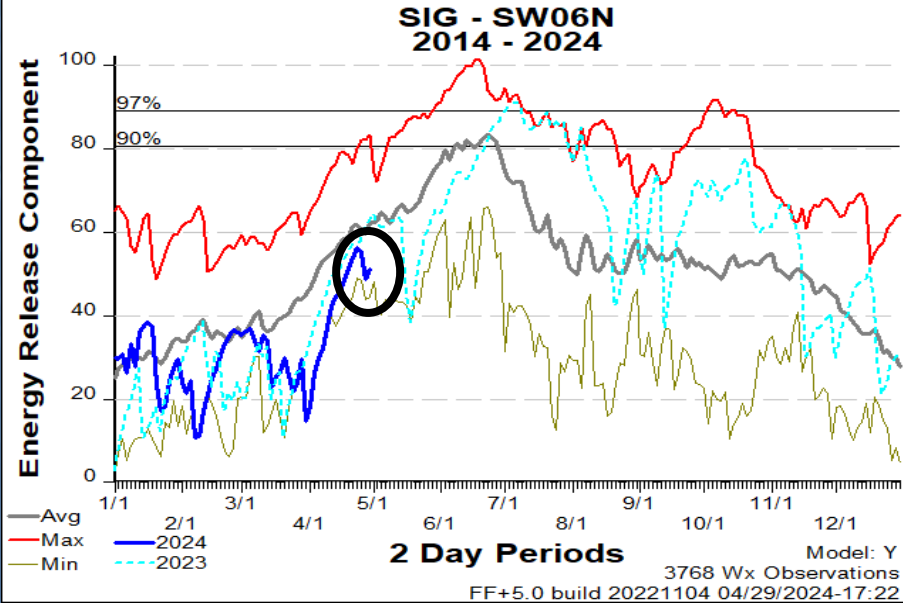
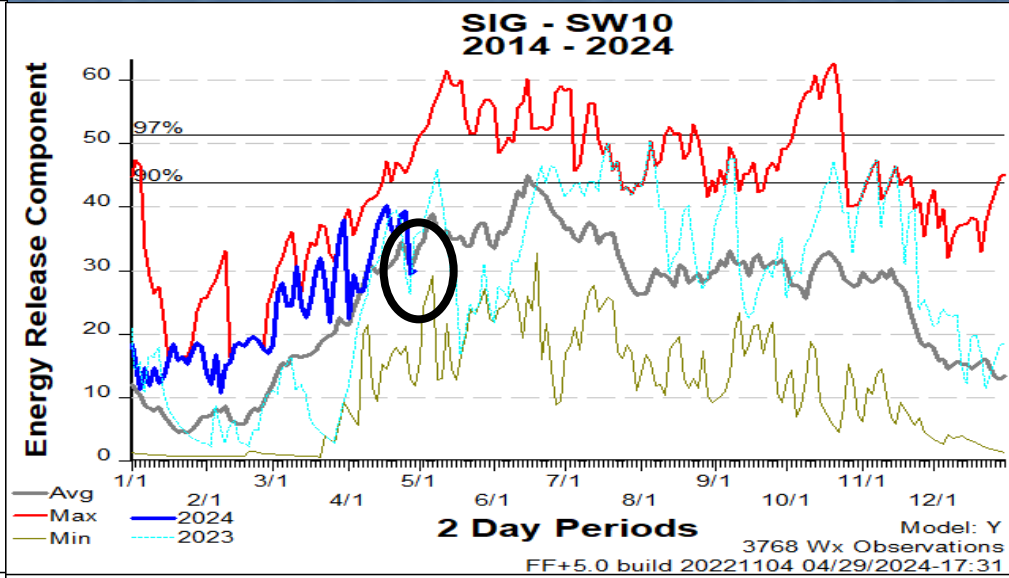
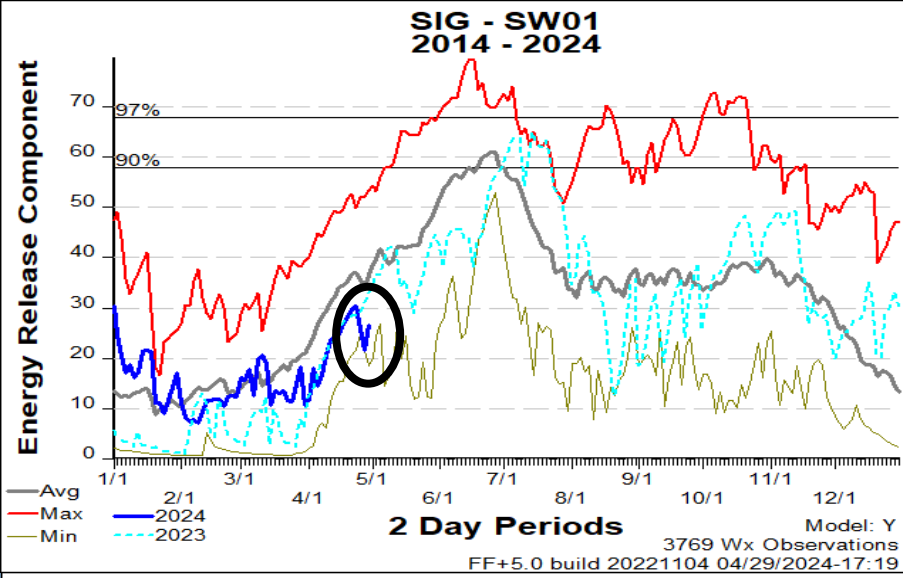


Fire Season 2024: Past 30 Days (APR '24) Temperature & Precipitation

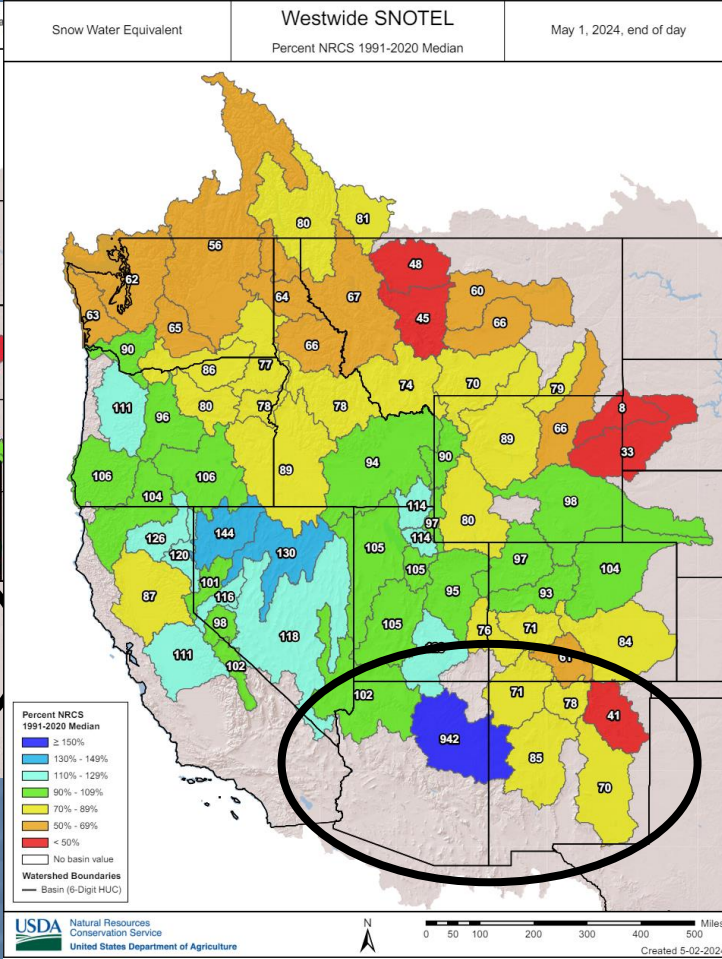
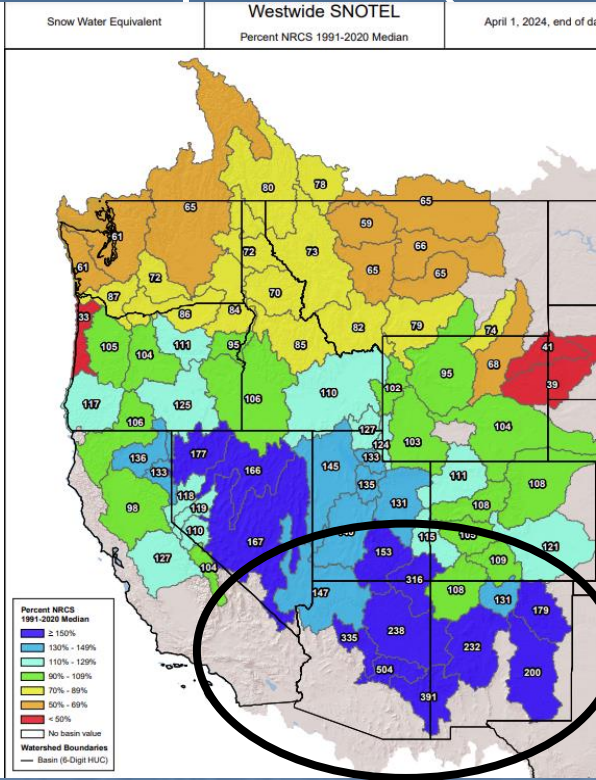
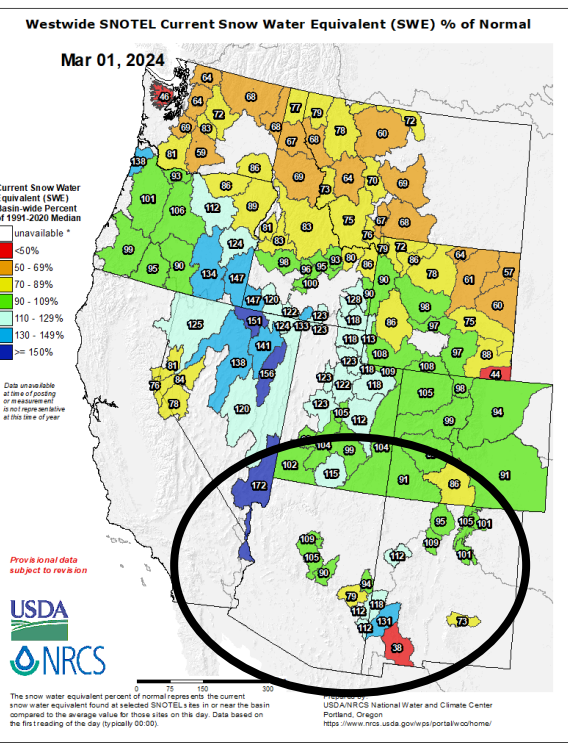
- Cooler/colder focused south with high temperatures from 1-6 degrees below, **mildest Four Corners, northern NM**
- **Drier than normal east of the divide, Wetter than normal overall west**

Fire Season 2024: ERC Values

- ERC values on 4/29/24

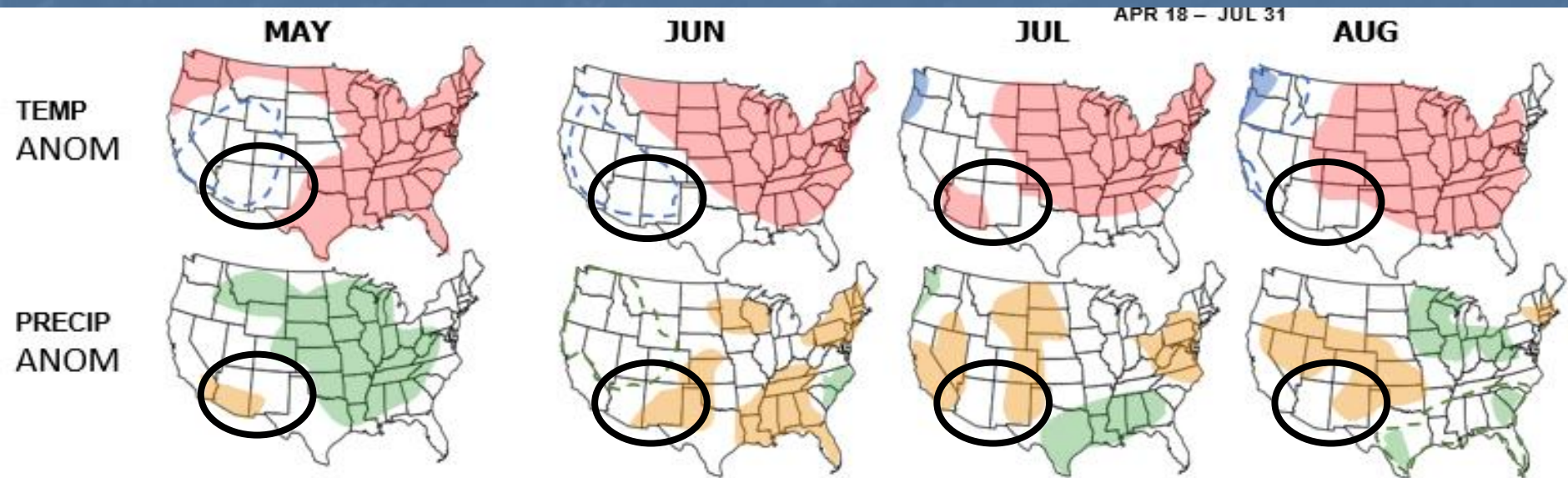


Snow Water Equivalent (Snowpack) Values



Fire Season 2024: MAY-AUG

Temp & Precipitation Forecast



A continued active and up/down late spring weather pattern with some continued periods of near normal/**slightly cooler than normal temperatures** focused west and **generally dry conditions overall** except far east.

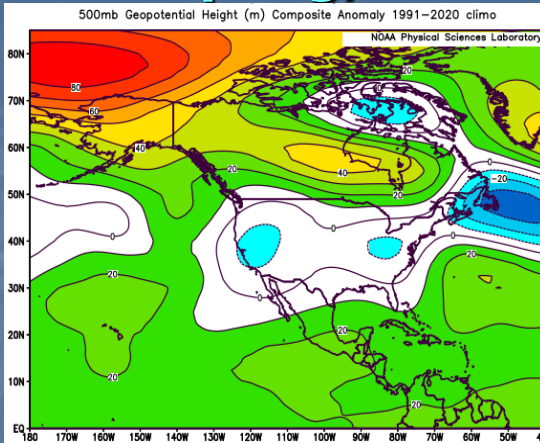
Overall moisture is expected to decrease by late spring/early summer with high temperatures becoming more regularly above normal by later in May into June

Monsoon likely to be on-time to slightly delayed with **better rainfall/moisture focused west of the divide overall**. Likely sharply drier east of the divide, but **esp. along/east of the NM central mtns coincident with hotter temps**. In addition, monsoon could taper off earlier than usual in AUG/SEP with lingering **warmer/hotter** & **drier conditions** through early-mid fall

Fire Season 2024

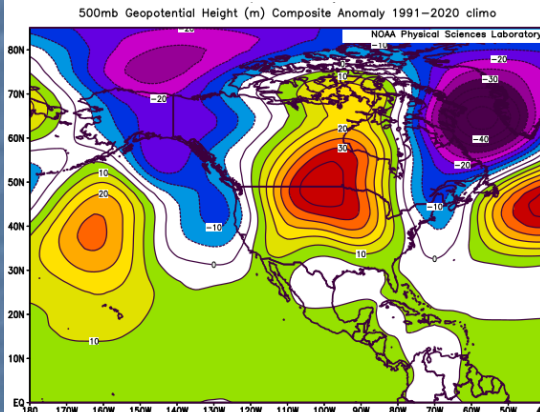
Late Spring/Summer Weather Pattern Impacts

MAY



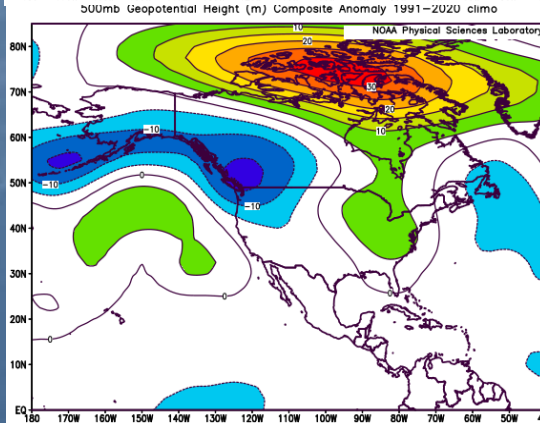
- Rather persistent jet stream keeping an active pattern intact for the Southwest Area
- Averaging cooler across the north/east, near normal many areas and wetter than normal at times across the east and far north
- Some downslope wind events with enhanced breezy/windy conditions 1st half or so of May

JUN



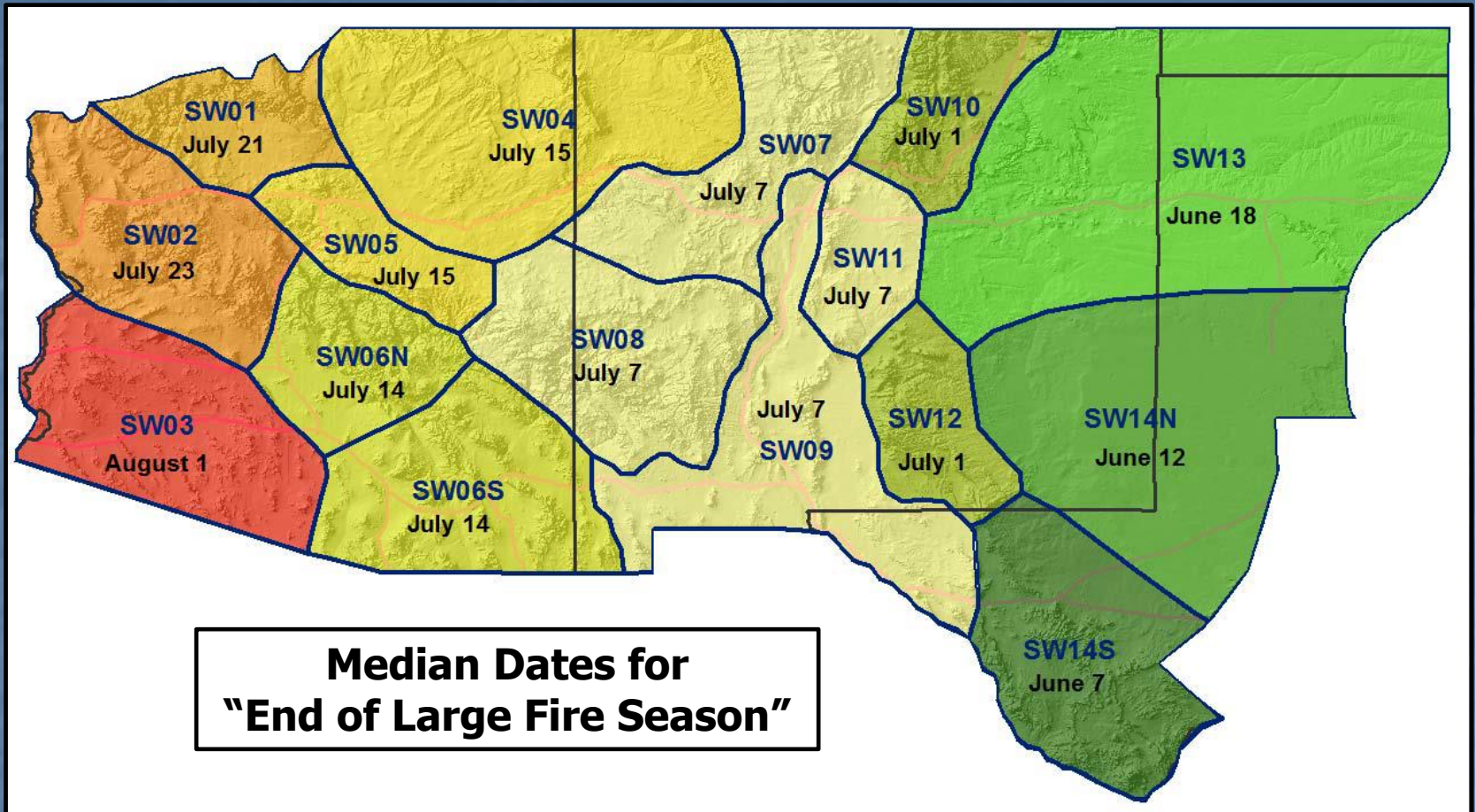
- Ridging to become more in control of region
- Normal to above normal temperatures many areas
- Near normal precipitation most places (dry), except drier than normal east overall
- Perhaps some areas of precip. far north/west

JUL-AUG



- Northwest U.S. troughing with above normal heights centered Lakes/OH valley (abnormal warmth/dryness plains, corn belt, midwest)
- Normal/Above normal high temps overall
- Monsoon – near/above normal west, near/below normal east, (likely near-normal to at least slightly delayed onset)

Fire Season 2024: Monsoon



- For Reference: Median dates for end of 'large fire' season.

ENSO neutral ongoing. Possible/likely La Nina conditions by JUL/AUG onward

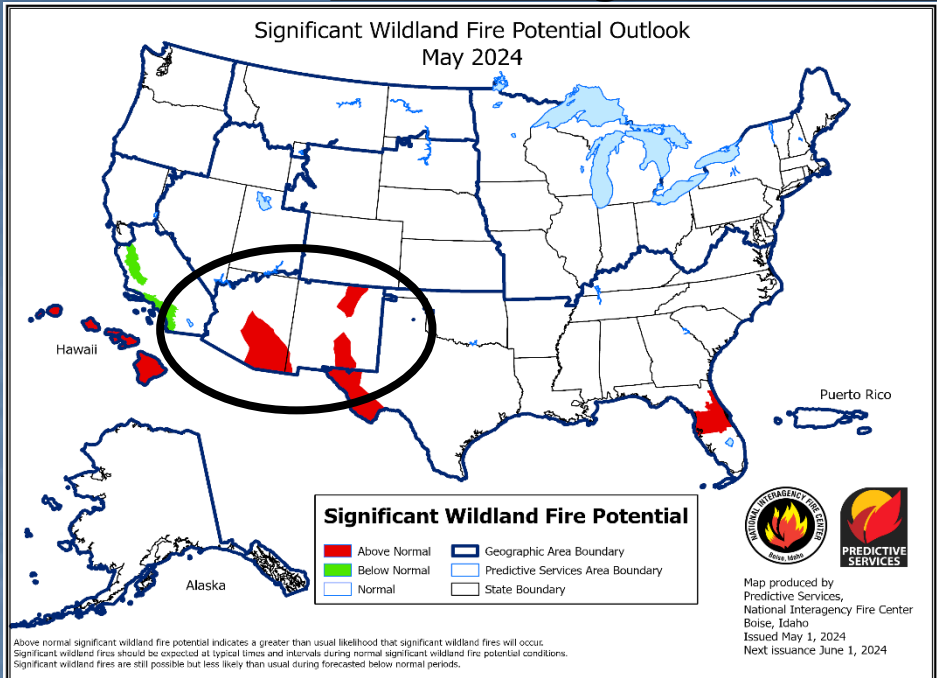
2024 Fire Season Factors Summary

1. **Drought** – Most significant both northern & southern NM
2. **Fine Fuels Condition** – Above normal yields along/south of Mogollon rim, sections of the Gila NF, and much of the northeastern plains
3. **Seasonal Temperature & Precipitation** – Generally been cooler/colder recently many areas, except for far east; Wetter overall along/west of the divide, drier along/east of the NM cntrl mountains, esp. far south/east
4. **Late spring Weather Pattern** – Continued active weather well through May characterized by continued 'seasonal coolness' & more frequent periods of moisture overall; some downslope wind events east of NM central mountains; more regular ridging by later in June
5. **Monsoon** – Likely on-time to at least slightly delayed and near/above normal west; near/below normal east

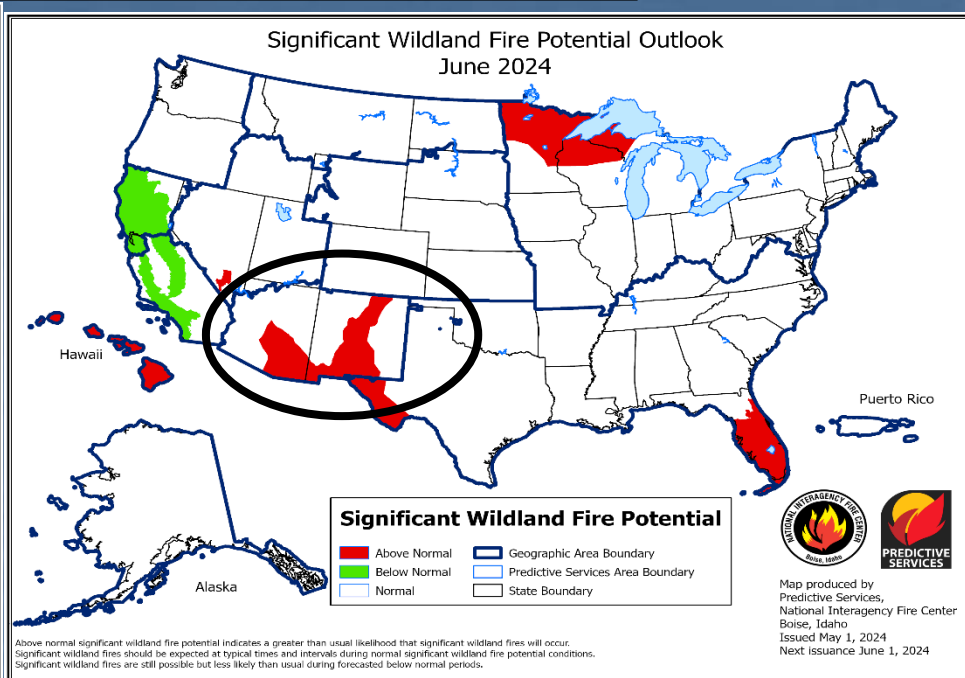
Bottom Line: A very uncharacteristic & changeable late spring/early summer pattern to lead to at least a slightly delayed start to the large fire season

National Significant Wildland Fire Potential Outlook

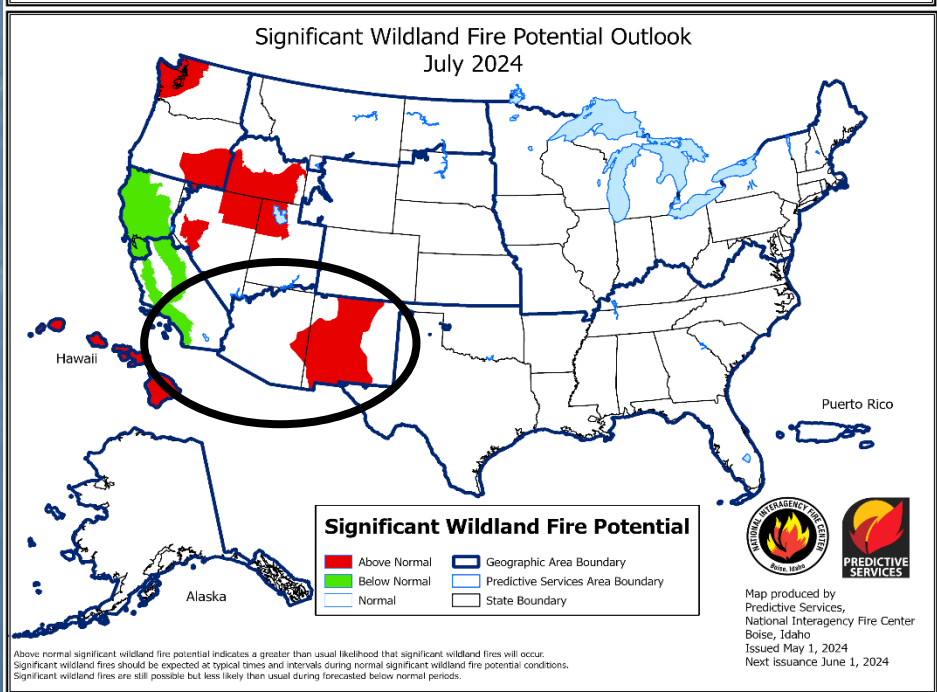
Significant Wildland Fire Potential Outlook
May 2024



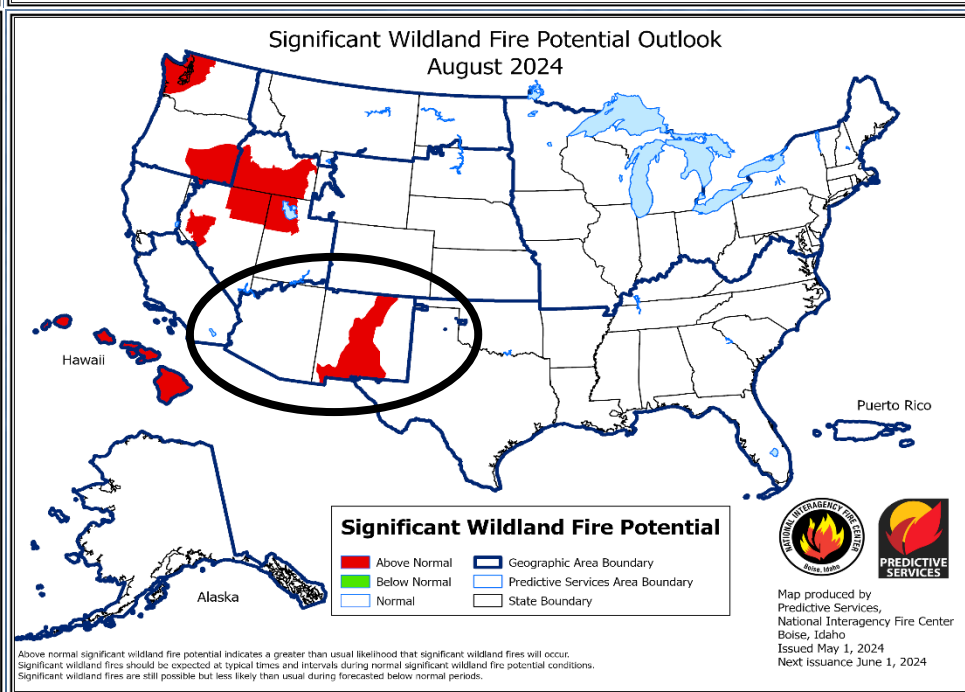
Significant Wildland Fire Potential Outlook
June 2024



Significant Wildland Fire Potential Outlook
July 2024



Significant Wildland Fire Potential Outlook
August 2024



Above normal significant wildland fire potential indicates a greater than usual likelihood that significant wildland fires will occur. Significant wildland fires should be expected at typical times and intervals during normal significant wildland fire potential conditions. Significant wildland fires are still possible but less likely than usual during forecasted below normal periods.

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END

SWCC Predictive Services

Next Update: this is the final update for Fire Season 2024

Contact: SWCC Predictive Services
505-842-3473

Consult the Outlooks Page (Below) for Updated Information Through Fire Season:
<http://gacc.nifc.gov/swcc/predictive/outlooks/outlooks.htm>