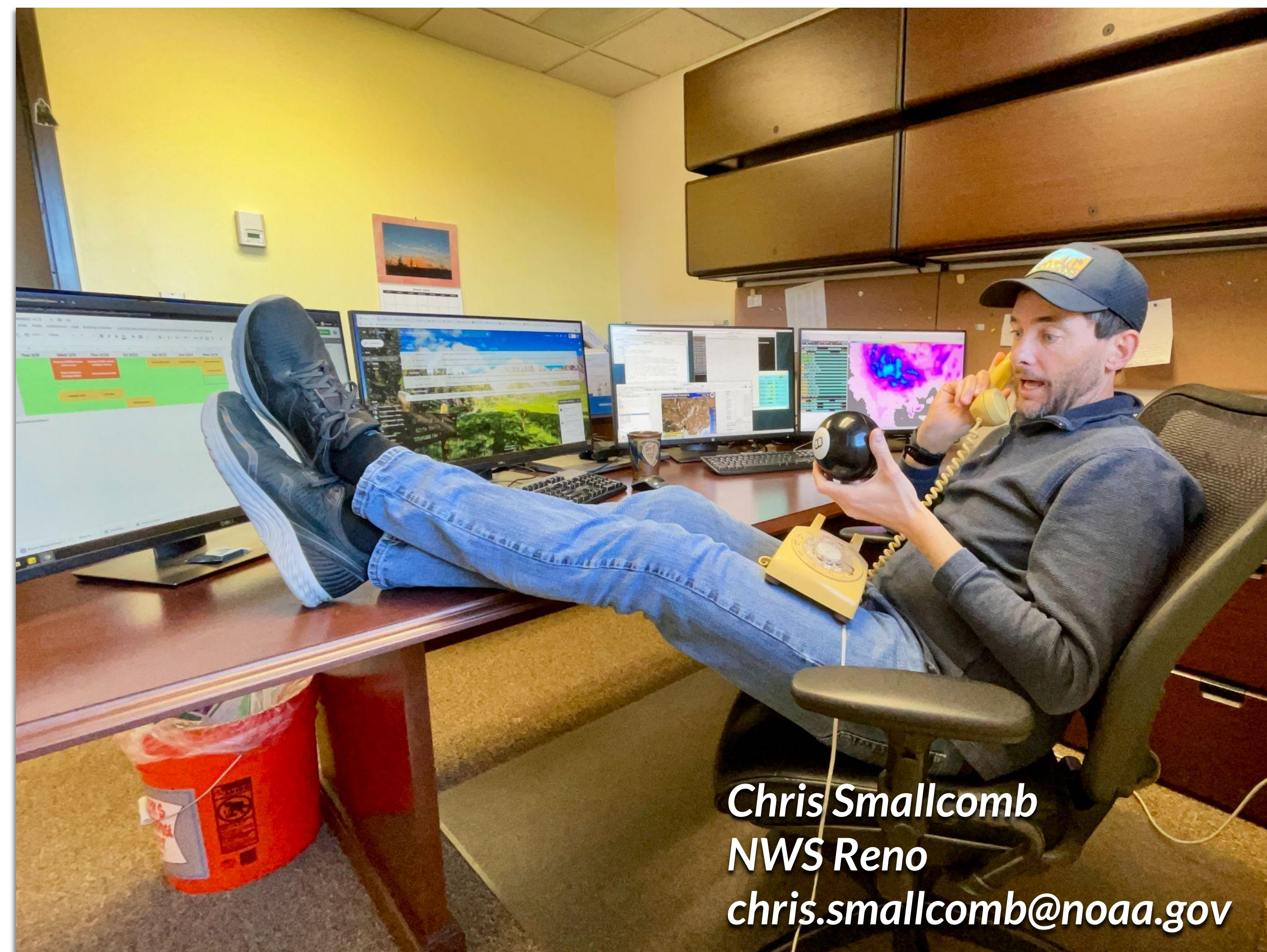




NWS Reno Weather Outlook for Summer 2022

Weather Forecast Office
Reno, NV
Sunday, June 5



Chris Smallcomb
NWS Reno
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**Exceptionally wet
October & December.**

**Historically Dry
January thru March.**

**April Saw Snow, But
Drought Expanded.**

**What Does Summer
Have in Store?**

AGENDA ITEM #5



Red Flag Stats Update: '21 Was Another Big Year

Weather Forecast Office
Reno, NV
Sunday, June 5

Sierra Front Fire Weather Zone

YEAR	NUM RED FLAG DAYS
2021	22
2020	29
2019	8
2018	16
2017	14
2016	21
2015	8
2014	16
2013	14
2012	26
2011	7
2010	14
2009	7
AVE	15.5
STDDEV	7.2
TOTAL	202

Truckee - Tahoe Fire Weather Zone

YEAR	NUM RED FLAG DAYS
2021	16
2020	19
2019	2
2018	7
2017	4
2016	1
2015	8
2014	4
2013	8
2012	10
2011	0
2010	9
2009	6
AVE	7.2
STDDEV	5.5
TOTAL	94

Mono-Alpine Fire Weather Zones

YEAR	NUM RED FLAG DAYS
2021	23
2020	29
2019	7
2018	10
2017	9
2016	6
2015	10
2014	8
2013	10
2012	16
2011	3
2010	9
2009	6
AVE	11.2
STDDEV	7.3
TOTAL	146



The Story of Winter 2021-22

Weather Forecast Office
Reno, NV
Sunday, June 5

Snow water equivalent from NRCS
SNOTELs in the Truckee River basin.

Reset Range

Current as of 06/04/2022:
% of Median - 85%
% Median Peak - 6%
Days Since Median Peak - 68
Percentile - 46

[Link to data: CSV / JSON](#)

December: Top-3 snowiest
month at Central Sierra Snow
Lab, ~40 years of record.

55-day streak of no SWE gain in Eastern
Sierra! New record dry streak for
December-February, since 1981.

40% of annual average rainfall at
RNO in one storm! Lake Tahoe rises
only 8th October in 121 years.

2nd warmest November on
record for RNO, with only
0.11" precipitation.

April storms + cooler temps stopped
the slide toward a record early meltout
& added 10-15% points to Truckee
River water forecasts.

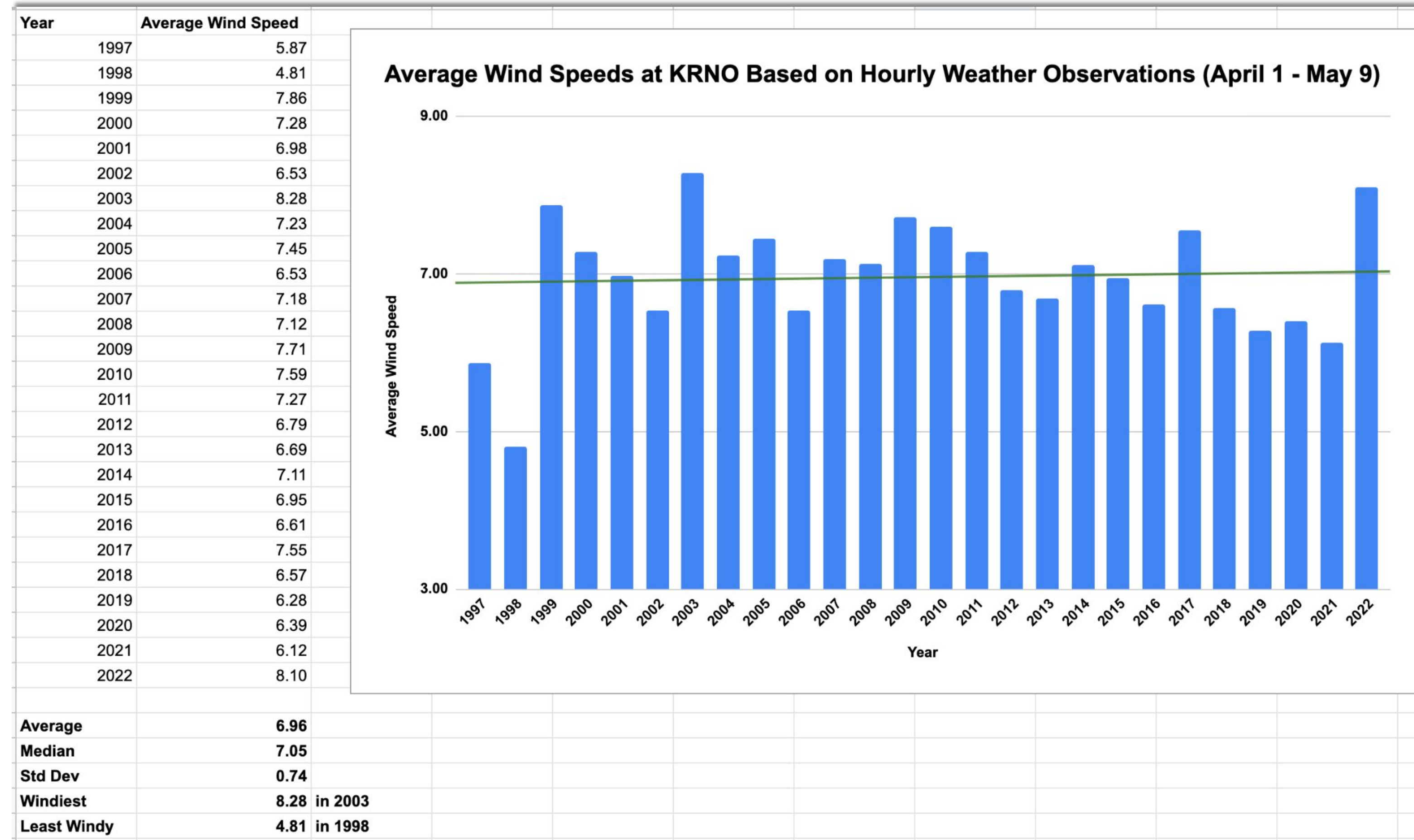
Snow Water Equivalent (in.)

Oct 1 Nov 1 Dec 1 Jan 1 Feb 1 Mar 1 Apr 1 May 1 Jun 1 Jul 1



Has This Spring Been More Windy Than Normal?

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Reno, NV
Sunday, June 5





Weather Outlook



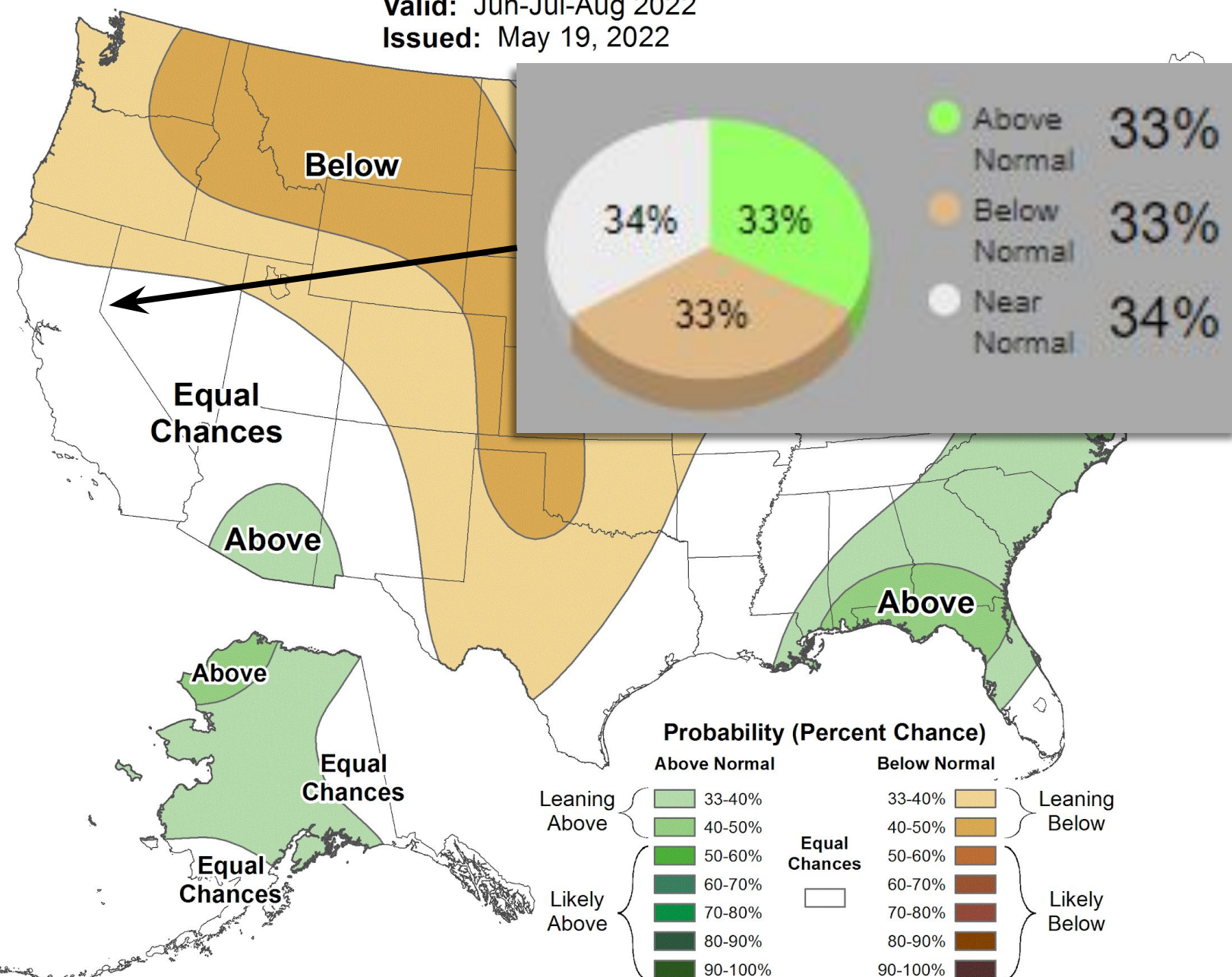
Some Peavine goodness from May 20th.



Seasonal Precipitation Outlook



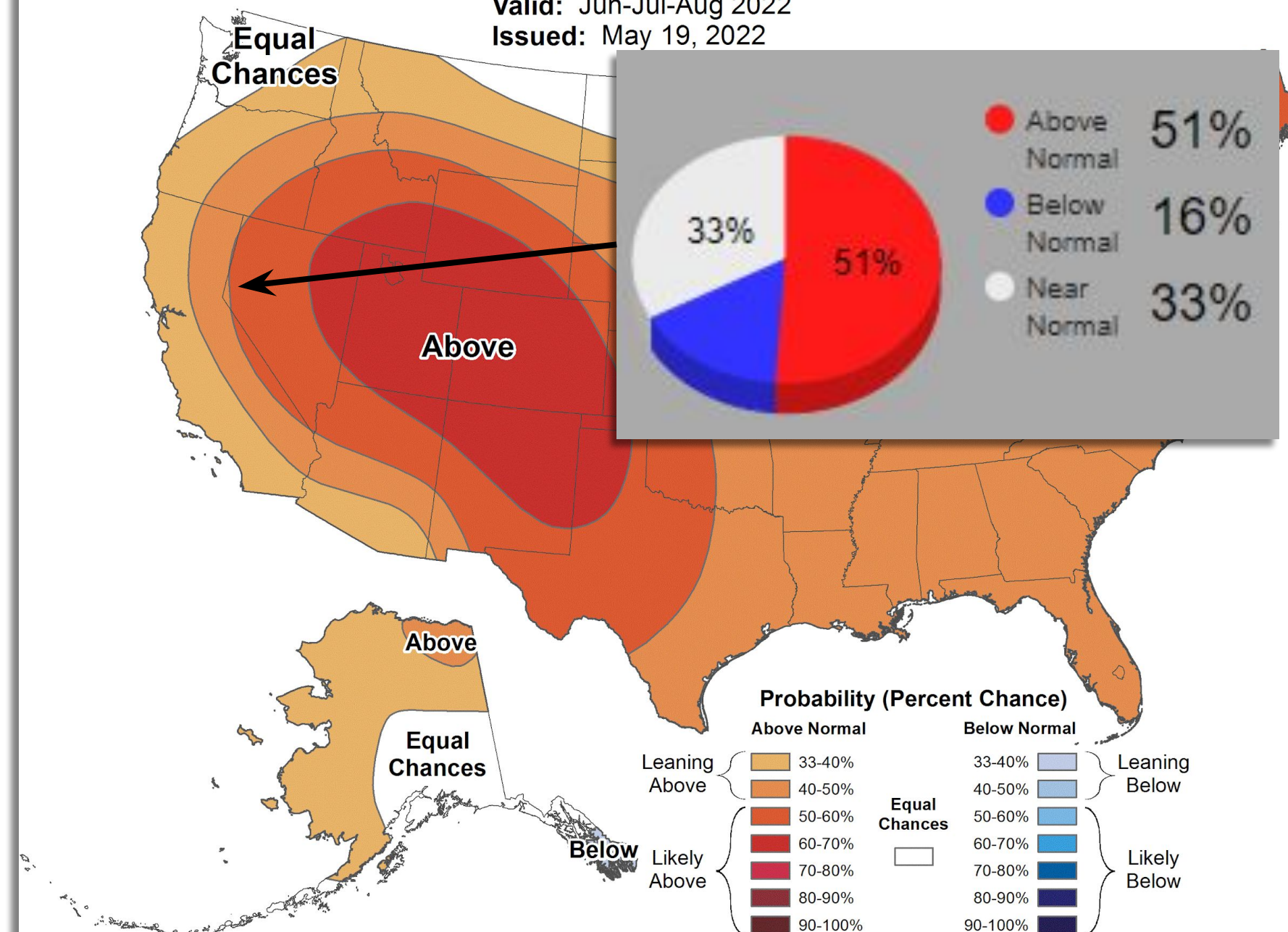
Valid: Jun-Jul-Aug 2022
Issued: May 19, 2022



Seasonal Temperature Outlook



Valid: Jun-Jul-Aug 2022
Issued: May 19, 2022

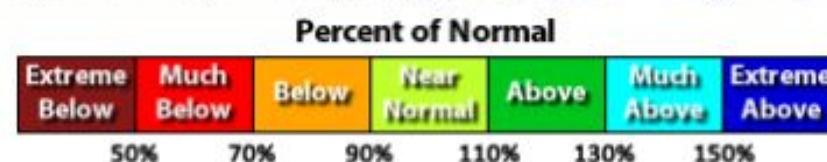
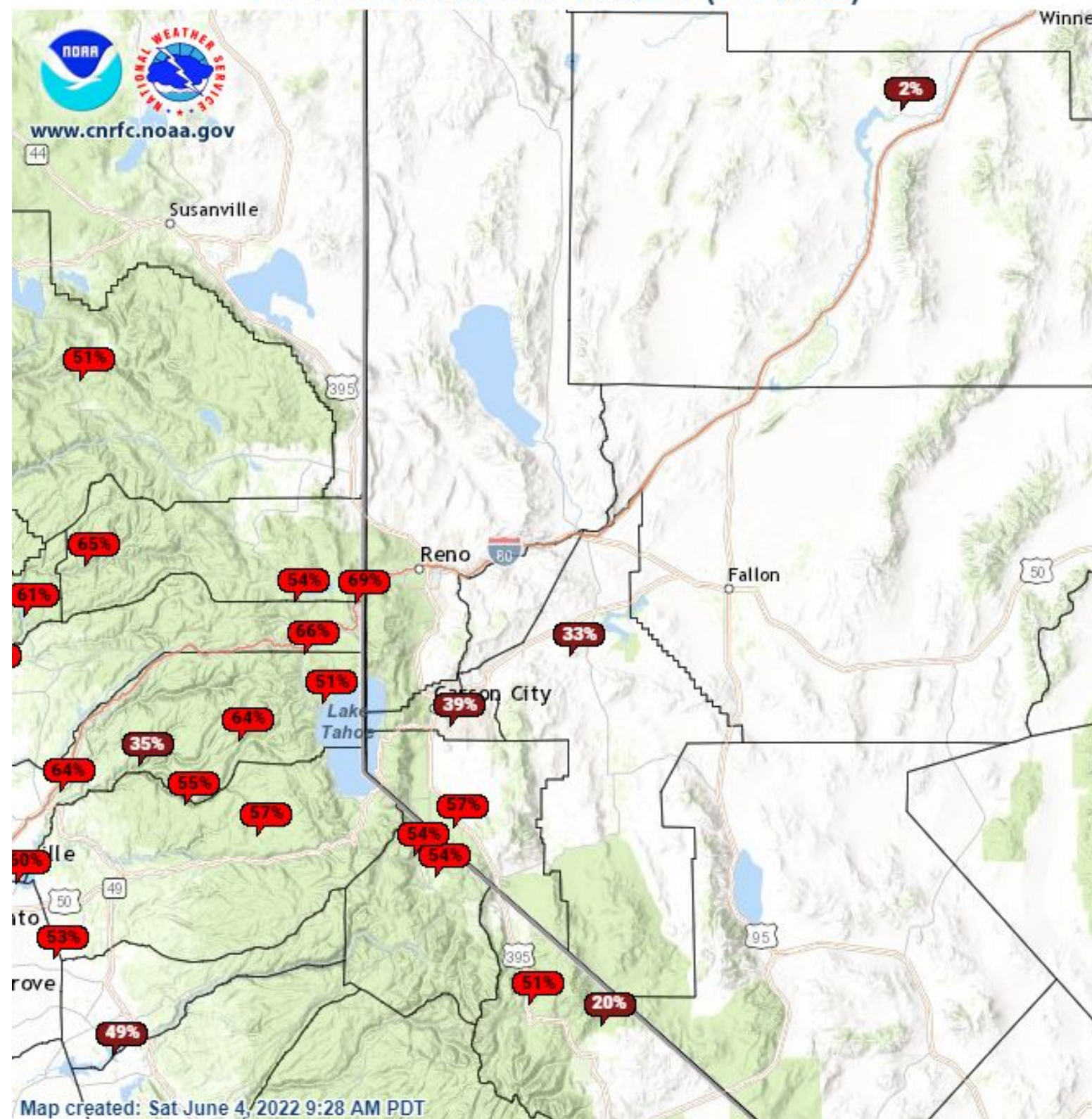


Heavily favoring for warmer than normal - Heat waves more likely. Earlier onset to fire season.

Drought persists or intensifies.

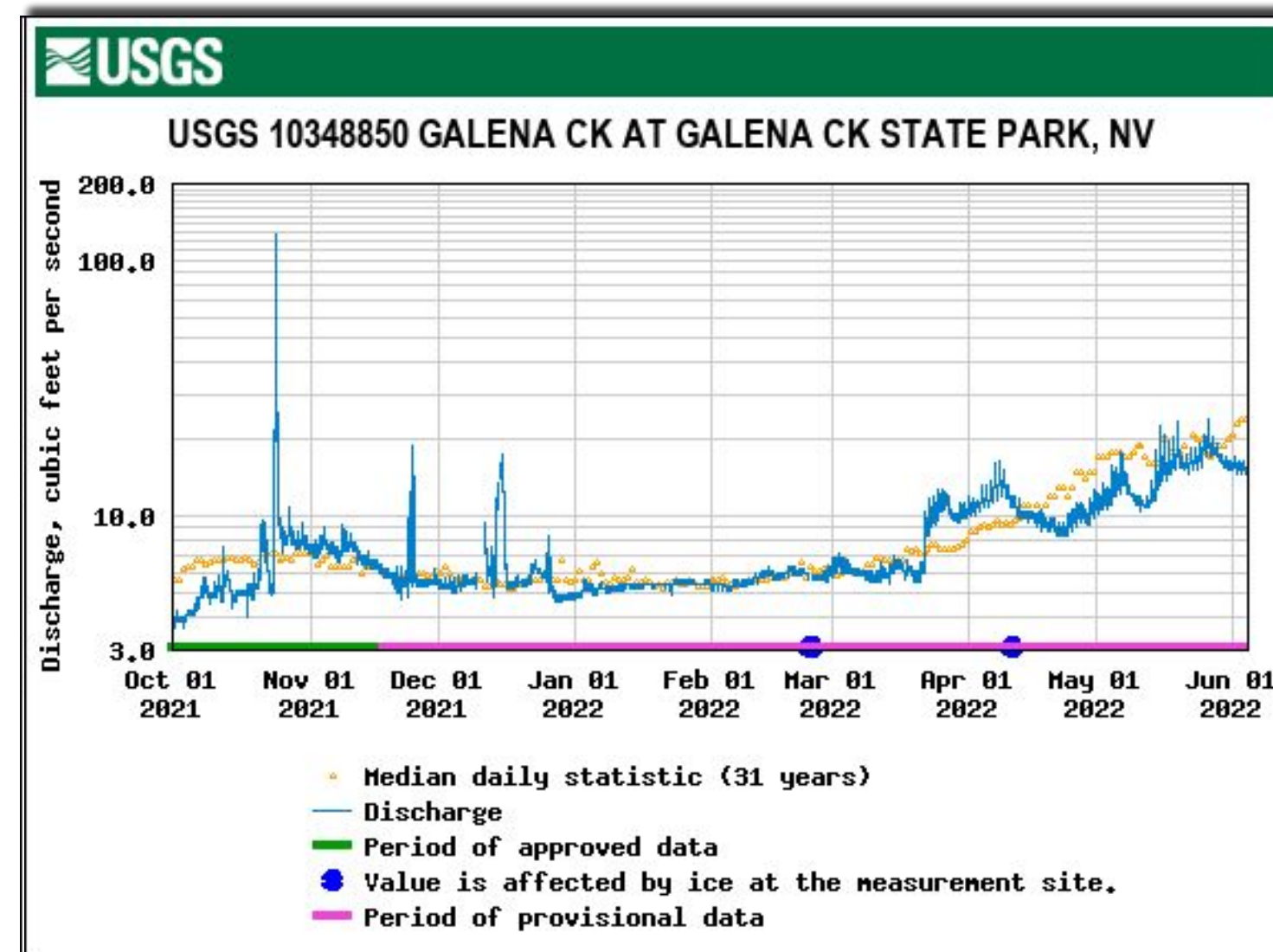
No favored outcome on precipitation - means anything from a quiet to a busy summer t-storm season.

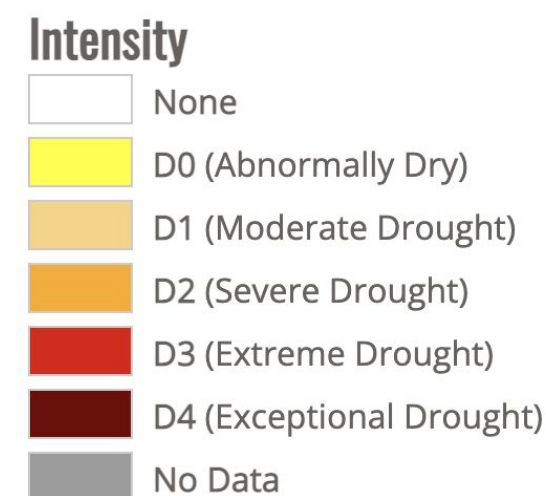
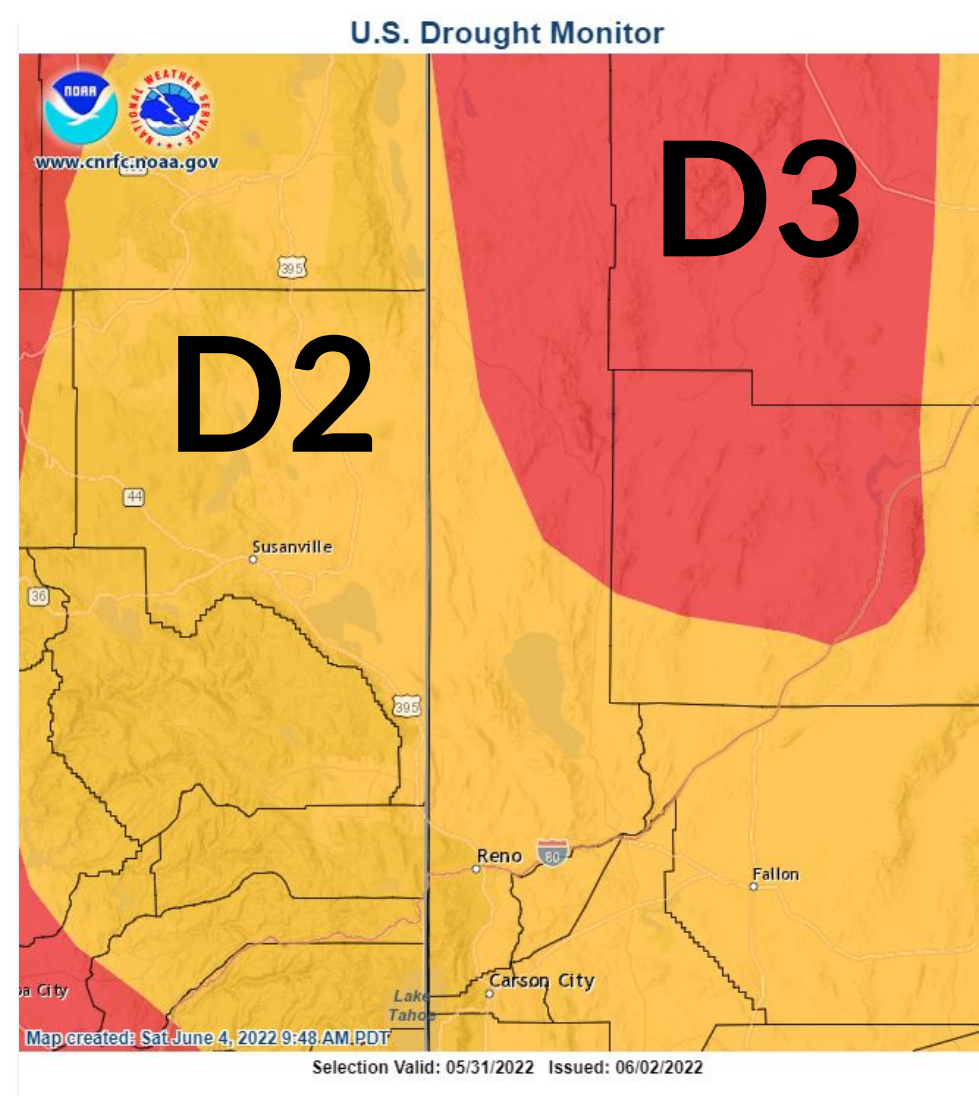
Forecast Seasonal Volume (WY2022)



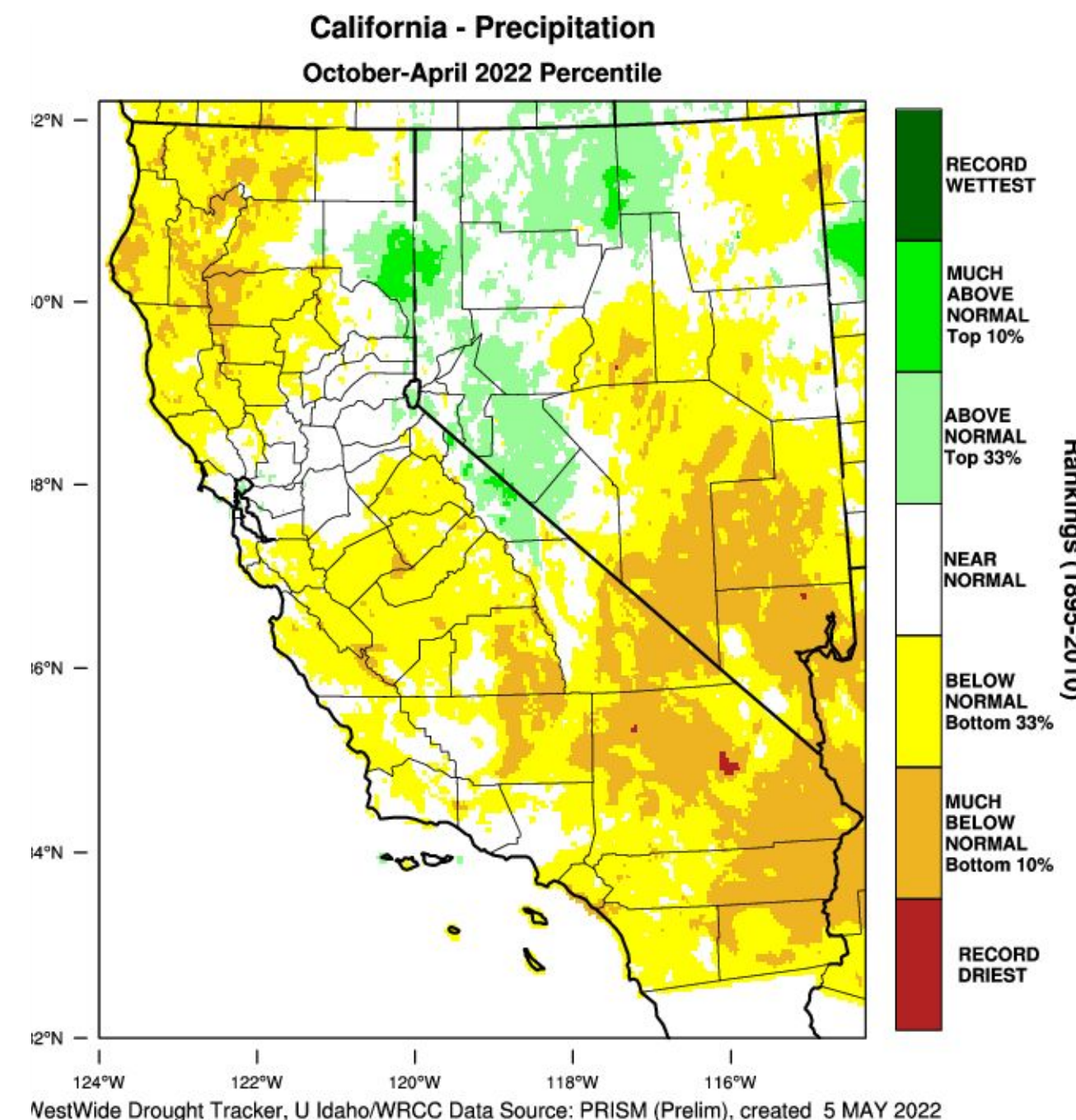
Key Takeaways

- Drought impacts to rural water resources.
- Snow melt out expected to be 2-3 weeks early.
- Heat wave late this week will accelerate that.
- Seasonal creeks & ponds will dry out sooner than normal this summer.





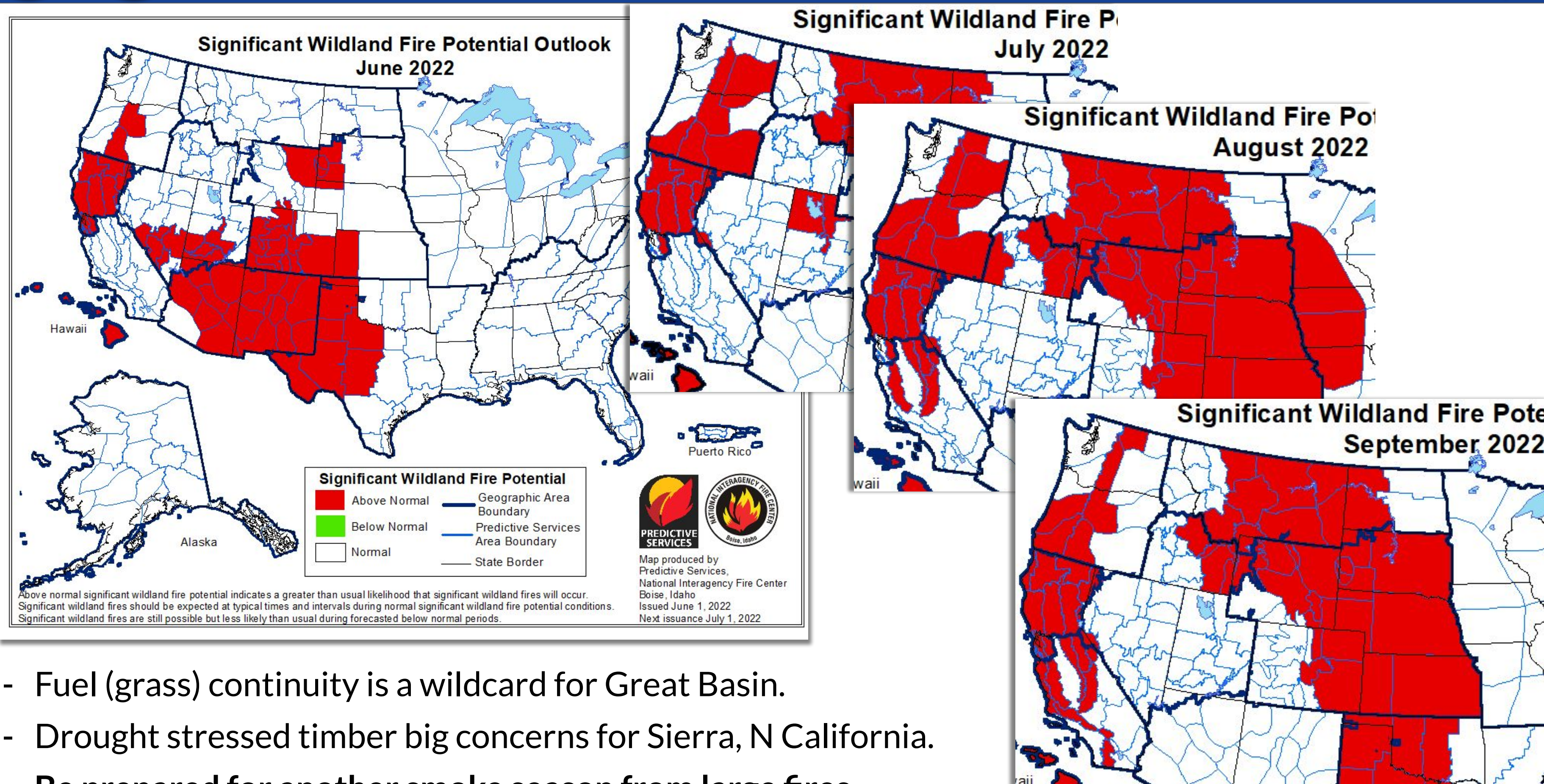
VS



- Long term drought curtails new grass growth. But big time stresses to existing vegetation including timber & juniper, which tends to favor having larger, plume dominated fires.
- Above normal precip & soil moisture tends to yield increased fine fuel grass growth. But how will super dry January through March impact that?
- Numbers of thunderstorm -or- windy & dry days are very much TBD - those are big drivers in how busy a fire season we have.

Official June 1st Predictive Services Fire Outlook

Weather Forecast Office
Reno, NV
Sunday, June 5



- Fuel (grass) continuity is a wildcard for Great Basin.
- Drought stressed timber big concerns for Sierra, N California.
- Be prepared for another smoke season from large fires.



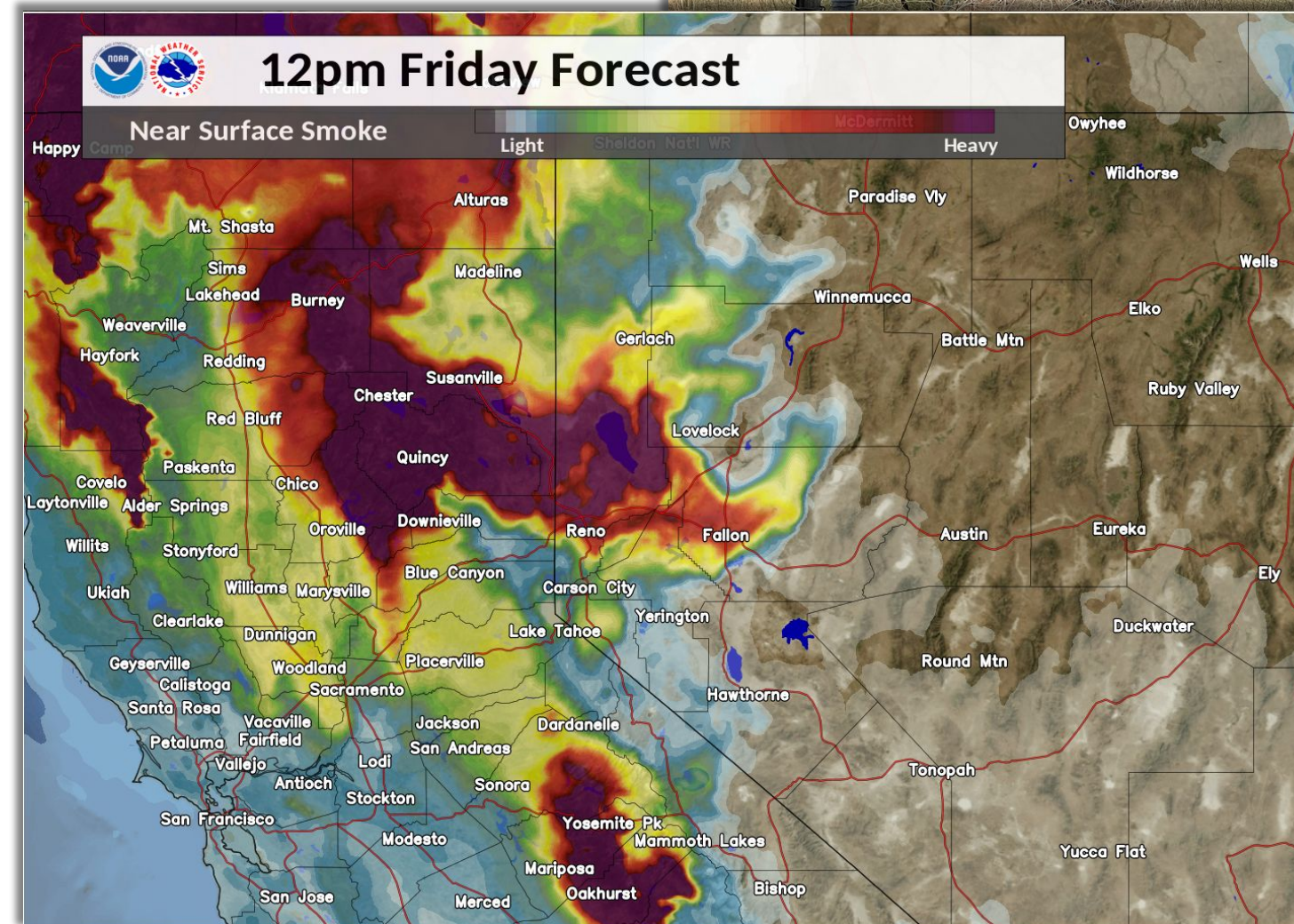
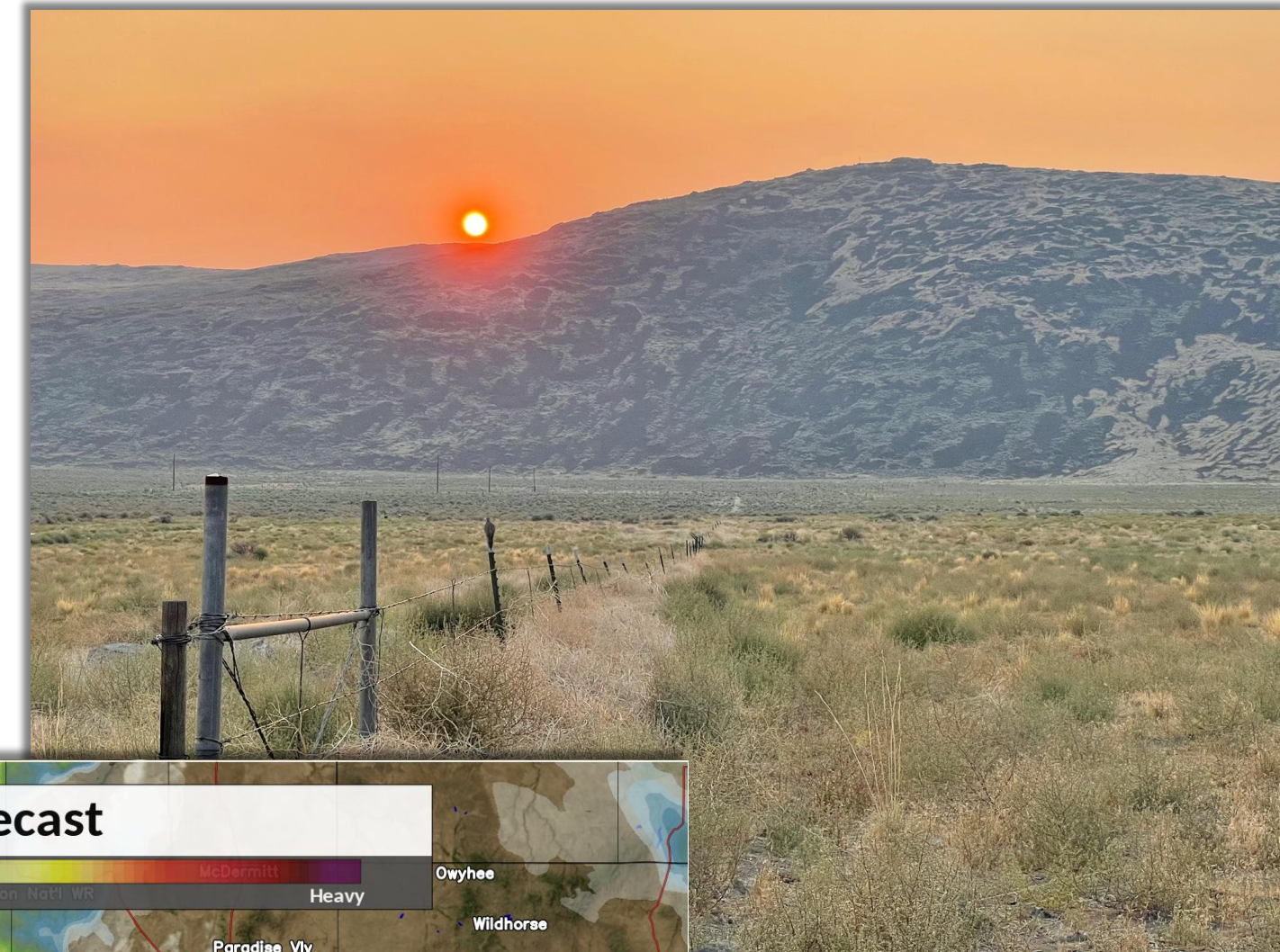
NWS Reno Support for Wildfire Smoke Days

Weather Forecast Office
Reno, NV
Sunday, June 5

Partner with Washoe Co AQMD and others to keep community informed. Brief schools, airports, fire services.

Every hour, NWS high resolution smoke models run out to 48 hours using new fire detections + meteorological variables.

Significant predictability limits of smoke, especially past 24 hours.





“All weather forecasts are wrong... but some are useful.”

Scenarios

“Most Likely” vs “Worst Case”
Being Prepared.

Confidence

Forecaster experience & what the models say.
High vs low confidence = different decisions.



Probabilities

What weather is important to you and how
likely is that to happen?



NWS Fire Weather Alerts You Might See

Weather Forecast Office
Reno, NV
Sunday, June 5



Fire Weather Watch

- ✓ 2-5 days in advance
- ✓ Medium confidence (~40-60% probability)
- ✓ Critical fire weather: 30+ MPH wind gusts and 15% humidity for 3+ hours -or- numerous dry t-storms



Red Flag Warning

- ✓ 1-3 days in advance
- ✓ High confidence (80%+ probability)
- ✓ Critical fire weather conditions.
- ✓ Roughly 10-20 Red Flag days each year, but varies!

Particularly Dangerous Situation (PDS) Red Flag Warning

- ✓ 1-2 days in advance
- ✓ Extremely high confidence (95%+ probability)
- ✓ Rare events of extreme wind, low humidity, and dry fuels. 50+ MPH wind gusts but can vary. Evacuation readiness vital!
- ✓ 1 per year or every other year.

