

## **Latest Update on AR Activity Over CA**

*Updated: 5 February 2024*

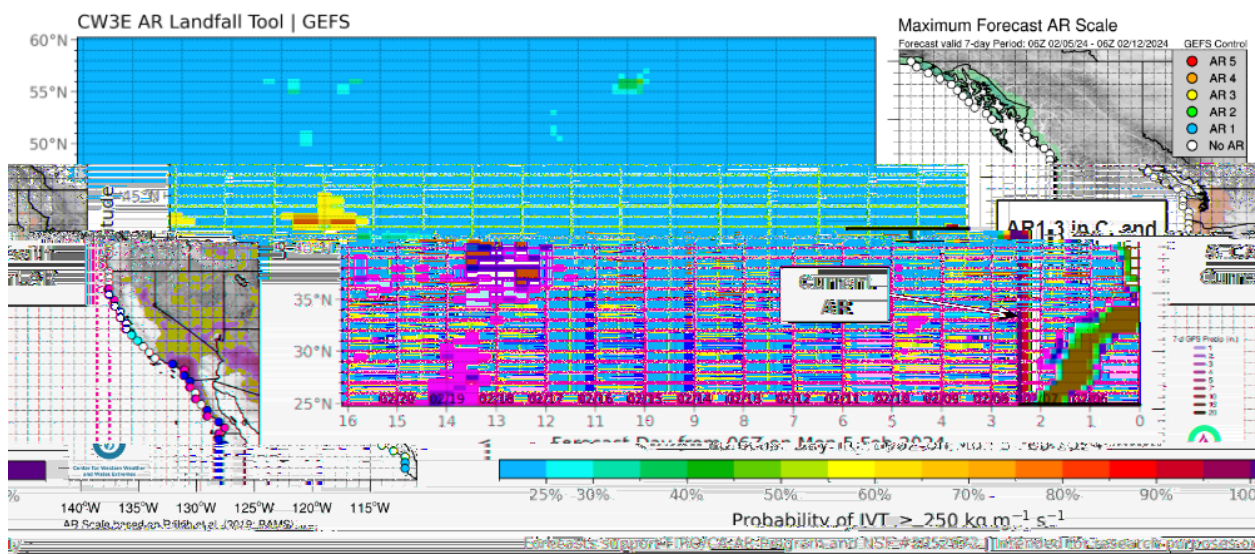
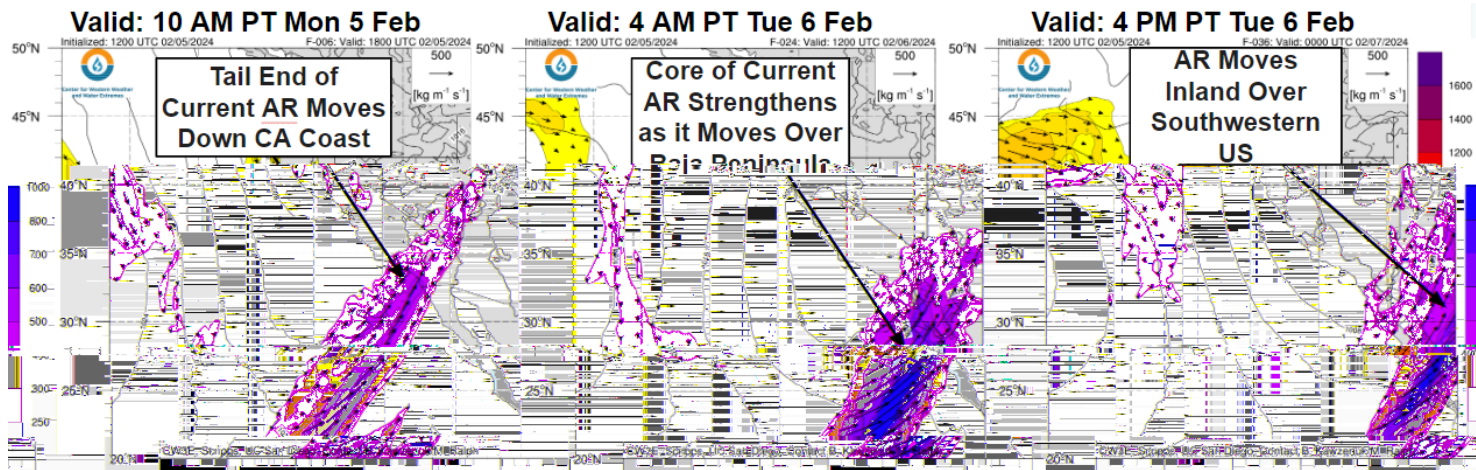
A quick look at the AR making landfall over California resulting in extreme impacts across the state.

### Forecast Highlights:

- The atmospheric river that made landfall over California yesterday will continue moving down the California coast through early Tue 6 Feb.
- CW3E's AR Scale tools for the GEFs ensemble show that this AR produced AR1-3 conditions (based on the Ralph et al. 2019 AR Scale) along the Northern and Central California coasts while the ECMWF EPS showed AR1-2 conditions down the coast.
- CNRFC observed precipitation totals show ~1.5 to 5 inches over the Sierra Nevada and ~2 to 6 inches over much of the California coast for Sat 5 Feb through early Mon 7 Feb.
- The highest observed precipitation totals were in Southern California, where 5 to 8 inches were observed across the Transverse Range and within the Los Angeles metro area, with peak totals exceeding 10 inches in western Los Angeles County.
- Upwards of two feet of snowfall has been observed across the Sierra Nevada with another foot or more forecast in the highest elevations through Tue 6 Feb.
- The Weather Prediction Center's (WPC) Winter Storm Severity Index (WSSI) is currently forecasting continued major impacts in the Sierra Nevada through Tue 6 Feb.
- The NWS WPC has issued a high risk (>70% chance) Excessive Rainfall Outlook for the LA metro area for the 24-hour period ending 4 AM PT Tue 6 Feb. There's a slightly larger region of moderate risk (>40% chance) of flash flooding along the Southern California coast encompassing the high risk for the same 24-hour period.
- There is a slight risk (>15%) issued by the NWS for the Southern California coast and western Arizona for the next 24-hour period ending 4 AM PT Wed 7 Feb with the end of the AR.
- As of Monday morning, the NWS California Nevada River Forecast Center (CNRFC) is forecasting 3 stations to rise or remain above flood stage and 14 to rise or remain above monitor stage in association with the heavy precipitation from the current AR.
- Widespread power outages have been reported across portions of Northern and Central California as a result of the high winds with this system moving onshore.

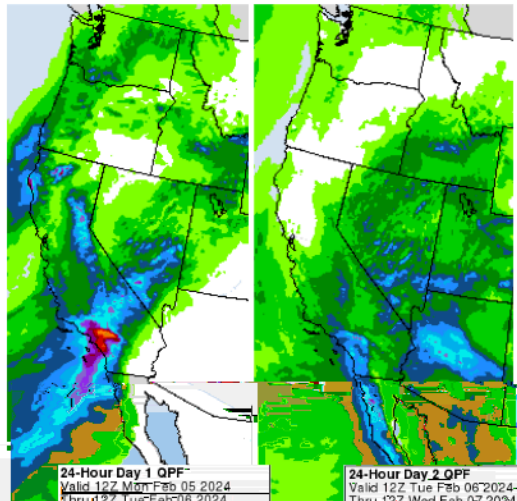
**Stay alert to official NWS forecasts, watches, and warnings at [weather.gov](https://www.weather.gov) and follow guidance from local emergency management officials**

**Stay tuned to the CW3E webpage for a full AR Update**



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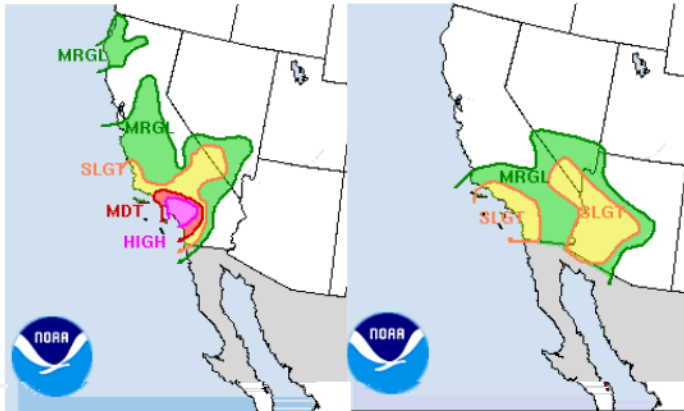
**Current AR QPF: 00Z Feb 5-7**



**24-Hour Day 1 QPF**  
Valid: 12Z Mon Feb 05 2024  
Thru: 12Z Tue Feb 06 2024  
Issued: 1016Z Mon Feb 05 2024  
Forecaster: NWS/ORAVEC  
DOC/NOAA/NWS/NCEP/WPC

**24-Hour Day 2 QPF**  
Valid: 12Z Tue Feb 06 2024  
Thru: 12Z Wed Feb 07 2024  
Issued: 1014Z Mon Feb 05 2024  
Forecaster: NWS/ORAVEC  
DOC/NOAA/NWS/NCEP/WPC

**Current AR ERO: 16Z Feb 5 - 12Z Feb 7**

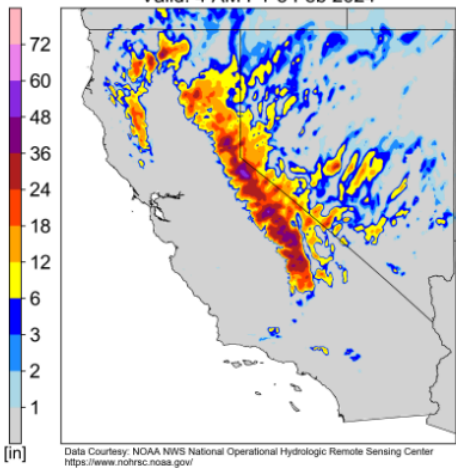


**Day 1 Excessive Rainfall Outlook**  
Valid: 16Z Mon Feb 05 2024  
Thru: 12Z Tue Feb 06 2024  
Issued: 1556Z Mon Feb 05 2024  
Forecaster: ORRISON  
DOC/NOAA/NWS/NCEP/WPC

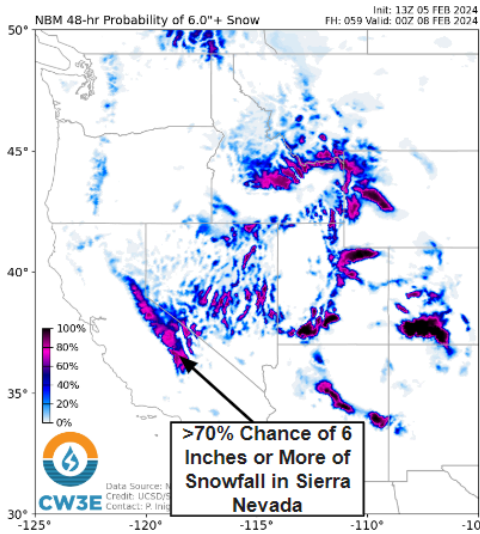
**Day 2 Excessive Rainfall Outlook**  
Valid: 12Z Tue Feb 06 2024  
Thru: 12Z Wed Feb 07 2024  
Issued: 0755Z Mon Feb 05 2024  
Forecaster: KLEEBAUER  
DOC/NOAA/NWS/NCEP/WPC

**NBM 48-Hr Probability of 6 and 12 Inches of Snowfall Accumulation: Valid Thu 8 Feb**

**NWS 48-day Snowfall Analysis**  
Valid: 4 AM PT 5 Feb 2024



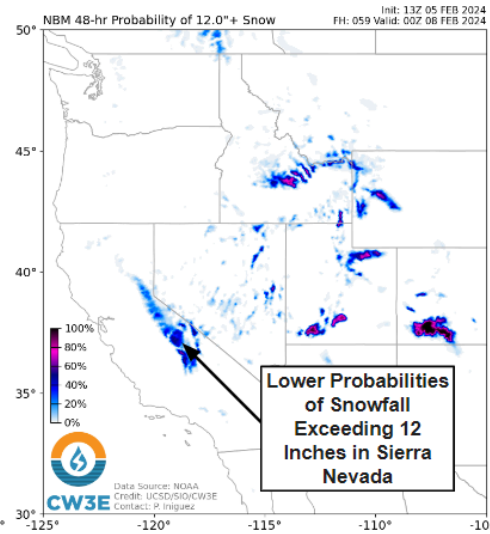
Data Courtesy: NOAA NWS National Operational Hydrologic Remote Sensing Center  
<https://www.noahrs.noaa.gov/>



**>70% Chance of 6 Inches or More of Snowfall in Sierra Nevada**



Data Source: NOAA  
Credit: UCSD/SIO/CW3E  
Contact: P. Iniguez



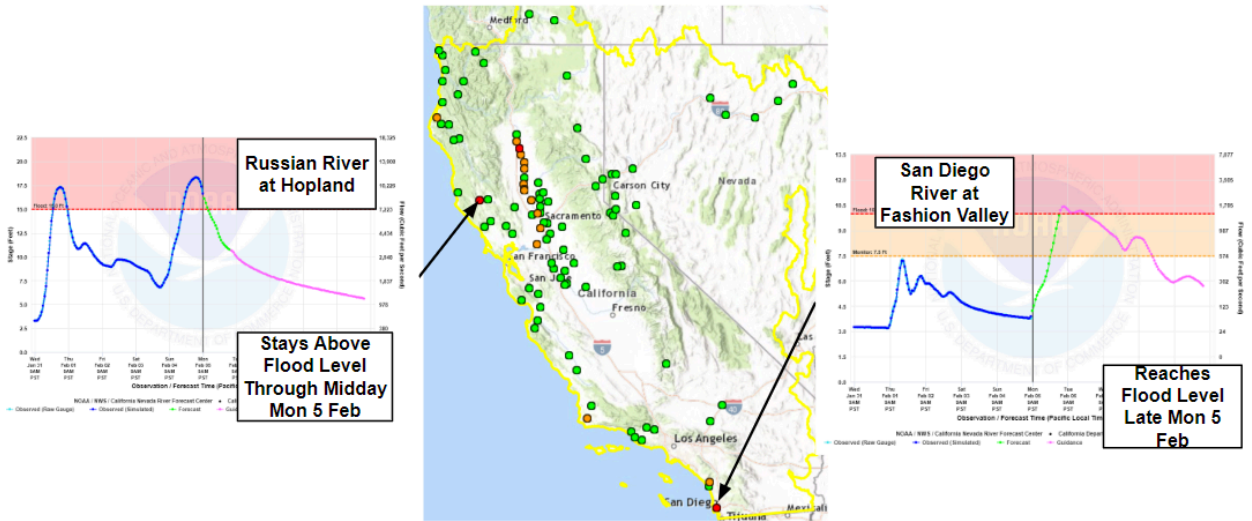
**Lower Probabilities of Snowfall Exceeding 12 Inches in Sierra Nevada**



Data Source: NOAA  
Credit: UCSD/SIO/CW3E  
Contact: P. Iniguez

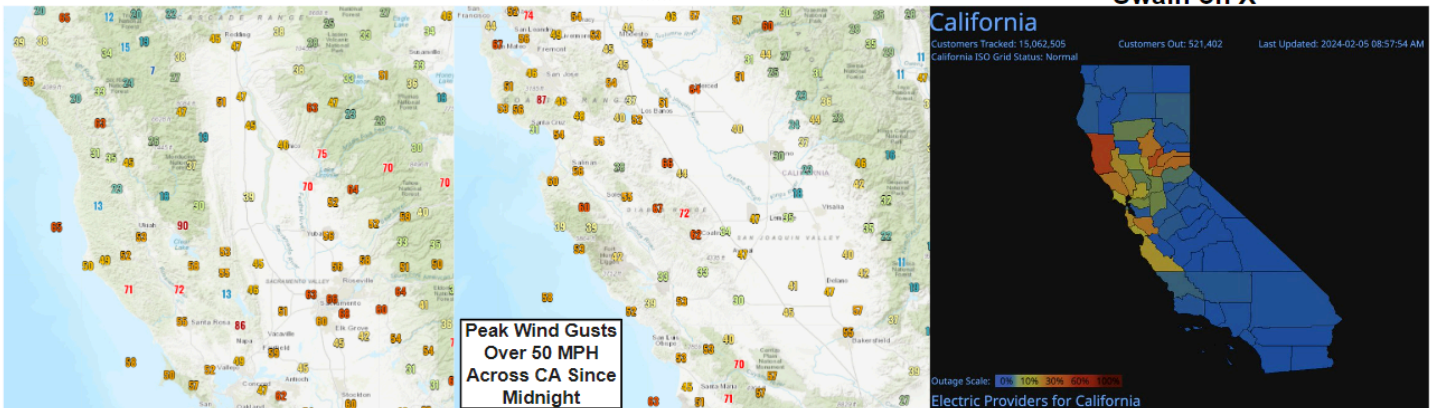
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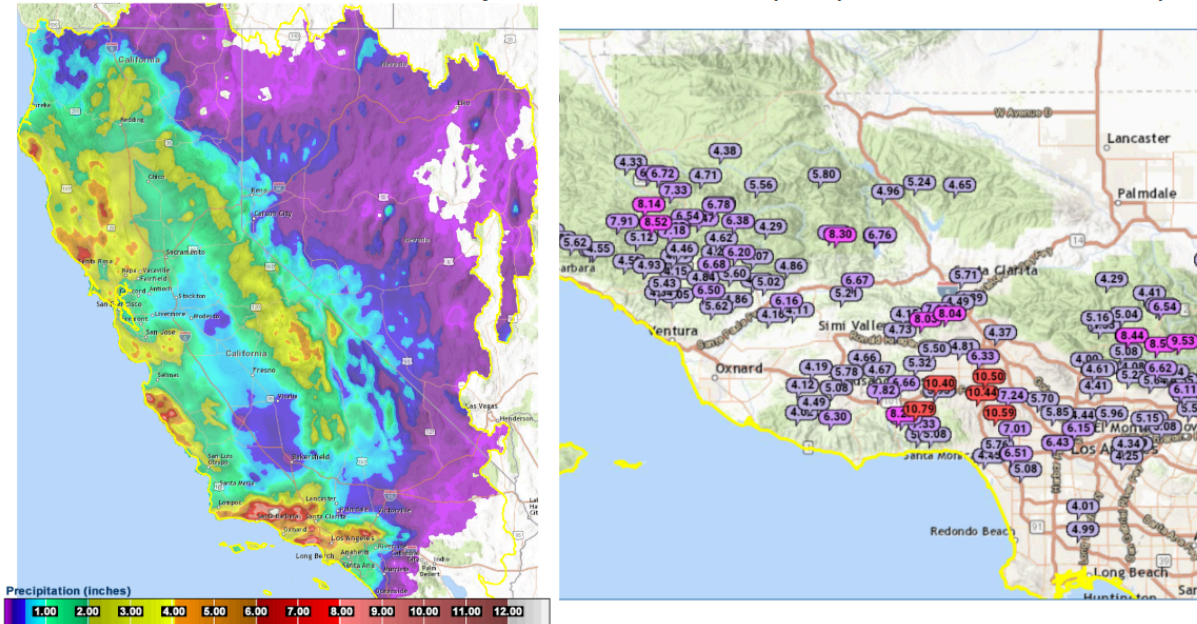
**Max Wind Gusts In Northern (Left) and Central (Center) CA For 24 Hour Period Ending 12 AM PT Mon Feb 5**

**Power Outage Tracker Courtesy: Dr. Daniel Swain on X**



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## CNRFC 48 Hour Observed Precipitation Across CA (Left) and in Southern CA (Right)



### Additional Considerations:

- Visit <https://www.cbrfc.noaa.gov/> and <https://cnrfc.noaa.gov/> for specific river and stream forecasts and <https://www.weather.gov/> for point specific watches, warnings, and forecasts.

In-depth AR forecasts products can be found here:

<http://cw3e.ucsd.edu/iwv-and-ivt-forecasts/>

Update by M. Steen

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