

How Forecasting can Inform Decision Making

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03/03/2025

Carson River Forum

Moderator: Chris Smallcomb
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Introductions

Moderator: Chris Smallcomb

Adam Wilson

Emergency Manager
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Stormwater Manager
Douglas County

Sam Booth

Community Development
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Alpine County

Weather Forecasting and Briefing





NWS Reno

@NWSReno

Flooding is possible due to heavy rainfall and runoff in northeast California, the Sierra Nevada, and western Nevada. Urban, poor drainage area, and small stream flooding are very likely, with major rises expected on mainstem rivers with minor-to-moderate flooding possible.

from
NWS Reno



Flooding Possible

Through Sunday, January 1, 2023

Northeast California, Sierra Nevada,
and Western Nevada

Moderate Risk – Take Action

Urban and poor drainage flooding
with major rises/flooding on
mainstream rivers



Northeast CA, Sierra
Nevada, & western NV



Heavy rainfall and
runoff



River flooding possible

- WF Carson River at Woodfords
- Carson River at Carson City
- Truckee River near Truckee
- Pit River in Big Valley



Rises on area
streams



Rock falls



River flooding
likely

- EF Carson River at Gardnerville
- Susan River at Susanville



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minor

moderate

major

extreme

4:32 PM · Dec 30, 2022 · 12.9K Views

2-5%

Probability of being all-snow



Current Conditions

Interstate 80 – Western Nevada

Issued: 4:00 PM - Saturday, December 31, 2022

GOLD RANCH



WEST MCCARRAN



I-80/I-580 N



ROCK BLVD



PYRAMID WAY EB



EAST MCCARRAN



SPARKS BLVD



VISTA BLVD



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Reno, Nevada



Weather Risk Outlook: When Should I Freakout?

Weather Forecast Office
Reno, NV
Saturday, December 31

	Sat ^{12/31} 🎉	Sun ^{1/1/23}	Mon ^{1/2}	Tue ^{1/3}	Wed ^{1/4}	Thu ^{1/5}	Fri ^{1/6}	W2 ^{1/7-1/13}
Wind	Gusty SW winds, south of US-50. Strong winds Sierra ridges.	Breezy/chilly N-NE winds.	Breezy SW winds.		Strong winds ridge lines, gusty winds for the lower elevations.		Lighter winds.	Active storm pattern continues, though storm impacts TBD based on temps/snow levels with each system.
Snow	Major Sierra travel delays. Snow levels below 6 kft. Snow to all valley floors by tonight. Sierra - 10% chance for thundersnow.	Snow winding down and moving out of area.	A couple of colder, fast moving systems.		Good signal for colder AR event. Significant Sierra snow and travel disruptions, snow to western NV valley floors possible.		Lingering snow showers with system moving out of region.	
Flooding	Urban & poor drainage, continued high flows and flooding near rivers & streams	High flows on western NV portions of Truckee & Carson Rivers.	Lighter precipitation and lower snow levels.		Colder system overall, but could see brief periods with snow levels up to 6000 feet. We're already saturated, so anything extra could bring impacts.		None expected.	
Unusual Temps	Seasonable, trending slightly below average to start 2023.							Near normal.
Air Stagnation	Ongoing active weather pattern with increased winds will maintain good mixing and ventilation.							Staying mixed.

What Does This Mean?
Color integrates impact potential and forecaster confidence levels.

No worries



Low

freakoutness



Moderate

freakoutness



High

freakoutness



Really bad



Discussion:

- How do Floodplain and Emergency Managers use this Information
- How do they interact together?





A wide, muddy river or floodplain under a grey sky. The water is brown and turbulent, with white foam visible in the rapids. The banks are covered in dry, brown vegetation and some debris. The sky is overcast and grey.

Significant Flood Events

- January and February 2017
- December 31st, 2022
- March 2023

Questions?

