

The attached document was submitted to the **Washoe County Board of Commissioners** during the meeting

held on 1/6/17

by Reno National Weather Service

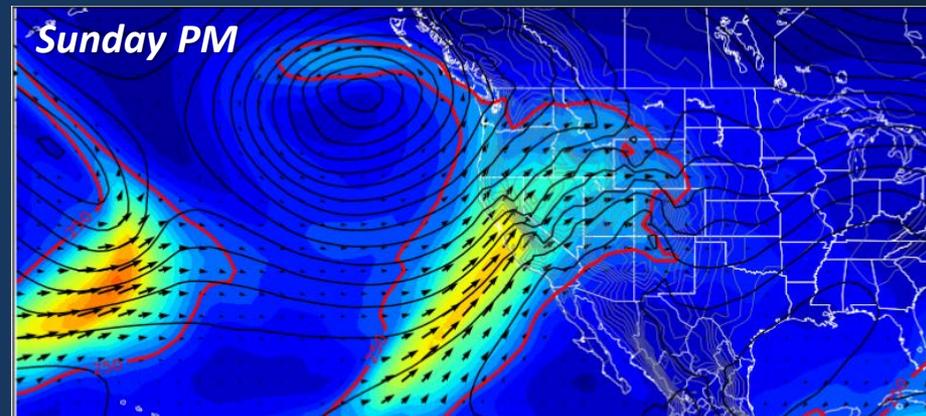
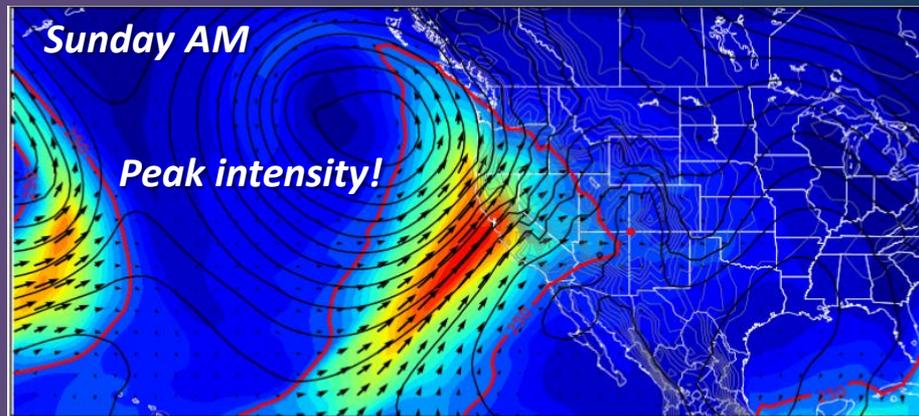
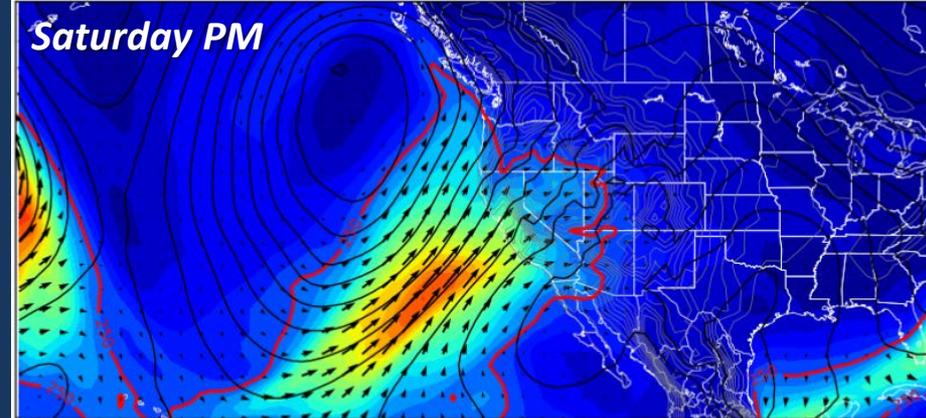
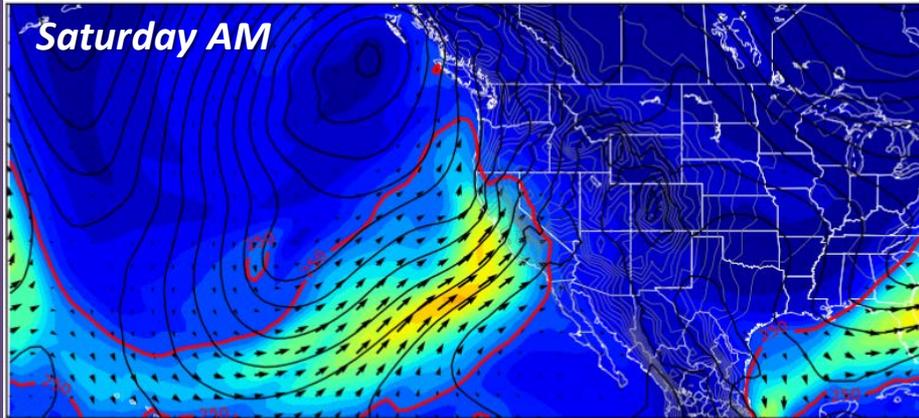
for Agenda Item No. 4

and included here pursuant to NRS 241.020(7) as

amended by AB65 of the 2013 Legislative Session.

# Atmospheric River Simulation

*One of the most impressive AR setups forecasters have seen in years*



*Integrated Vapor Transport (wind energy + moisture) from GEFS. 750+ is strong AR.*



[weather.gov/reno](http://weather.gov/reno)

**Reno National Weather Service**  
Forecasting for the Sierra and western Nevada since 1905



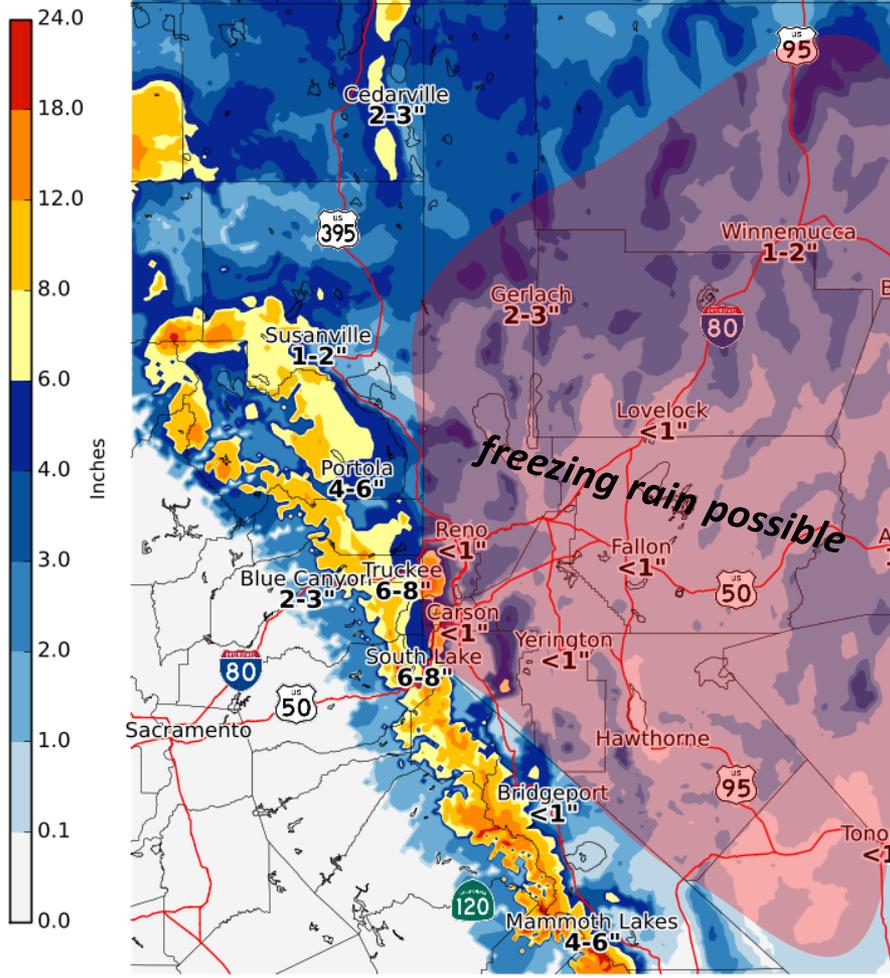
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# Initial Hit of Snow, Freezing Rain Saturday

## Most Likely Snowfall through Saturday Evening

Valid: 4 AM to 10 PM Saturday



- Timing – Onset between 4-10 AM Saturday. On/off mix of snow, freezing rain, rain Sat into Sat eve. Transition to all rain by daybreak Sun.
- Impacts – Travel disruptions likely Sat through the day around Reno, Washoe Co. Will impact flood prep efforts. Local power interruptions. *A little ice is not nice.*
- Confidence – High in seeing a wintry mix but uncertain in the ratio of snow vs freezing rain for valleys around Reno/Sparks.



weather.gov/reno

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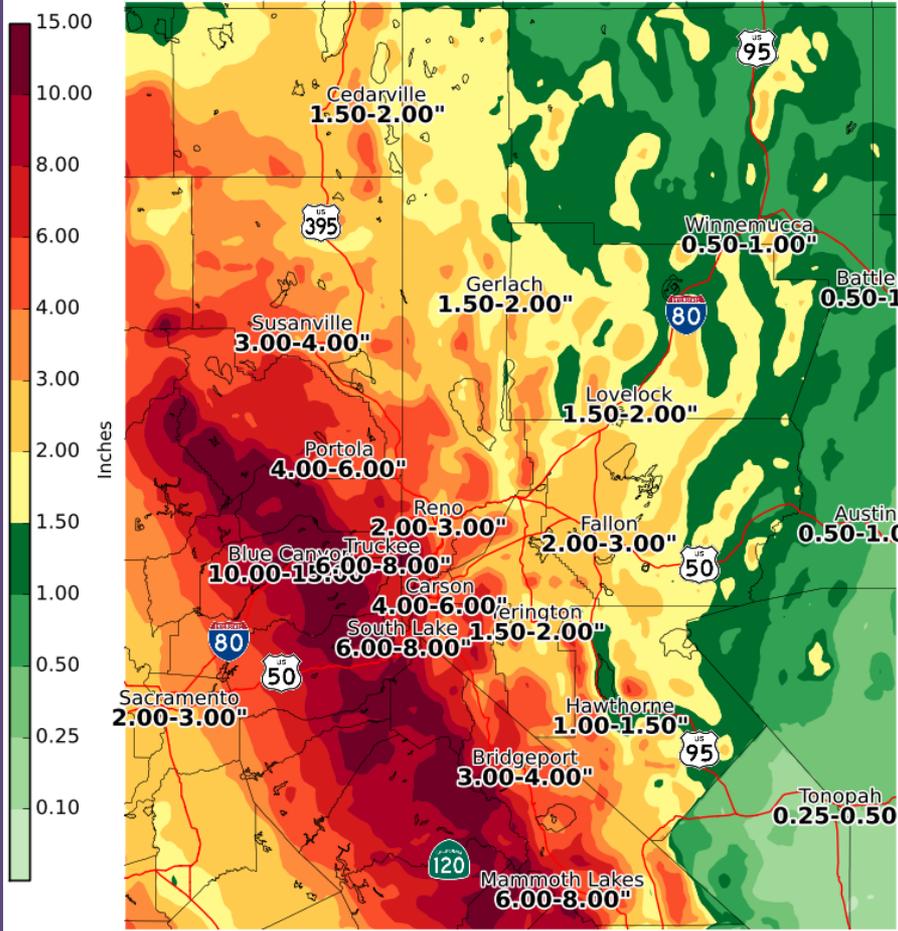


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# Prolonged, Strong Atmospheric River Sat-Mon

**Storm Total Precipitation**  
Valid: Saturday through Monday



**Timing** – **Torrential** rain starting Sat night mountains, Sun daybreak W Nev. Lasting through Sun Eve. **Highest flooding risks Sunday-Monday.** Turn back to snow or rain Monday – including Reno

**Impacts** – **High risk of flooding** on creeks, burn areas, urban poor drainage, construction areas, and rivers. Rock slides in steep terrain. **Ingredients are lining up for significant flooding – think 2005.**

**Confidence** – **High** in seeing a series of strong, wet storms next weekend with flooding. **High** confidence in seeing significant regional flooding but **Medium** on the severity of flooding – room for fluctuations still.



[weather.gov/reno](http://weather.gov/reno)

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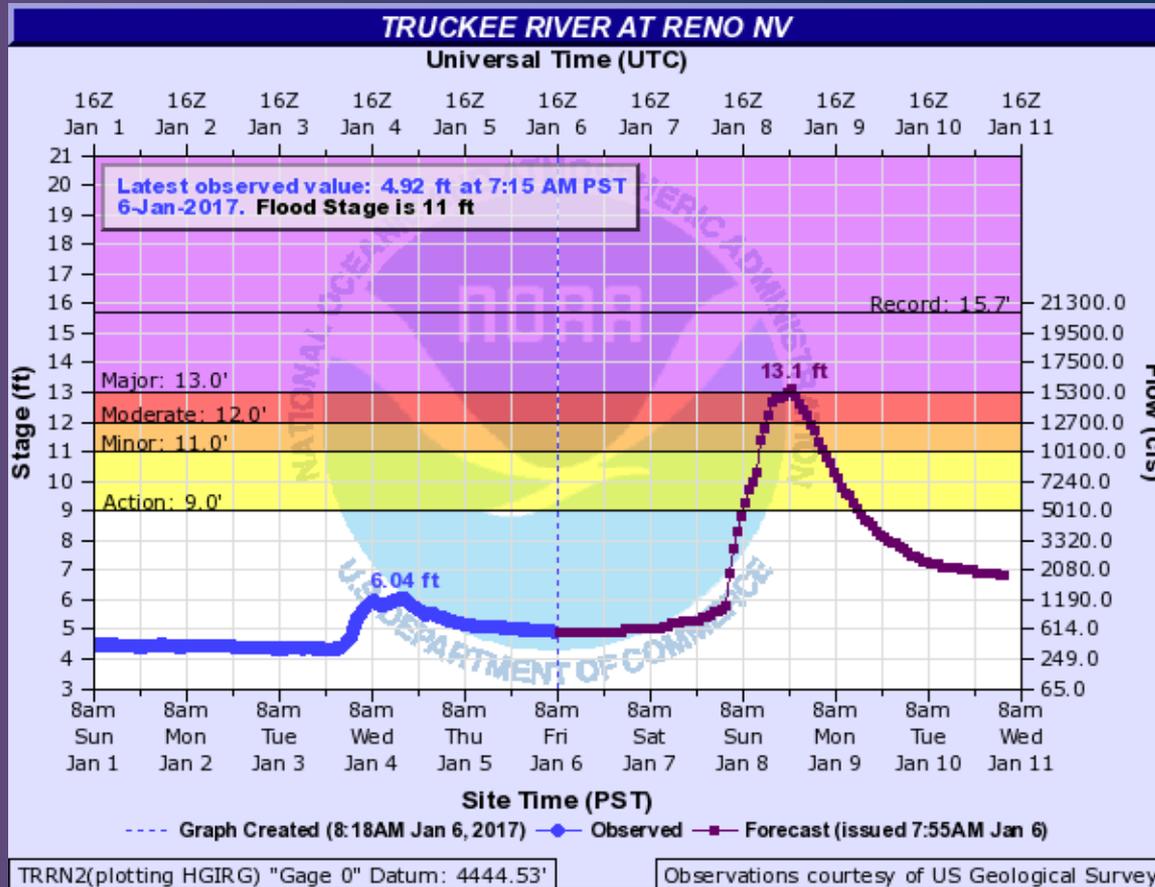


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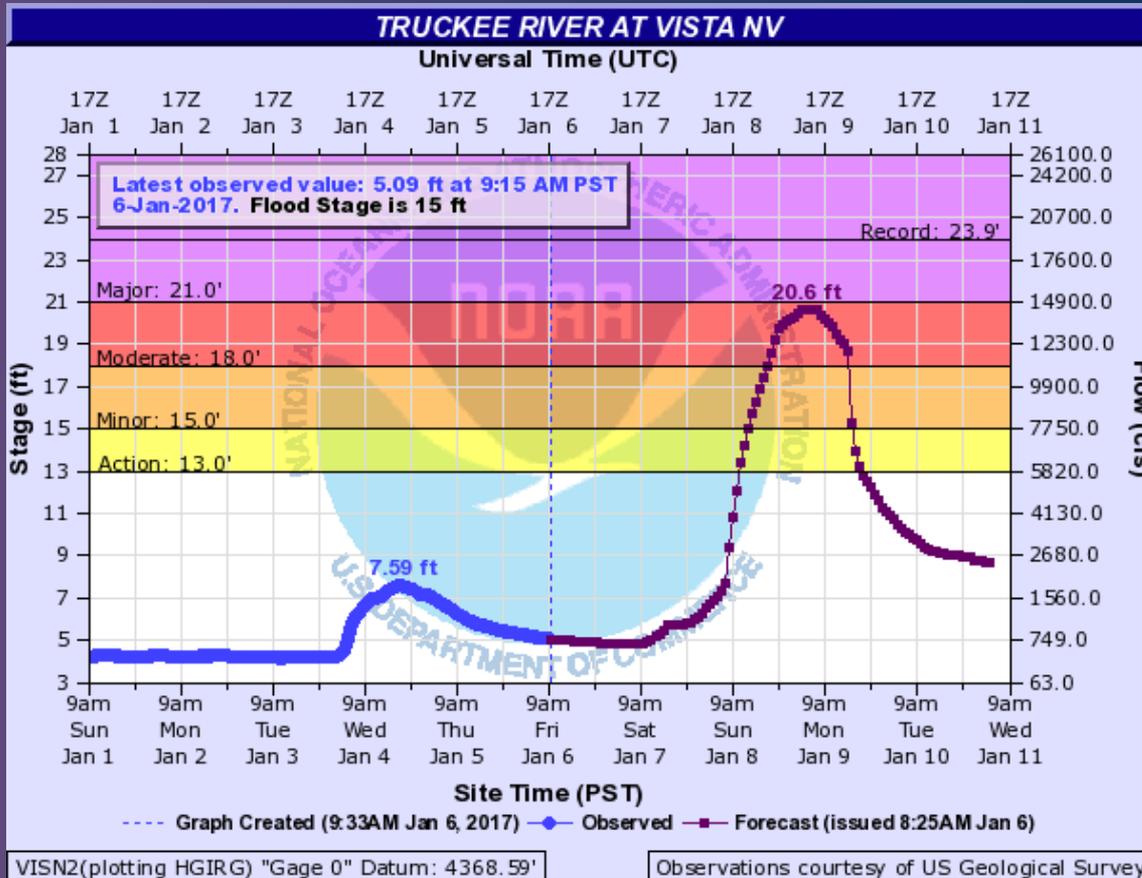
# Truckee River @ Reno



- Very rapid rise Sunday
- Above flood 1 PM Sun to 5 AM Mon. Peak 9 PM Sun.
- If river forecast errs – could go higher.
- Major flooding with serious damage from Mogul to Highway 395. Trailer parks along river serious impacts. Downtown Reno begin to have flooding...1 to 2 feet. Idlewild and Wingfield Parks flooded about 6 feet deep.
- Compare – Dec 31 2005 hit 13.5 ft



# Truckee River @ Vista



- Very rapid rise Sunday
- Above flood 1 PM Sun to 4 PM Mon. Peak 3-6 AM Mon.
- If river forecast errs – could go higher.
- Moderate to major flooding from Highway 395 to Nixon including Sparks, Lockwood, Tracy and Wadsworth. Sparks industrial area flooded up to 6 feet. **Watch airport closely!**
- Steamboat Creek will see significant flooding. Hidden Valley...by Rosewood Lakes Golf Course...begins to flood.
- Compare – Dec 31 2005 hit 20.4 ft

# Messaging

## High Confidence in Widespread Flooding this Weekend

This is a once a decade event  
Flooding may be similar to 2005

This is not a *"I'll believe it when I see it"* forecast  
The time to prepare is now!



Photo: Truckee River  
Downtown Reno 2005

Flood Impacts will  
begin Sunday  
1/8/2017



## What Can You Do? Flood Preparation

### Prepare NOW!

- ✓ Clear drains and gutters of debris and snow.
- ✓ Have an emergency kit.
- ✓ Be aware of stream, drainage channels, canyons, and other areas known to FLOOD suddenly.
- ✓ Check [www.nevadafloods.org](http://www.nevadafloods.org) for more information.
- ✓ Follow the instructions of local law enforcement and emergency personnel.
- ✓ Follow [#NVFlood17](#) and [#RenoFlood](#)

**Reno National Weather Service**

Forecasting for the Sierra and western Nevada since 1905

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# Words of Advice

-  **Now is the time** to be working on preparations for flooding – along rivers and near flood prone areas in the Sierra and W Nevada. **Construction areas** can have enhanced risk of flooding problems.
-  Use **2005 flood** for planning – a “close enough” planning comparison tool. Some sites may exceed 2005 levels but uncertain by how much.
-  Make good use of the **today’s break!** Saturday weather will **not be as favorable** for flood preparations! Clear that snow away from drains, creeks. Clean gutters. Plan weekend staffing. Do your supply runs. Notify homeless and others without communications about flood.
-  Keep **flood response measures** in place due to potential for 1-2 more atmospheric river storms next week. Not a guarantee of renewed flooding but there’s a chance. Keep a close eye on the forecast!



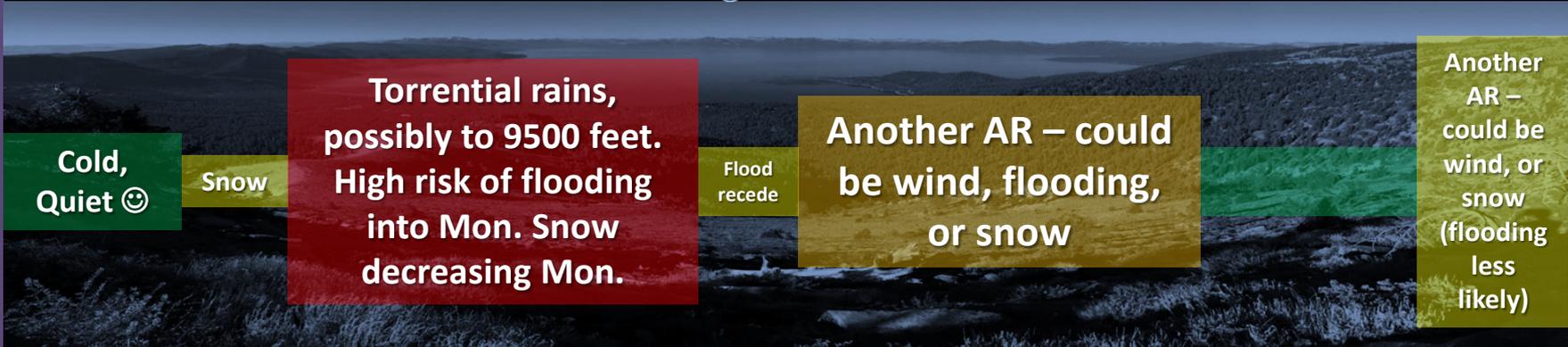


# Hazards Timeline

*For your situational awareness*

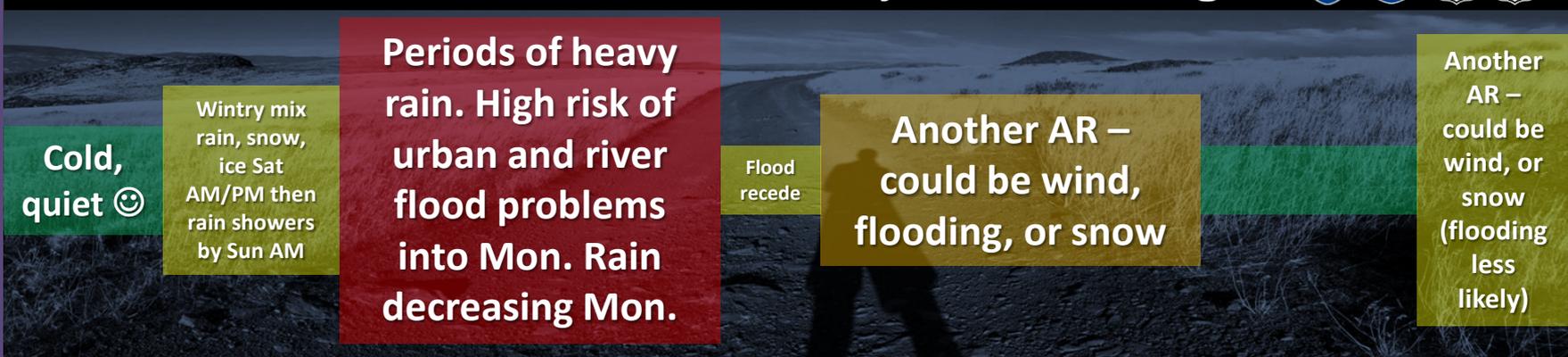


## Tahoe, Northern Sierra , NE California, Mammoth



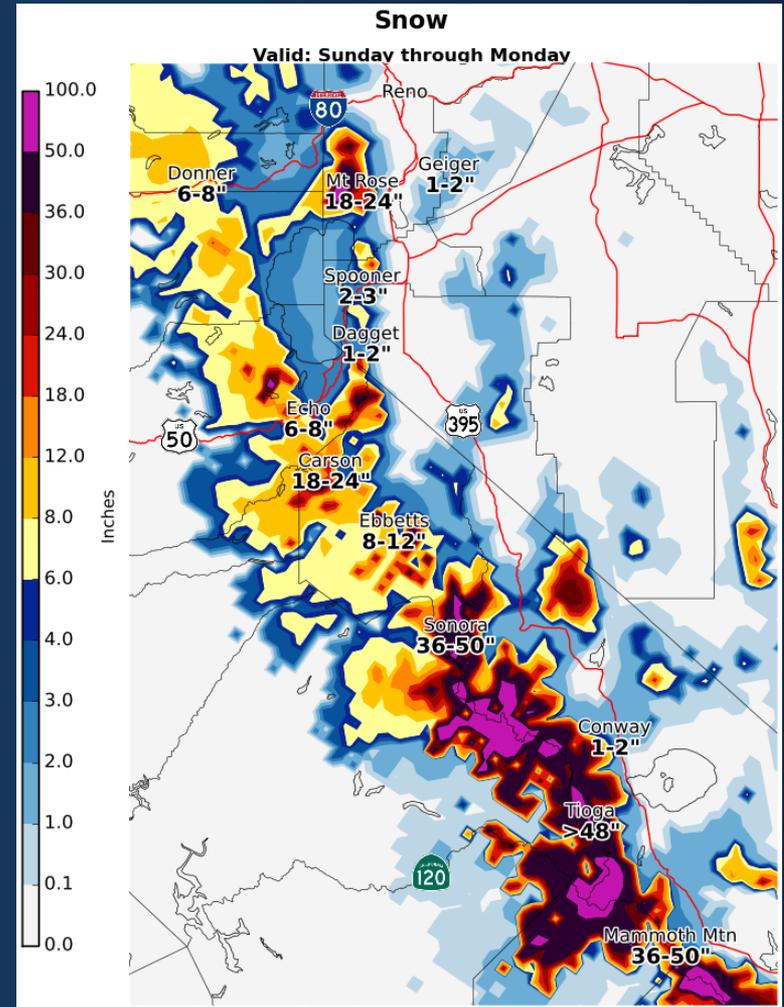
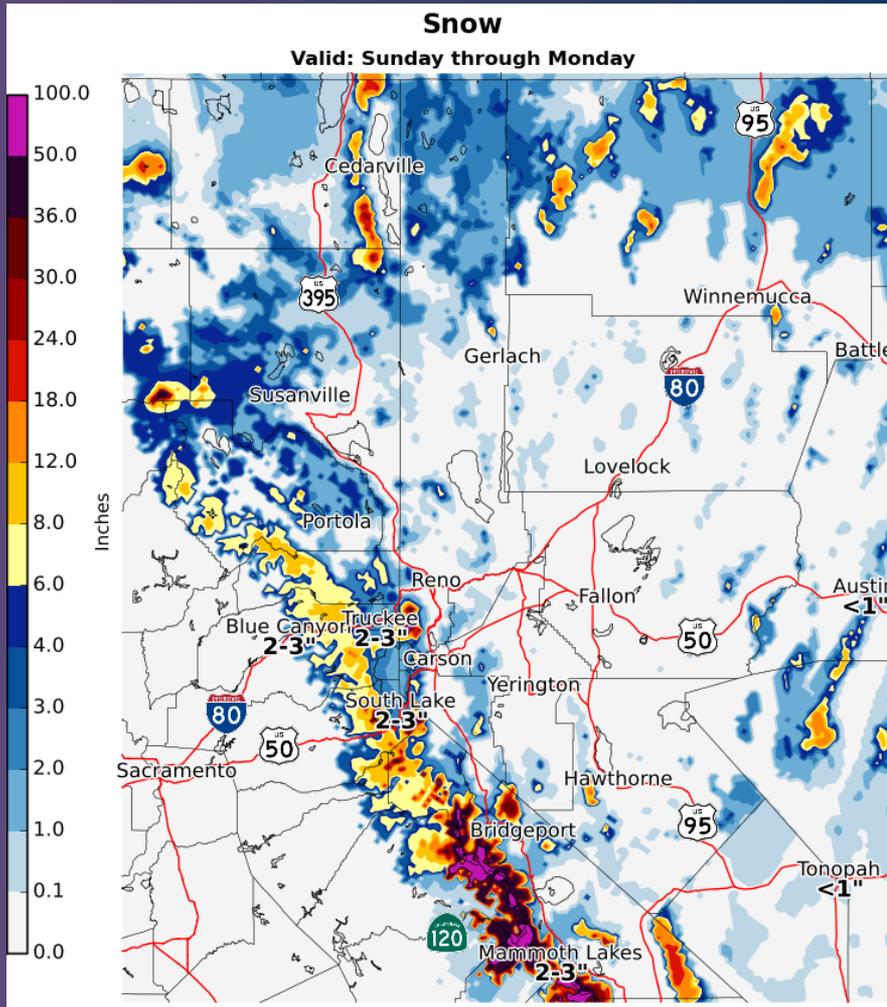
1200 Fri      1200 Sat      1200 Sun      1200 Mon      1200 Tues      1200 Wed      1200 Thurs      1200 next Fri

## W Nevada: Reno, Carson City, Fallon, Yerington



1200 Fri      1200 Sat      1200 Sun      1200 Mon      1200 Tues      1200 Wed      1200 Thurs      1200 next Fri

# Sun-Mon Snowfall Projections



[weather.gov/reno](http://weather.gov/reno)

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# Top Messages

January 6, 2017

-  **Changes Since Yesterday** – Confidence in significant regional flood continues to increase. Forecast peaks trending **higher, longer duration** later into Mon.
-  **Break Today** – Use it wisely for snow cleanup, preparations for weekend flooding. **Conditions Saturday will deteriorate** with snow, freezing rain hindering prep work.
-  **High Risk of Flooding Sun-Mon** – **Major atmospheric river impact** Sat-Mon. Initial wintry mix **Saturday with snow, rain, or freezing rain** in Sierra and W Nevada. **May linger into Sat eve**. Warming rapidly with torrential rains Sat night into Sunday and early Mon. **Widespread flooding including rivers certain. One of the most favorable flood scenarios we've seen in years. Think 2005 for planning.** Monday – turn back to mountain snow, valley rain or snow showers then diminishing.
-  **Another AR Tues/Wed, Maybe Fri** – Simulations favoring another AR **Tues-Wed**. Traditional winter storm, with mountain snow, valley rain or snow, and lots of wind. But within **margin of forecast error** we could see a warmer storm with flood risk.





# Truckee River @ Reno



Source: Truckee River Flood Project. Based on slightly lower peak river levels.





# Truckee River @ Reno



Source: Truckee River Flood Project. Based on slightly lower peak river levels.

