# **Working with Decision Makers in Reno-Tahoe: Stories from the Relentless** Winter of 2016-17

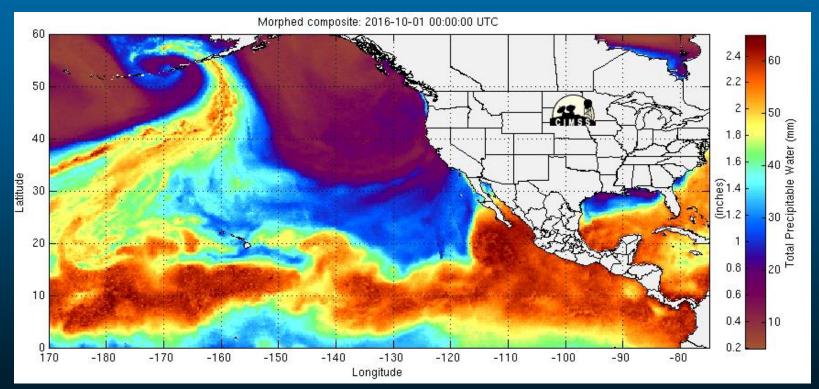
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Peavine Summit, Elev 8255' January 1 2018



## If I Hear "Atmospheric River" One More \*\*\*\*\* Time...



### What Keeps Me Awake?

How much of a brat will my 2 year old be today?

Will I make it to work before the snow squall hit Am I out of Trader Joe's bourbon?





### What Keeps Me Awake? (Professionally)

# Complacency



# Selfishness



### **It Starts With Seasonal Outlooks...**





### **October 2016** Fire AND Floods Within 12 Hours.

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

Spark



### January & February 2017 Back to Back River Floods. In a Desert.



Nevada Guard

🛃 Follow

Aerial photos of the Lemmon Valley flood scene taken today from a Nevada Army National Guard Blackhawk.



#### 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



Reno National Weather Service



### April, May, & June 2017 All That Snow is Coming Down. Somehow.



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#### Situational Awareness - When Should I Freakout?

Chris' 7-Day Regional Freakout Forecast for the Sierra and western Nevada

|  | Today 5/21   | Monday 5/22   | Tuesday 5/23  | Wed. 5/24   | Thursday 5/25               | Friday 5/26   | Saturday 5/27             |                               |    |
|--|--|---|---|---|-----------------------------|---|---------------------------|-------------------------------|----|
| Wind   | gene   | rally light winds under 10                          | ) mph   | breezy W-SW winds, typical impacts  |                             | generally light winds under 10 mph  |                           |                               |    |
| Snow   | no snow  |   |   |   |                             |   |                           | :h 14th available St          | or |
| River & Snowmelt<br>Flooding   | snowmelt flows gradually increasing as<br>temps warm; mainly minor flooding impacts<br>overall |   | much warmer<br>temps, rapid<br>increase in flows<br>especially Walker   | for most areas - widespread minor to maybe moderate flooding<br>issues as temperatures continue to warm; <b>main-stem Walker likely</b><br>to see major flooding! |                             | likely still major on<br>main Walker but<br>less confidence on<br>impacts |                           |                               |    |
| Flash Flooding (fast paced<br>flooding of streams, poor drainage and<br>steep terrain areas, rock slides, burn scar<br>runoff) | no heavy rainfall signals, thankfully  |   |   |   |                             |   |                           | ian Apr-Jul Runoff F          | or |
| Thunderstorms  | isolated cells over  | als have faded; very<br>the mountain areas<br>sible | a few thunderstorms, mainly mountains but can't rule out valleys; no<br>severe storms but could see localized heavy rain, gusty winds,<br>lightning, hail |   |                             |   |                           |                               |    |
| Unusual Cold or Heat   | no widespread freezes expected   |   |   |   |                             |   |                           |                               |    |
| Fire Weather   |  |   | carryover grasses could dry enough from heat to burn with gusty<br>winds  |   |                             |   |                           |                               |    |
| What Does This Mean? No v  | worries 😬  | Low<br>freakoutness                                 |   | rate<br>outness   | High<br>freakoutness        | End of ti<br>really ba  | his (aka<br>ad)           | e Truckee Pross               | er |
|  |  |   |   | Forecas   | R<br>ting for the Sierra an | eno National Weati<br>id western Nevada                                   | her Service<br>since 1905 | $\overline{\mathbf{S}}$       |    |
|  |  | Heavilla Jameter 1975                               | Sector 1 -  |   |                             |   |                           | Reno National Weather Service |    |

Forecasting for the Sierra and western Nevada since 1905

### What Did We Learn?

# **Atmospheric River = red alert**

## Scenario forecasts help prepare

# Wind - onion of the AR sandwich

# Lead time. Lead time. Lead time.





