

Remember When Lake Tahoe Was This Low?

April 20 2016



No. I am not going to do an "after" picture.

Short Attention Span Briefing Upfront

- **More Prolonged Warmup:** Latest simulations extending warmup through all of next week. 10-15 degrees above normal Sunday-Friday next week (e.g. 75-82 at Reno). Lows above freezing lower elevations and even some mountain valleys.
- **Impacts:** This is not a classic “heatwave” trigger for major flooding but will ramp up snowmelt flows noticeably in streams and rivers across the region. **Simulations higher than yesterday.** Monitor stages a safe bet with increased inflows to reservoirs, terminal lakes. This could be the start of long-duration high flows from snowmelt. **West Carson could hit flood stages late next week, dramatically increased flows into Lahontan possible, Truckee and Walker Rivers flowing strong. Mild weekend - prepare for more river incidents, rescues.**
- **No Heavy Rain Signals:** Light precipitation possible next weekend with slight cool-down. Potential cut-off low over the SW US next weekend but very low predictability, and at this point very low risk of heavy rain impacts for our region.

Situational Awareness - When Should I Freakout?

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

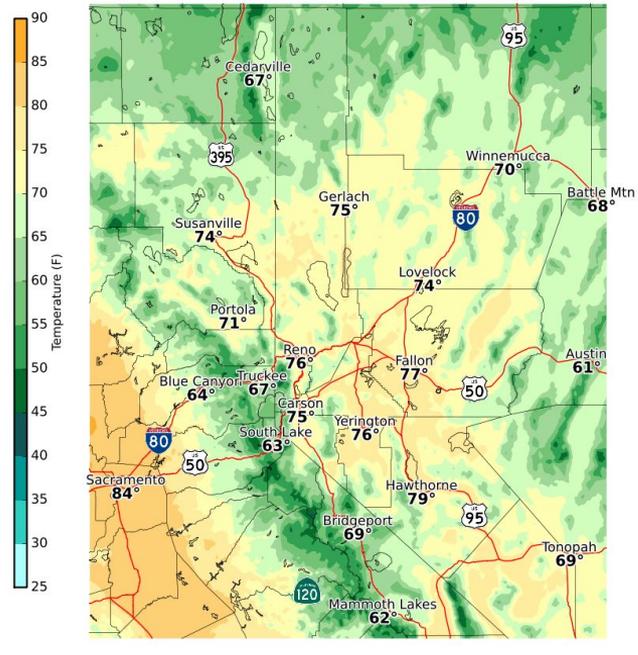
	Today	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday
Wind	breezy NW winds	localized breezy N winds					
Snow	when was the last time this was all green??						
River & Snowmelt Flooding	high flows due to controlled releases until further notice; limited snowmelt contributions due to cool temps			increased snowmelt flows most river basins; likely monitor stages most of next week (yellow), could near flood stage if temps warmer than expected (orange)			
Flash Flooding (fast paced flooding of streams, poor drainage and steep terrain areas, rock slides, burn scar runoff)	no heavy rainfall signals						
Thunderstorms	not enough instability for thunderstorms						
Unusual Cold or Heat	cool through Friday, then warming - but nothing too unusual for spring						
Fire Weather	conditions unfavorable for rapid fire spread						
What Does This Mean? Integrates impacts and confidence	No worries	Low level of freakoutness	Moderate freakoutness	High freakoutness	End of this		



Forecast Temperatures Sunday-Monday

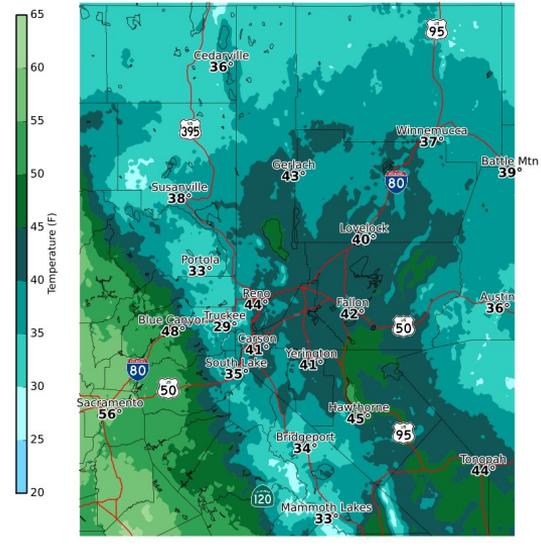
Afternoon Highs

Valid: Sunday April 30, 2017



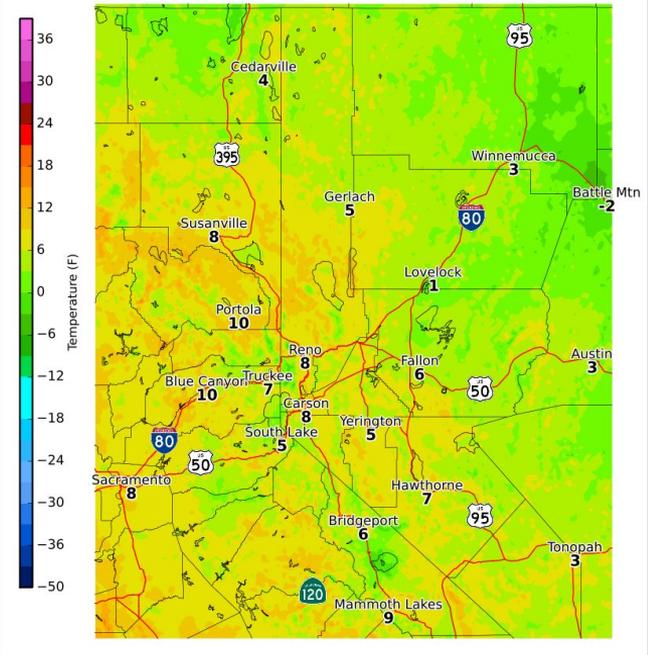
Morning Lows

Valid: Monday May 01, 2017



How Far Above Normal

Valid: Sunday Highs



Similar temperatures, or slightly warmer, all of next week



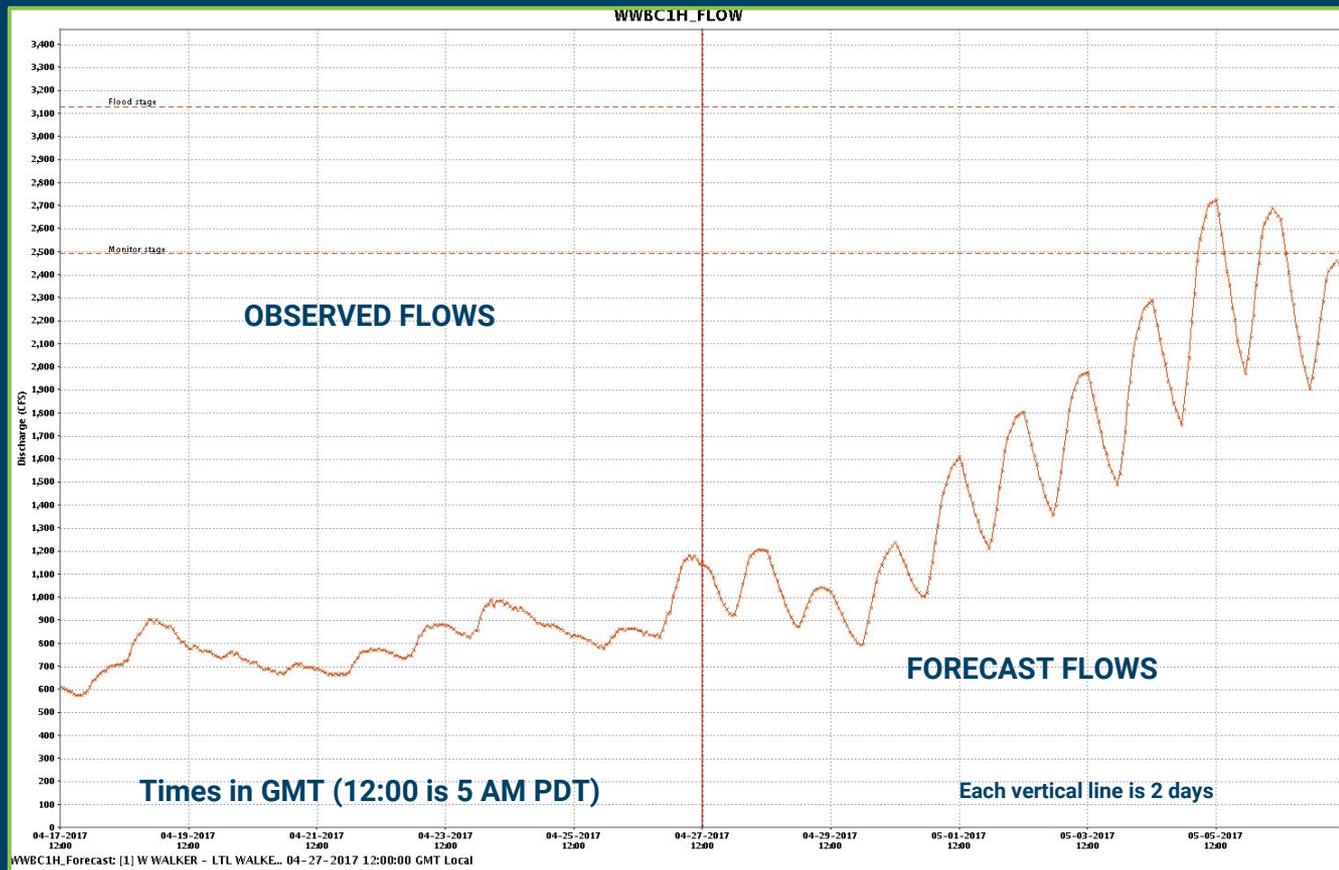
10 Day Simulation - West Walker River

5-day official forecasts - [CNRFC](#) or [NWS Reno](#)

Near Sonora Jct, CA

- **Update** - now reaching monitor stages late next week.
- Appreciable increase in flows starting Monday, lasting all of next week.
- Minor flooding issues downstream in Antelope Valley area start around 3100 cfs.

10-day simulations are experimental and provide rough long-range guidance for our public safety partners.



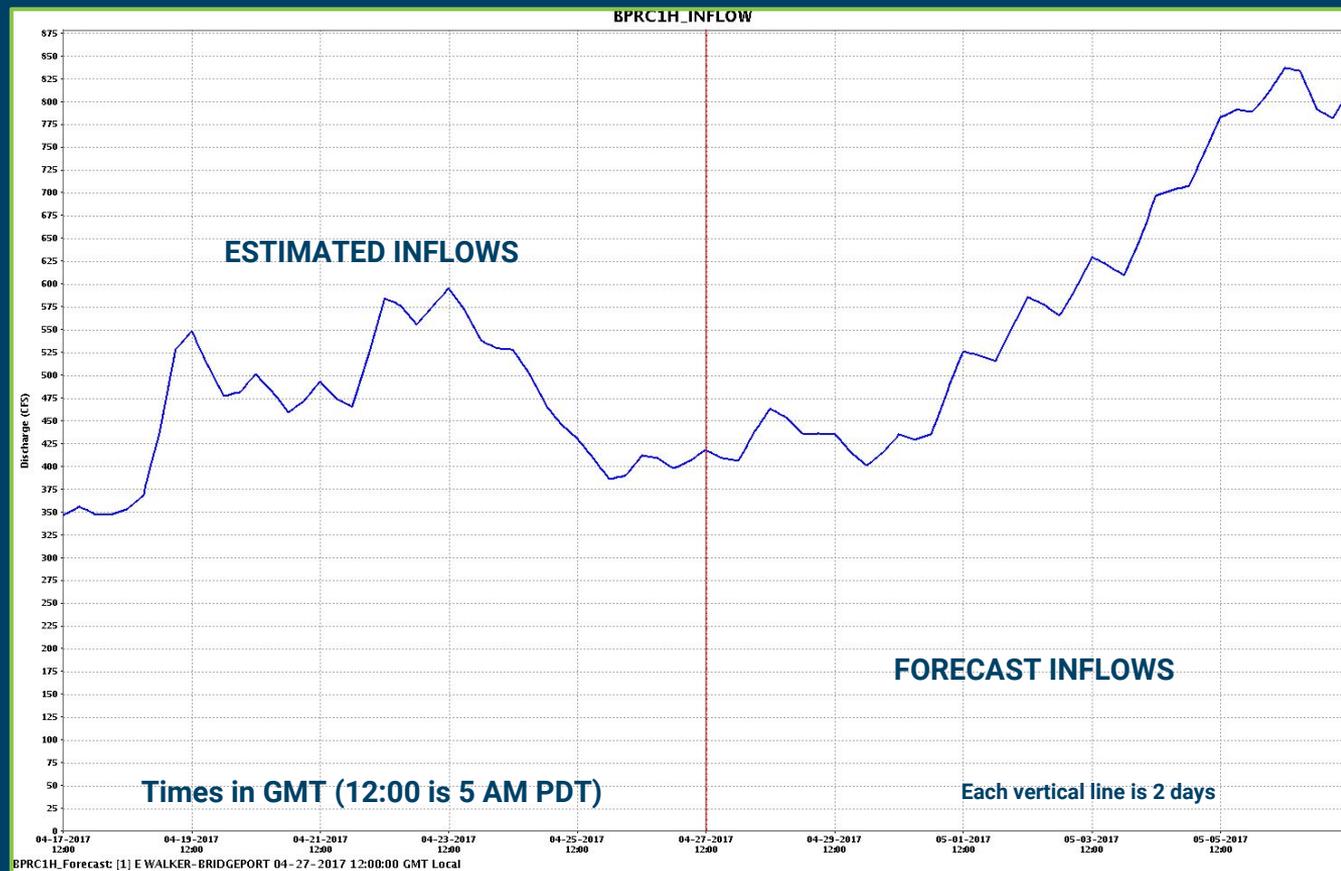
10 Day Simulation - East Walker

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Bridgeport Inflow

- These are simulated inflows based on snowmelt projections.
- **Greater uncertainty** due to lack of gauge network upstream of Bridgeport Reservoir, but provides a general guide.
- Increased snowmelt flows expected next week. **Potentially double what is currently happening.**

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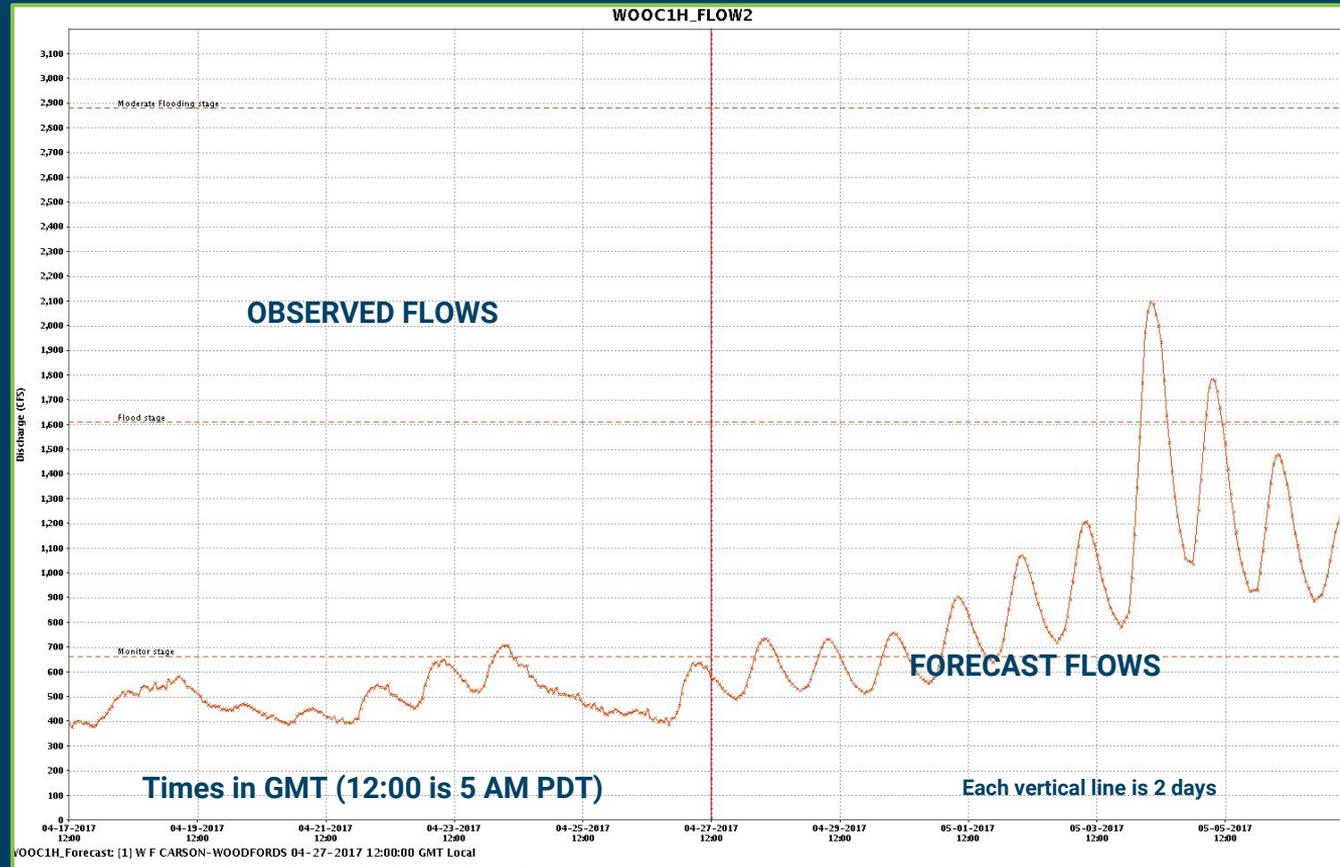


10 Day Simulation - West Carson River

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Woodfords, CA

- Update - rises above flood stages starting Thursday.
- Appreciable increase in flows starting Monday, lasting all of next week.
- Above monitor stages all next week. Possibly going above flood stages late next week - minor flood issues Carson Valley up to Genoa.



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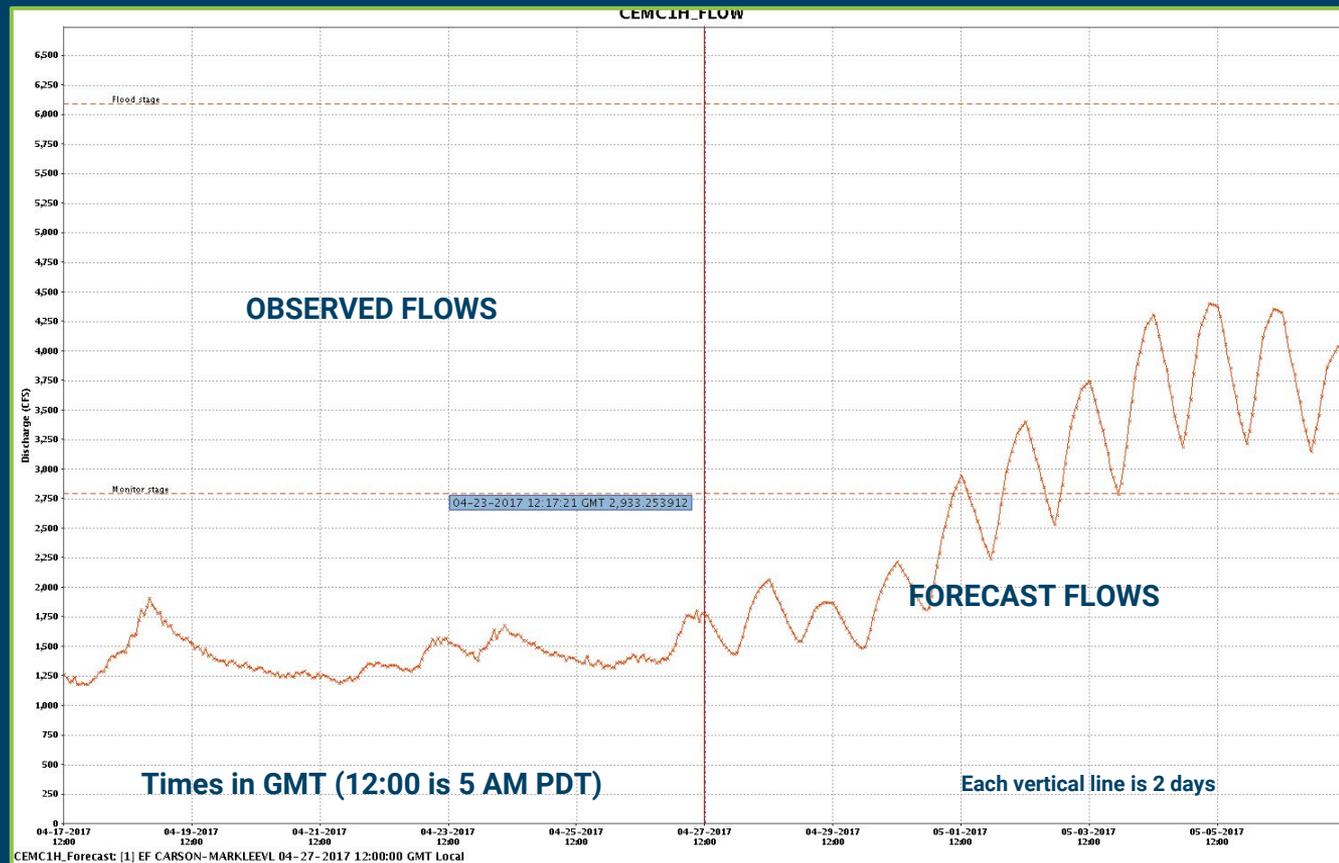
10 Day Simulation - East Carson River

5-day official forecasts - [CNRFC](#) or [NWS Reno](#)

Markleeville, CA

- **Update** - no huge changes.
- Appreciable increase in flows starting Monday, lasting all of next week.
- Passing monitor stages Monday, but below flood status. 5,000 cfs is where lower elevations of Carson Valley near east fork begin to have very minor flood issues. 6100 cfs is official flood stage.

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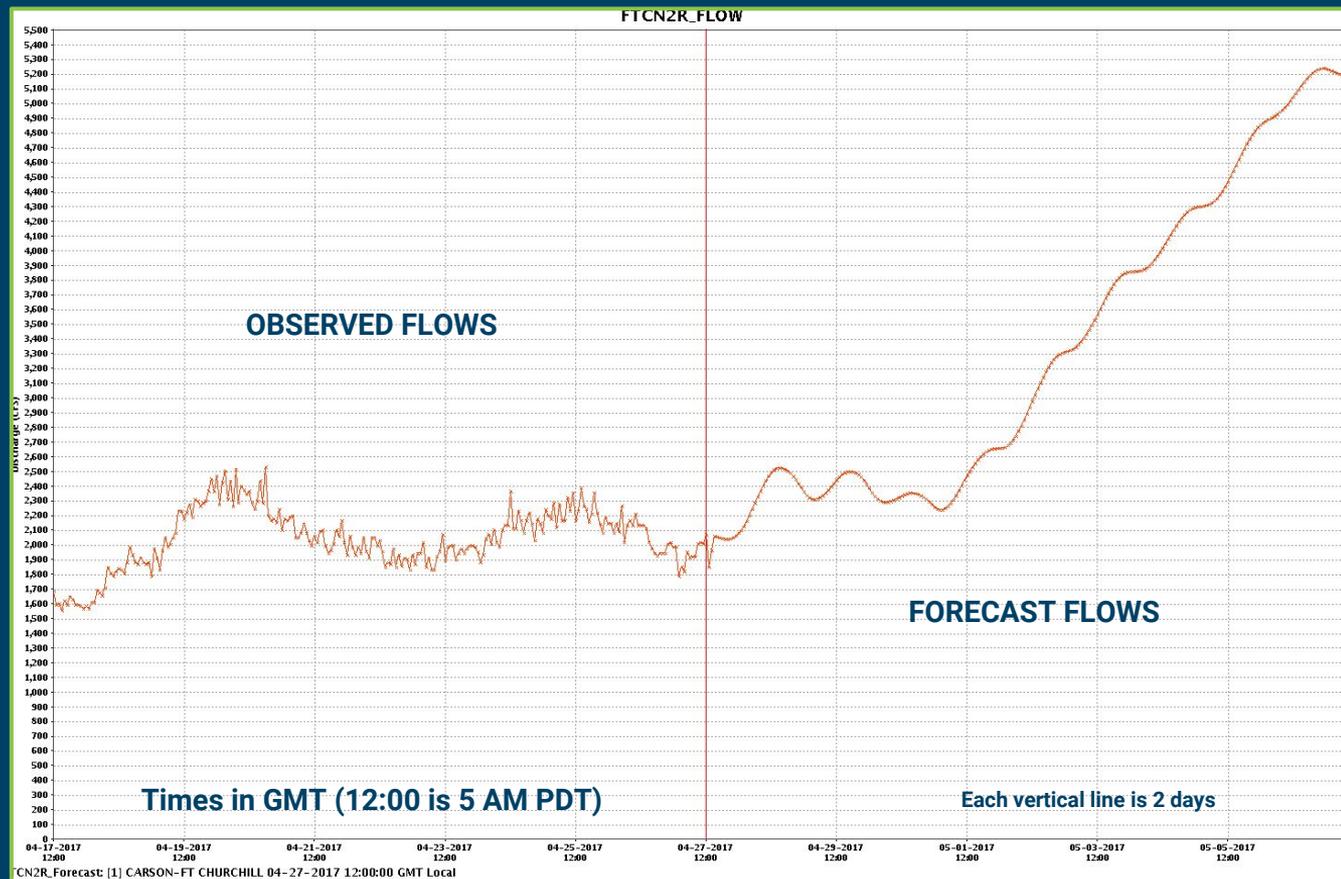


5 Day Simulation - Downstream Carson

5-day official forecasts - [CNRFC](#) or [NWS Reno](#)

Ft Churchill, NV

- Update - dramatically higher inflows into Lahontan starting Tuesday next week.
- Monitor stages ~4000 cfs, minor flood stage along the river ~7200 cfs.



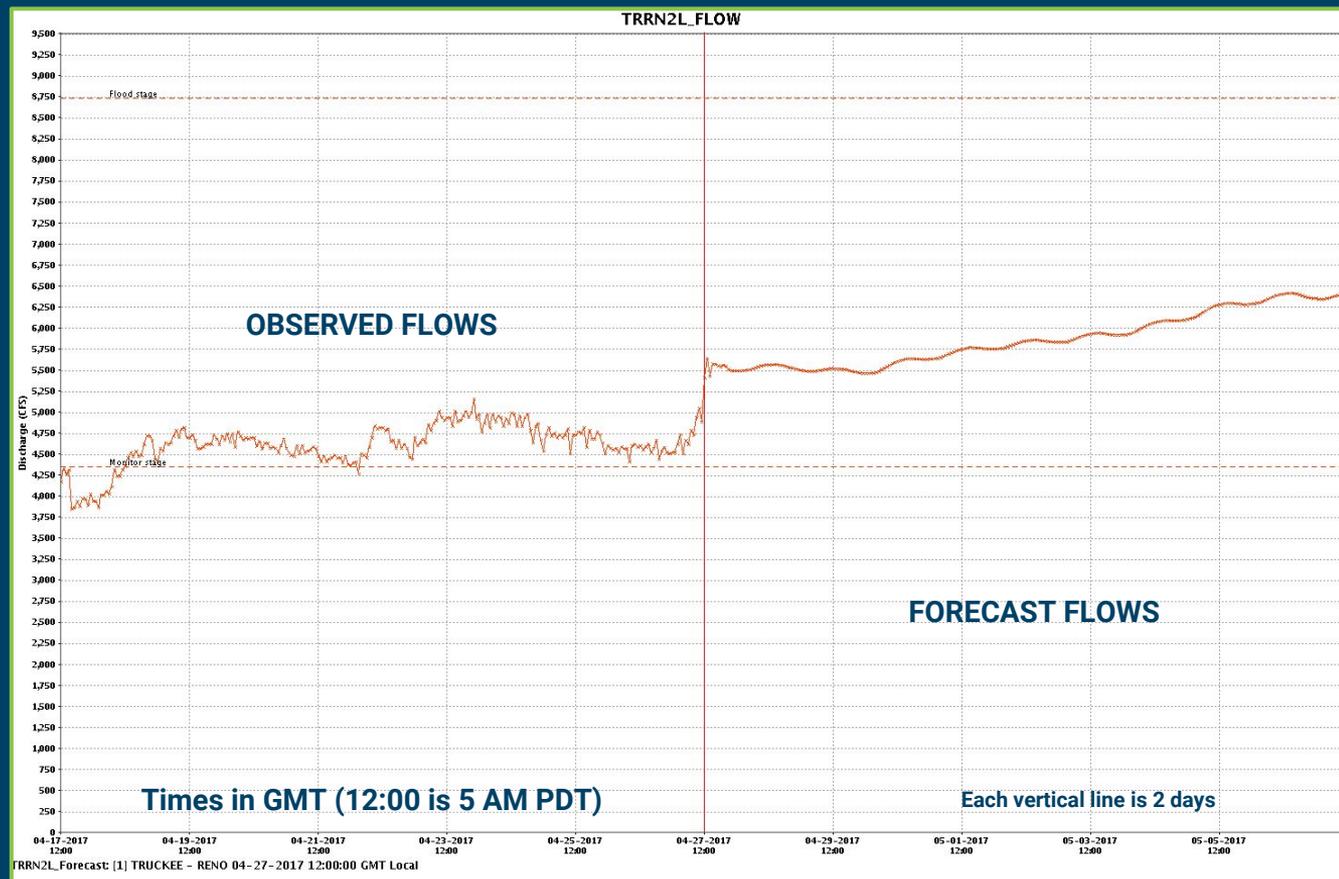
10 Day Simulation - Truckee River

5-day official forecasts - [CNRFC](#) or [NWS Reno](#)

Reno, NV

- **Update** - higher flows from increased Tahoe releases starting yesterday. Snowmelt contributions higher too.
- Simulation rises above 6,000 cfs late week, but that will be regulated by watermaster via reservoir controls.
- Bike path will continue to be flooded in spots through Reno/Sparks.

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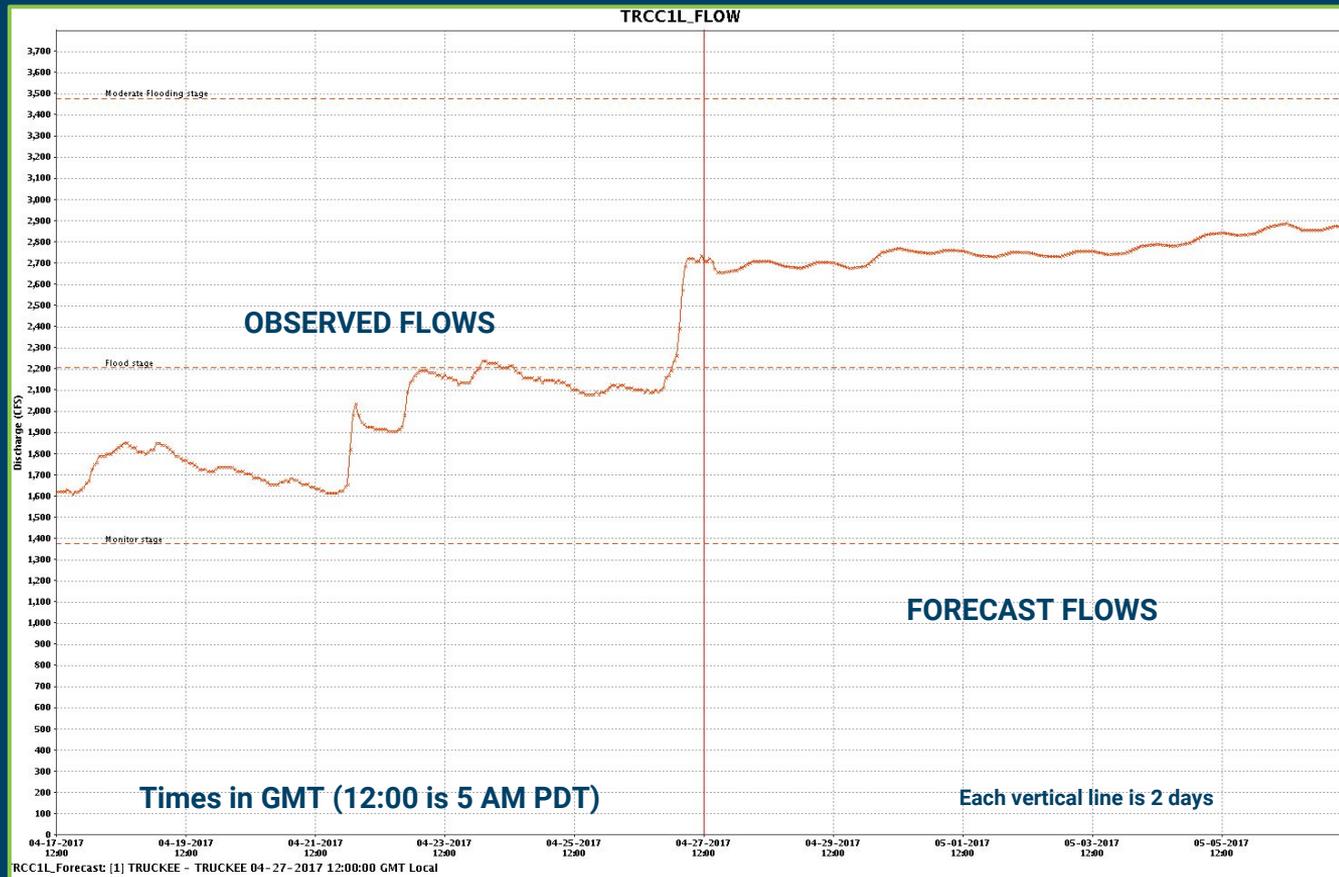


5 Day Simulation - Truckee River

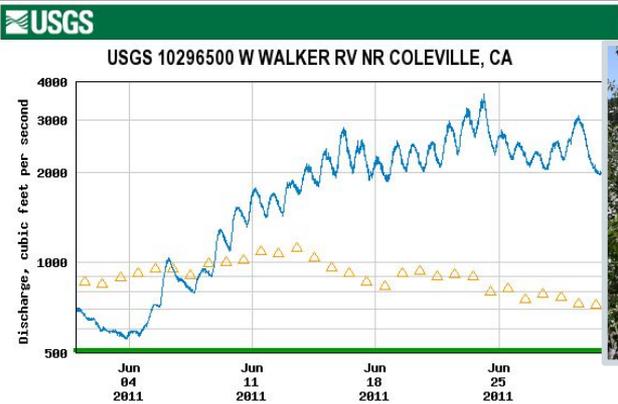
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Truckee, CA

- Update - higher flows from increased Tahoe releases starting yesterday. Snowmelt contributions higher too.
- Impacts mainly right along river - bike path affected. Some river home's basements, crawl spaces impacted.
- Long duration flood issues - lasting weeks/months. Adds an element of unknowns to impact potentials.



SAFETY: What is Different About Snowmelt Flooding?



- Triggered by sudden warming temperatures and/or heavy rainfall events.
- Creeping hazard which occurs over much **longer time scales**, days-weeks-even months
- Sleeper issue is often **peak flows occur at night** due to time lag from mountains-valleys. Harder to see by drivers; catches residents, campers off-guard.

