

NWS Reno Snowmelt Flood Briefing to FEMA, NDEM

Key Points - June 7, 2017

Weather

- **Roller coaster weather** next 7-10 days! A good thing to mitigate flooding from snowmelt, but won't eliminate.
- Today will be the last hot day of this sequence; low 90's W Nevada cities. 7th day in a row of above normal temps, but nothing record breaking.
- Cold front will bring dramatically cooler temperatures and increased winds Thursday-Monday. **10-20 degrees below normal!** Coolest Sunday, highs 60-65 W Nevada cities. Close to record low-max but not breaking. Winds gusting 30-35 mph at times Thurs-Sat. Fire weather hazards today and tomorrow.
- Cool temperatures for 4-5 days will really slow down snowmelt processes. **Should see declines in river flows this weekend into early/mid next week** as a result.
- Some rain, but limited amounts. Thursday, and again Sunday/Monday. Mostly showers and a couple thunderstorms in N Sierra, NE Cal. Less than 0.25", hydrologically insignificant. Not much in E Sierra and W Nevada. Could be some snow showers above 7000' Sunday - surprise to people outdoors caught unprepared.
- Very gradual warm-up next week, pleasant overall. Around 80. Some initial hints of a more dramatic heat-up for Father's Day weekend (17-18th) but too soon to call.

Hydro Highlights [[5-day river forecasts](#)]

- **Snowpack Status** - Big gradient in snowpack between 8000' and higher up. Still have 30-40% of peak snowpack left in many areas above 8000', with some spots of 60-80% left at snow-favored or higher elevation NRCS SNOTEL sites (e.g. Leavitt Lake, Mt Rose, Independence)
- **Snowpack Trends** - Losing mid/high elevation snowpack at **very rapid rates**, some of the highest melt rates for early June on record. On the order of 1-2" of water per day. Gives us more confidence that we could be seeing peak flows this week.
- **River flow accumulation since April 1** - W Walker 111% of April-July normals; E Walker 137%; Carson 199%; Truckee 189%; Humboldt 157%. **Wow!**
- Status quo, virtually certain we're past peak on Truckee, Carson River systems. High flows, cold water continuing until further notice with increased SAR incidents. Humboldt River - on a gradual decline but potential for a secondary, lesser peak late June if we have another decent heat event.
- Walker River remains our highest concern for flooding issues but **that concern is declining**. Lots of indications in snowpack data and simulations that we're seeing peak flows on West Walker this week with this current heat. Not a 100% lock but looking probable. Freakout scale trending toward "moderate"
- Still need to be mindful of additional heatwaves unlocking additional high elevation snowpack in a hurry - could cause more widespread flooding. In any scenario - expect

persistent high flows and occasional minor/localized flooding impacts on Walker system.

- Water management with reservoirs has mitigated flooding issues twice now with heatwaves - what was potentially major impacts on main Walker ended up being minor impacts.
- East Walker via Bridgeport has higher elevation basin so peak flows likely late June, but not as large a source of water compared to W Walker basin. Again we need to maintain monitor mode here for flood issues through June.
- Am thinking by July 1 we should be able to lower Freakout levels to “low” for Walker basin unless weather behaves unusually mid-late June.
- Eastern Sierra in Mono, Inyo Counties continues to see appreciable impacts from numerous small streams/creeks with minor-moderate flooding and road closures. Expect that to continue through early or mid July.

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