

Key Messages

- → Snowmelt process has begun across the basin
 - Snowpack needs to <u>ripen</u> before runoff can begin
- → Anticipate river responses within the next 7 days, with at least the Buffalo River in Minnesota and southern Red River mainstem sites reaching flood stage by the end of the week
- → Extensive overland flooding anticipated to commence by the end of the week or beginning of next week
- → Variability in forecast temperatures and precipitation is resulting in greater than normal uncertainty with river forecasts









Basins Impacted:

- Red River Mainstem:
 - Southern Mainstem: Minor to moderate flooding commencing by the end of the week or start of the weekend. There is a fair amount of uncertainty with the crest forecasts due to potential for high variability in forecast temperatures. Locations such as Abercrombie and Fargo are expected to level off in a week, with a subsequent higher rise later this month. Major flooding is expected to commence at Fargo early next week in its initial crest.
 - Central/Northern Mainstem: Rises are expected with the future warm up period, but no flood thresholds are expected to be crossed in the next 7 days (hence no forecasts yet for these areas).
- MN Tributaries:
 - Buffalo River: Due to the potential for high variability in forecast temperatures, there is a fair amount of uncertainty with crest forecasts.
 - Other MN Tributaries: Rises are expected with the future warm up period, but no flood thresholds are expected to be crossed in the next 7 days (hence no forecasts yet for these areas).
- ND Tributaries: Rises are expected with the future warm up period, but no flood thresholds are expected to be crossed in the next 7 days (hence no forecasts yet for these areas).



Upcoming Weather and Potential River Impacts:

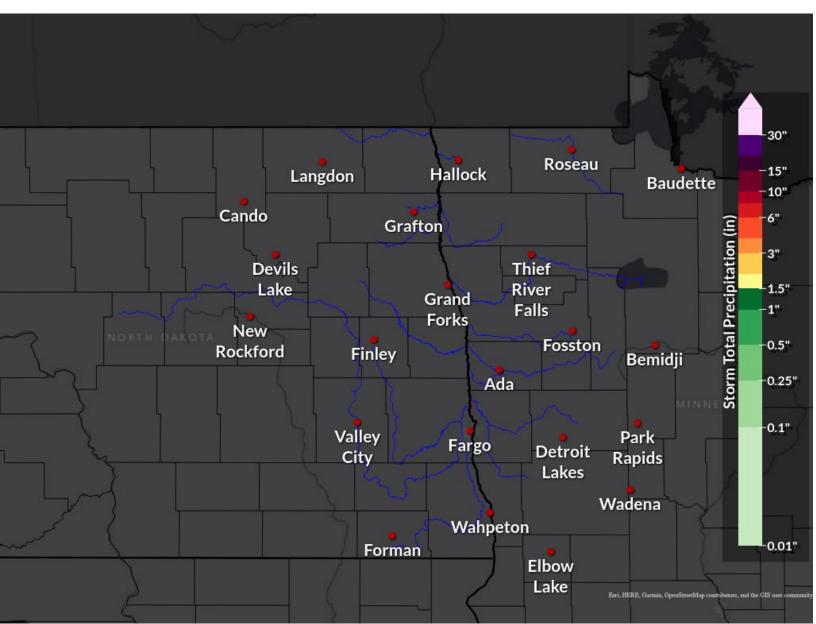
- Relatively quiet period through mid week. Above freezing temperatures during the daytime and overnight periods allowing for a fairly rapid melting process.
- The next chance for rain or snow comes Thursday into the weekend. Several scenarios still exist, including rain or snow with varying amounts. Thunderstorms also remain a potential scenario, although coverage is uncertain.
 - o Impacts are possible, but remain unknown at this time.







Observed precipitation over the past 24 hours (7 AM Mon April 10th through 7 AM Tue April 11th)

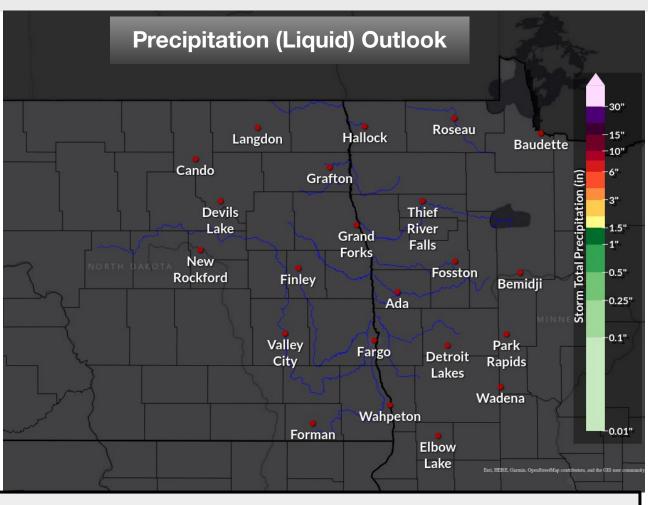




Snowmelt Beginning

Forecast precipitation included in today's river forecasts

(7 AM April 11th to 7 AM April 12th)



Precipitation amounts beyond the river model forecast precipitation period are denoted by low, medium, or high chances of receiving the amounts indicated below.

Legend	Date	Туре	0.01 - 0.25"	0.26 - 0.50"	0.51 - 1.00"	1.00" +
100%	Wed, April 12	T-storms/Rain	Low	-	-	-
High	Thu, April 13	Rain	Medium	Low	Low	-
70%	Fri, April 14	T-storms/Rain	High	Medium	Low	-
Medium 40%	Sat, April 15	T-storms/Rain/ Snow	Medium	Low	Low	-
Low	Sun, April 16	Rain/Snow	Medium	Low	1	-
10%	Mon, April 17	Rain/Snow	Low	-	-	-







7-Day Temperature Outlook

Day of the Week	Highs	Lows (Overnight)
Wednesday, April 12	Areas with snow: 45 - 55 Areas with limited snow or forested: 60 - 70	30 - 45
Thursday, April 13	Areas with snow: 35 - 45 Areas with limited snow or forested: 50 - 70	30 - 40
Friday, April 14	Areas with snow: 35 - 50 Areas with limited snow or forested: 55 - 70	30 - 45
Saturday, April 15	Areas with snow: 35 - 45 Areas with limited snow or forested: 40 - 45	25 - 35
Sunday, April 16	Areas with snow: 30 - 40 Areas with limited snow or forested: 40 - 45	20 - 30
Monday, April 17	Areas with snow: 35 - 40 Areas with limited snow or forested: 40 - 50	20 - 30
Tuesday, April 18	Areas with snow: 40 - 45 Areas with limited snow or forested: 45 - 50	20 - 30



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Fields starting to become exposed with some standing water near Barnesville, MN in the southeast Red River Valley.

April 10 2023 - courtesy of MNDOT

Quick facts you should know about flooding:

- Flooding can be caused by heavy rain, rapid snow melt, ice jamming, levee overtopping, dam failure, or from wastewater systems.
- It only takes six inches of fast-moving water to knock you off your feet
- A car can be moved in as little as two feet of water.
- 90% percent of all U.S. natural disasters declared by the President involve flooding.

NWS Grand Forks Webpage
NWS Grand Forks River Observation/Forecast Page





