

MASSACHUSETTS RIVER OVERVIEW



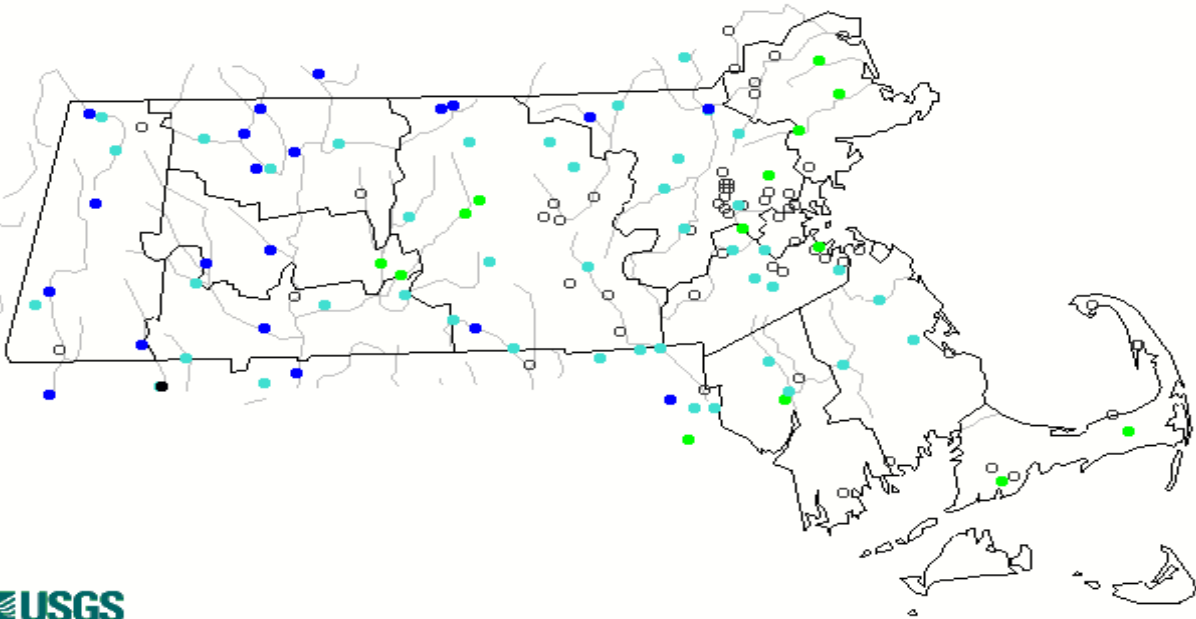
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NWS / Northeast River
Forecast Center
MA Drought Management
Task Force
8 February 2023

OUTLINE

- Snapshot of Massachusetts River Flows
- NERFC River Forecast Outlook
- Wrap Up

MASSACHUSETTS RIVER FLOWS

Sunday, January 08, 2023 08:30ET



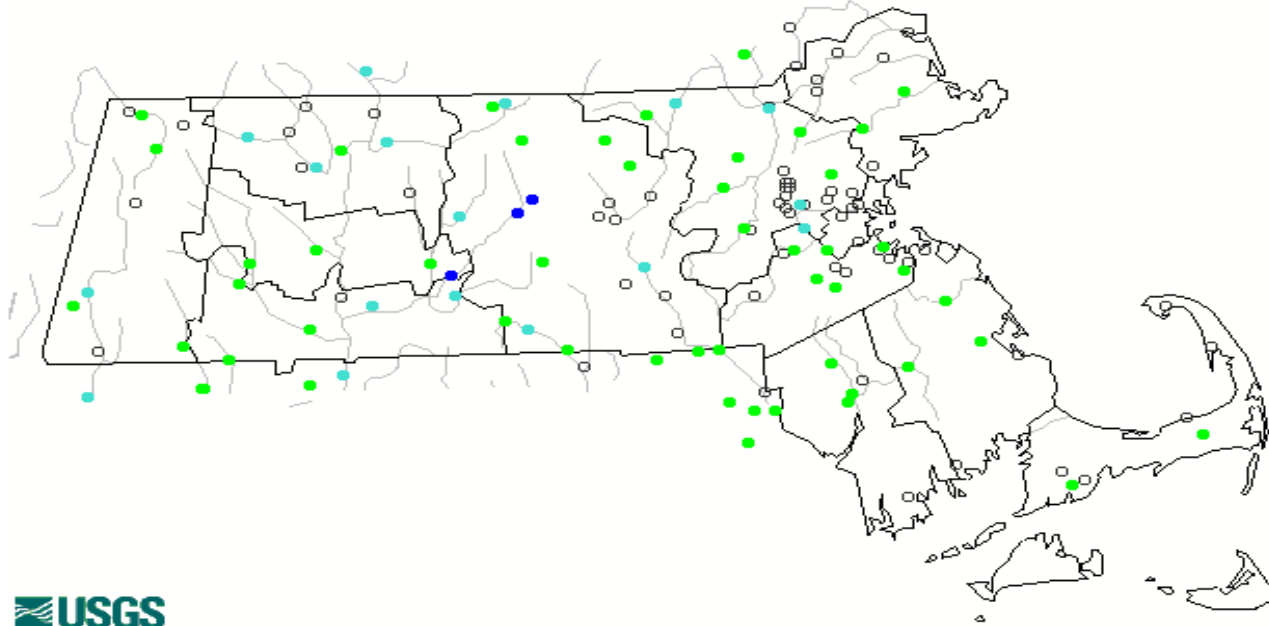
Search USGS streamgage

Choose a data retrieval option and select a location on the map

- List of all stations
 Single station
 Nearest stations
 Peak flow

Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Tuesday, February 07, 2023 10:30ET



Search USGS streamgage

Choose a data retrieval option and select a location on the map

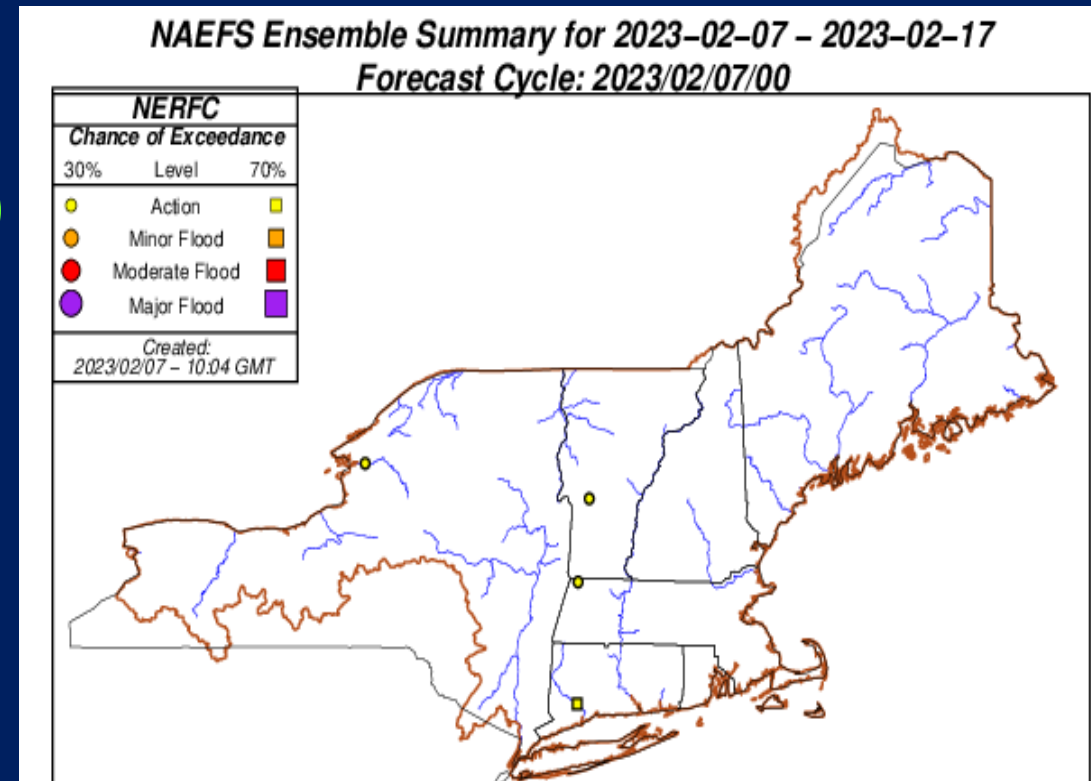
- List of all stations
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Explanation - Percentile classes							
●	●	●	●	●	●	●	○
Low	<10	10-24	25-75	76-90	>90	High	Not-ranked
	Much below normal	Below normal	Normal	Above normal	Much above normal		

River flows have declined a bit over the past month across most of the Commonwealth but still remain near to above normal throughout the state.

NAEFS ENSEMBLE RIVER FORECAST OUTLOOK

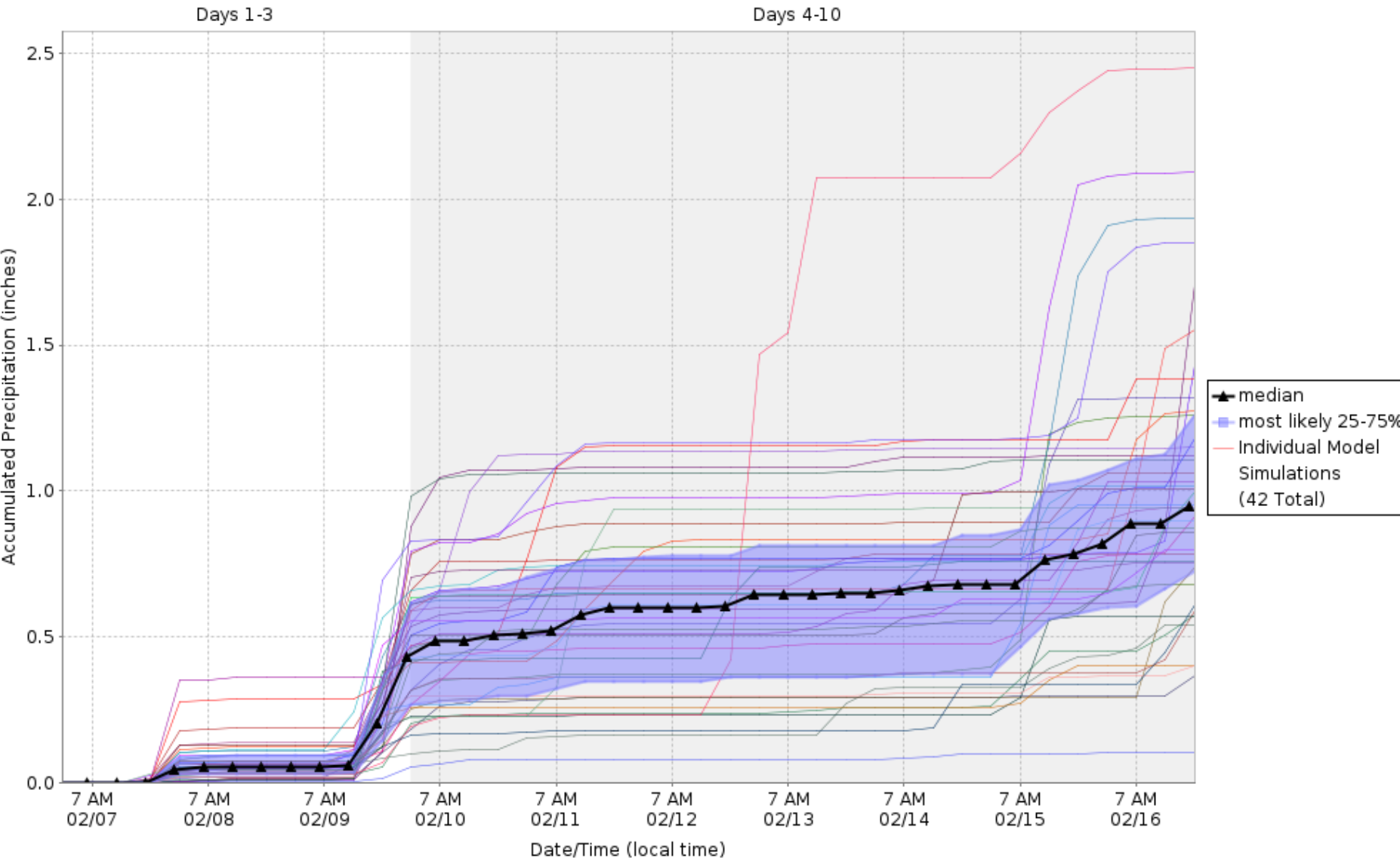
- A 42 member ensemble run for all NERFC forecast points to give us an idea of the possible range of river flows out 10 days.
 - Basically 42 slightly different initial conditions in the weather models lead to 42 different river forecasts based on rainfall and temperature.
- Will show results for...
 - Westfield River at Westfield (WSFM3)
 - Shawsheen River at Wilmington (WLMM3)



NAEFS PCPN – WSFM3

Feb 07 - Feb 17, 2023

Westfield River at Westfield, MA (WSFM3)

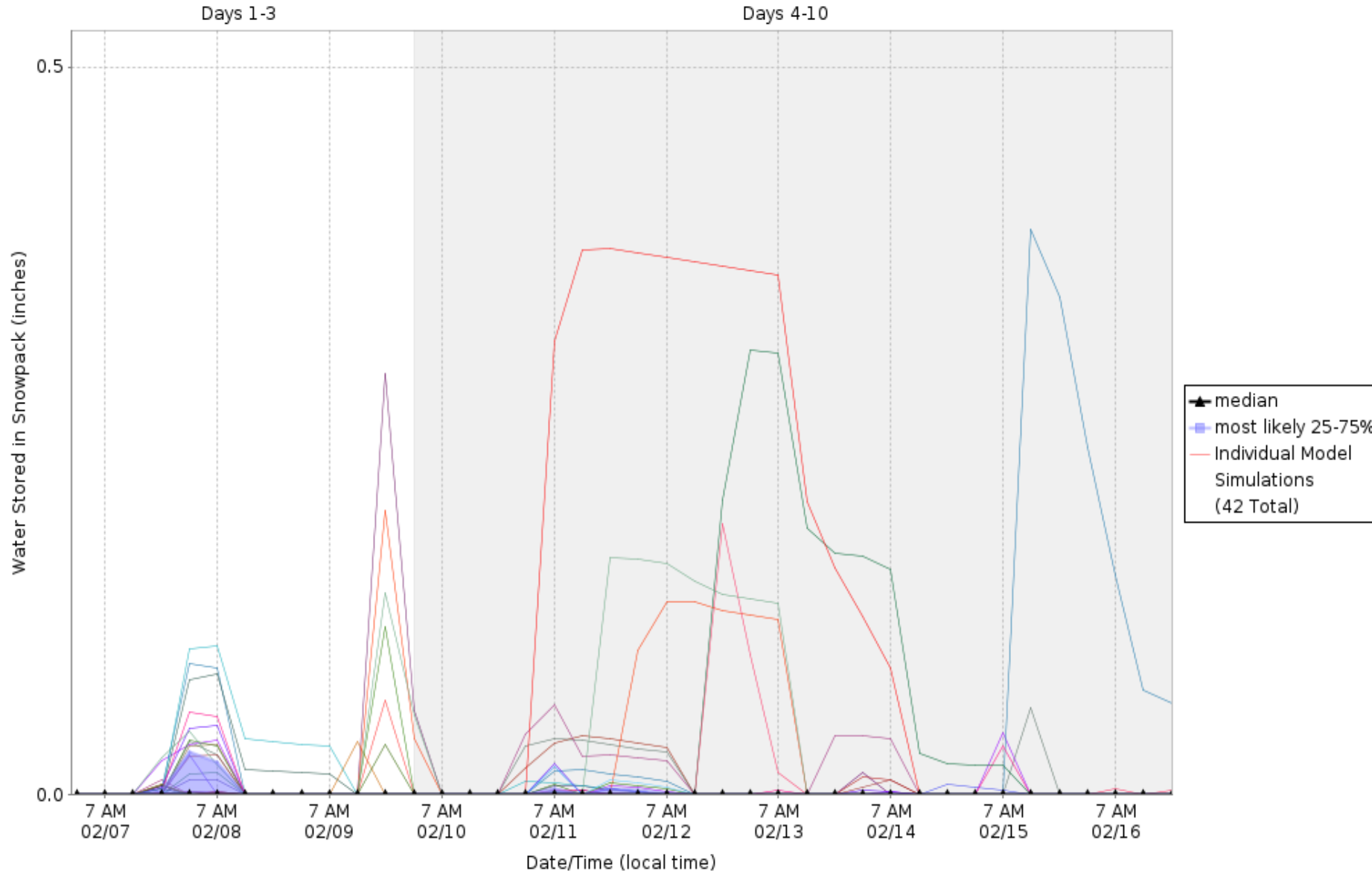


Right now...most ensembles signal near or less than 1" of melted equivalent precipitation over the next 10 days.

NAEFS SNOW – WSFM3

Feb 07 - Feb 17, 2023

Westfield River at Westfield, MA (WSFM3)

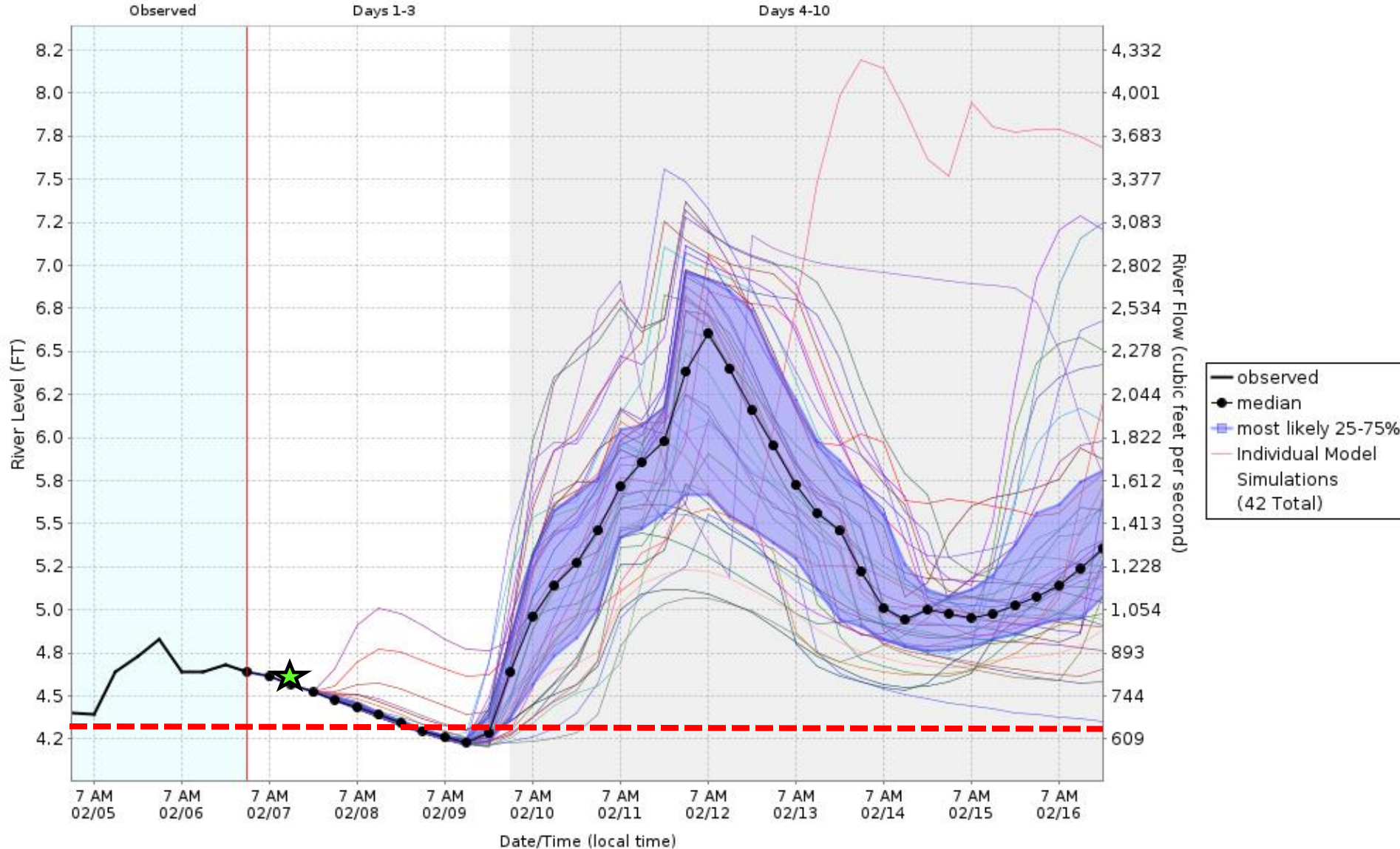


Guidance suggests a very low probability for building any significant snowpack until at least late February.

NAEFS – WSFM3

Feb 07 - Feb 17, 2023

Westfield River at Westfield, MA (WSFM3)

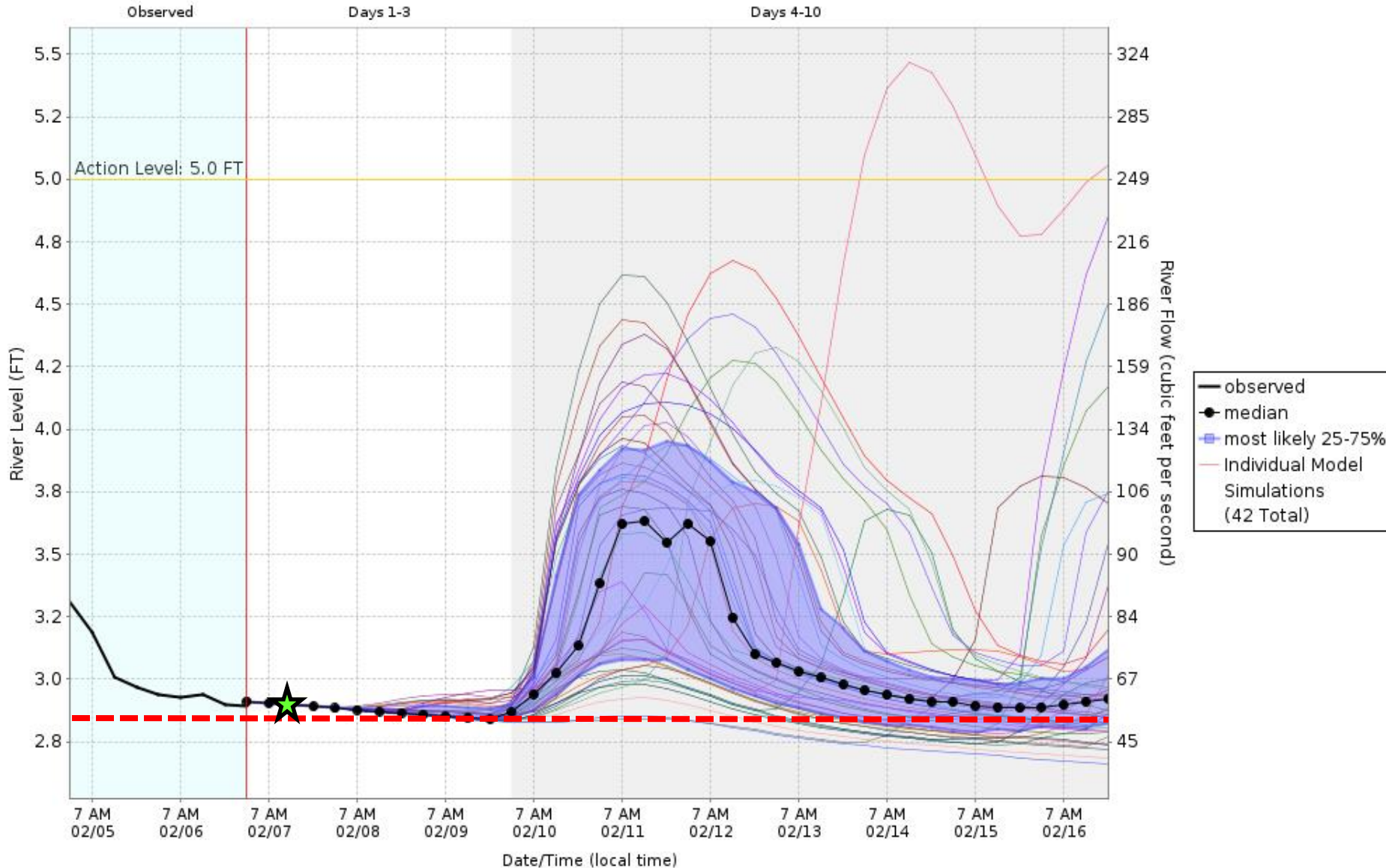


- Flows are likely to stay at or above median levels (dashed red line) right into the end of February.

NAEFS – WLMM3

Feb 07 - Feb 17, 2023

Shawsheen River at Wilmington, MA (WLMM3)



Like most rivers in the Commonwealth...the Shawsheen should stay near or above median flow levels as we head into the end of February.

CONCLUSIONS

- River flows have declined a bit across the Commonwealth over the last month but still remain near to above normal at gauged locations.
- Flows will likely stay near or above February median levels over at least the next 10 days.
- The only concern is that we have a lack of snow water available for recharge at the current time. If we don't maintain normal amounts of rainfall through the Spring...dryness could crop up pretty quickly.

[weather.gov/nerfc](https://www.weather.gov/nerfc)