



MASSACHUSETTS RIVER OVERVIEW



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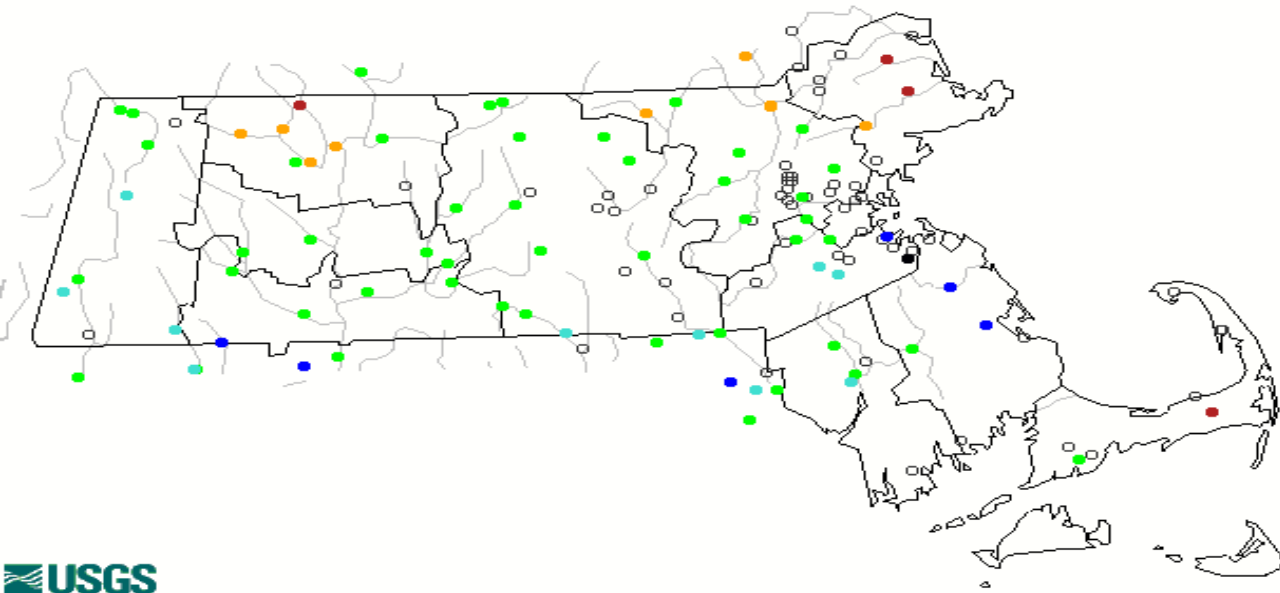
9 November 2022

OUTLINE

- Snapshot of Massachusetts River Flows
- NERFC River Forecast Outlook
- Conclusions

MASSACHUSETTS RIVER FLOWS

Wednesday, October 05, 2022 11:30ET



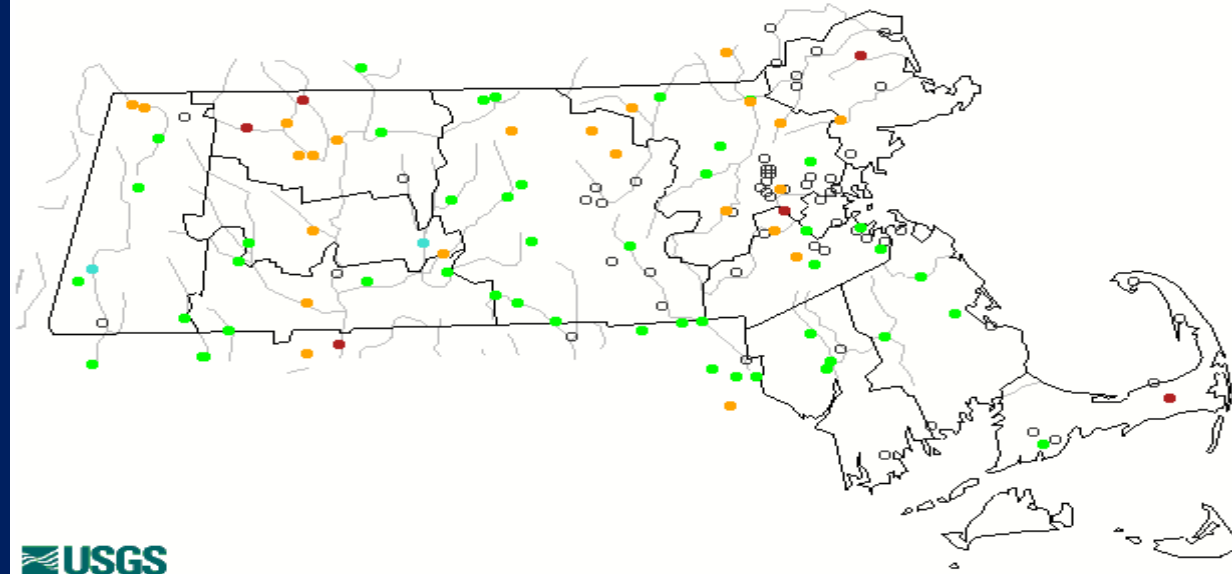
Search USGS streamgage

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 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

Monday, November 07, 2022 11:30ET



Search USGS streamgage

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

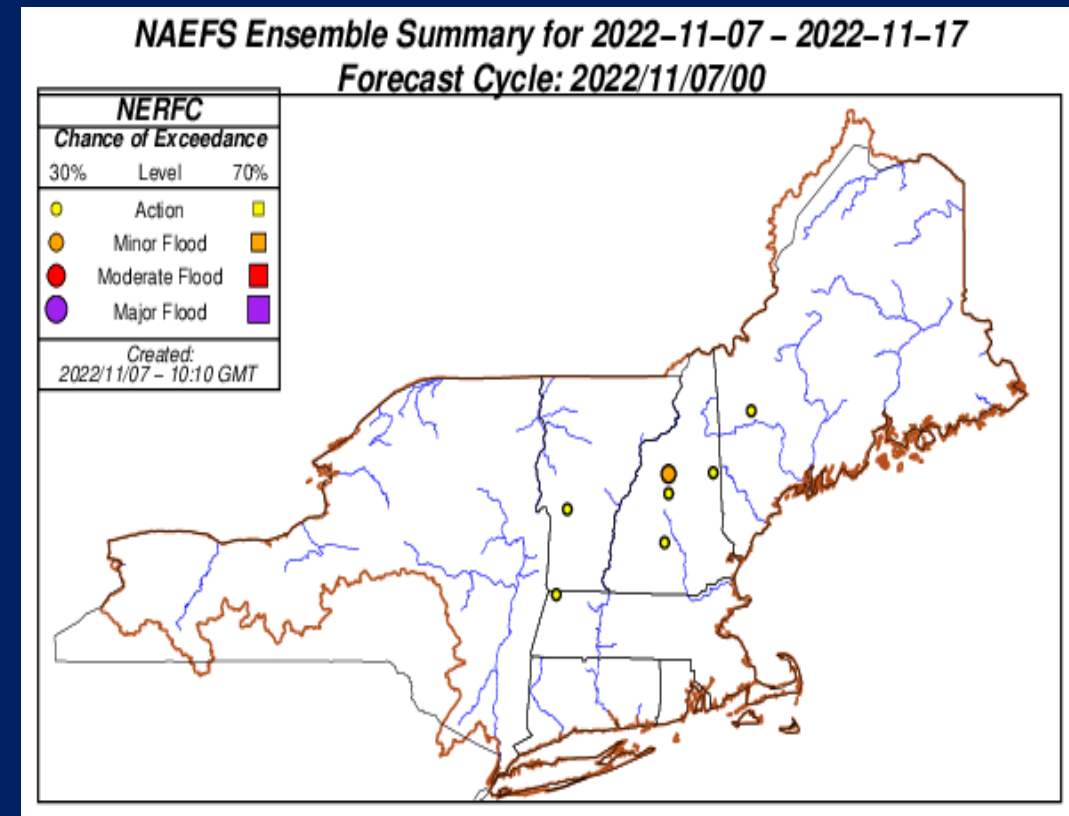
- List of all stations
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Explanation - Percentile classes							
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

On the whole...flows across the Commonwealth have declined over the past month. The most dramatic declines have occurred across southeast portions of the state.

NAEFS ENSEMBLE RIVER FORECAST OUTLOOK

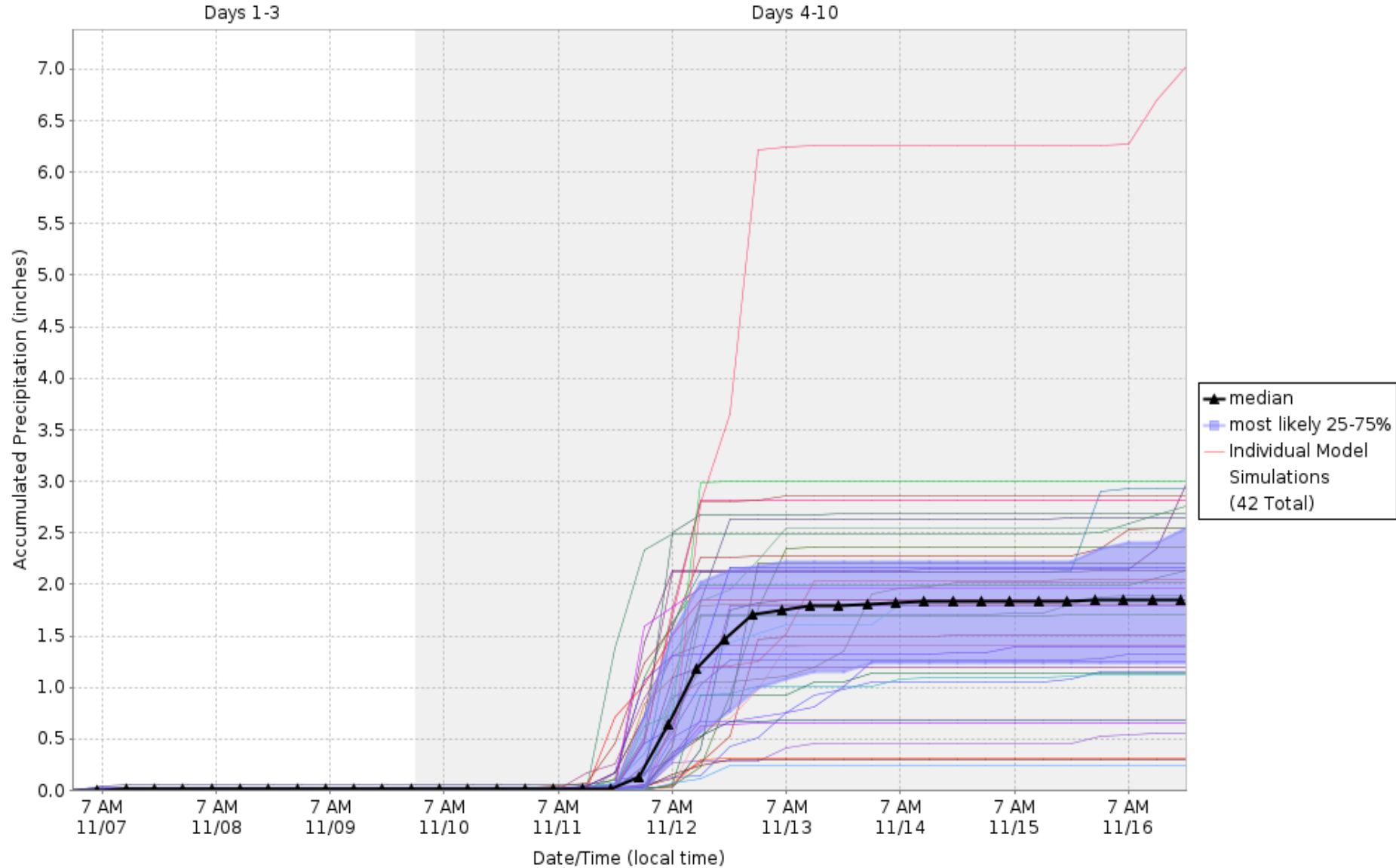
- A 42 member ensemble run for all NERFC forecast points to give us an idea of the possible range of river flows out 10 days.
 - Basically 42 slightly different initial conditions in the weather models lead to 42 different river forecasts based on rainfall and temperature.
- Will show results for...
 - Charles River at Dover (DOVM3)
 - North Nashua River at Fitchburg (FBGM3)
 - Hoosic River at Williamstown (WILM3)
 - Taunton River at Bridgewater (BDGM3)



NAEFS PCPN – DOVM3

Nov 07 - Nov 17, 2022

Charles River at Dover, MA (DOVM3)

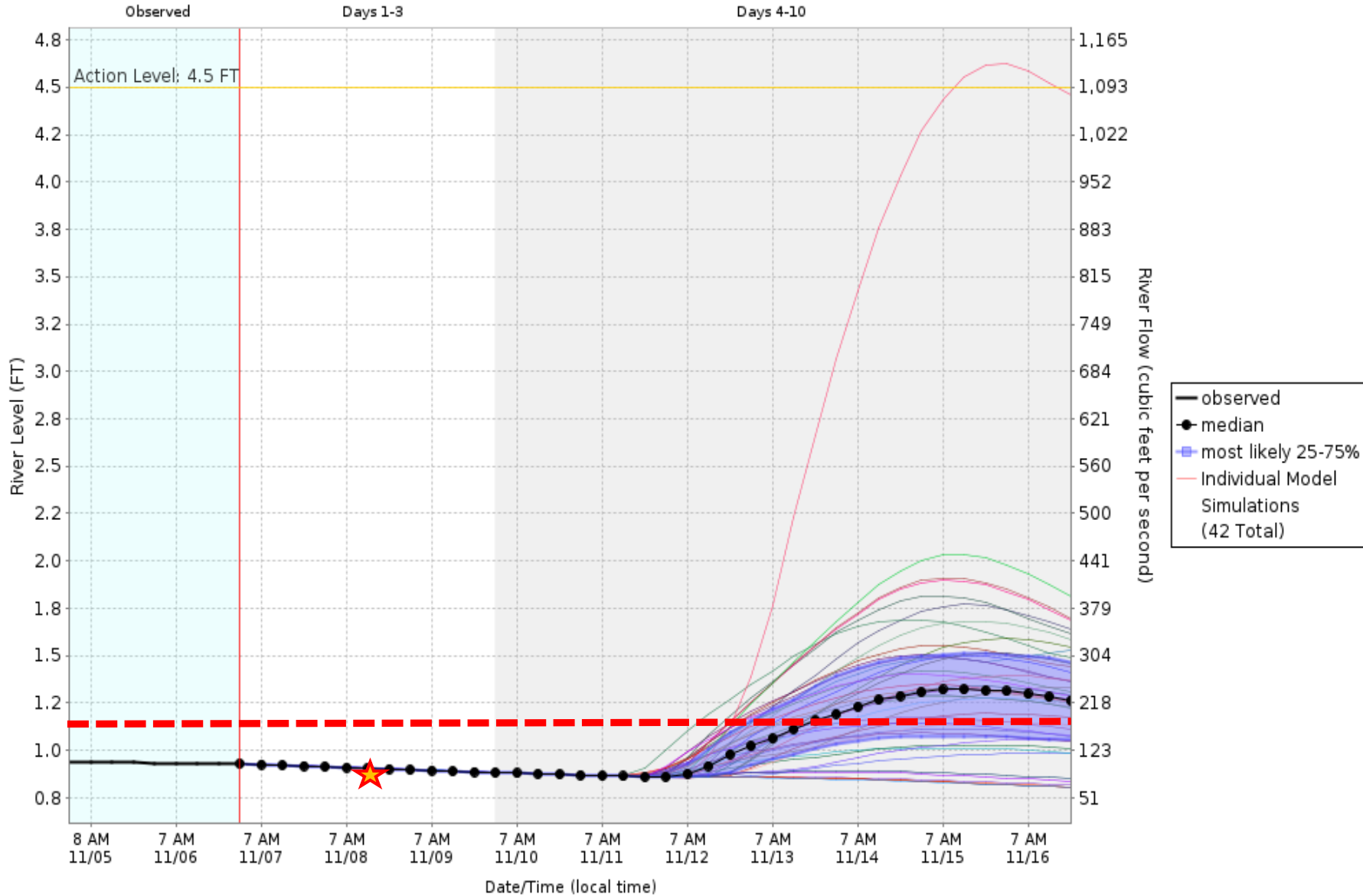


Heavy rainfall likely late this week...partially associated with the remnants of Nicole

NAEFS – DOVM3

Nov 07 - Nov 17, 2022

Charles River at Dover, MA (DOVM3)

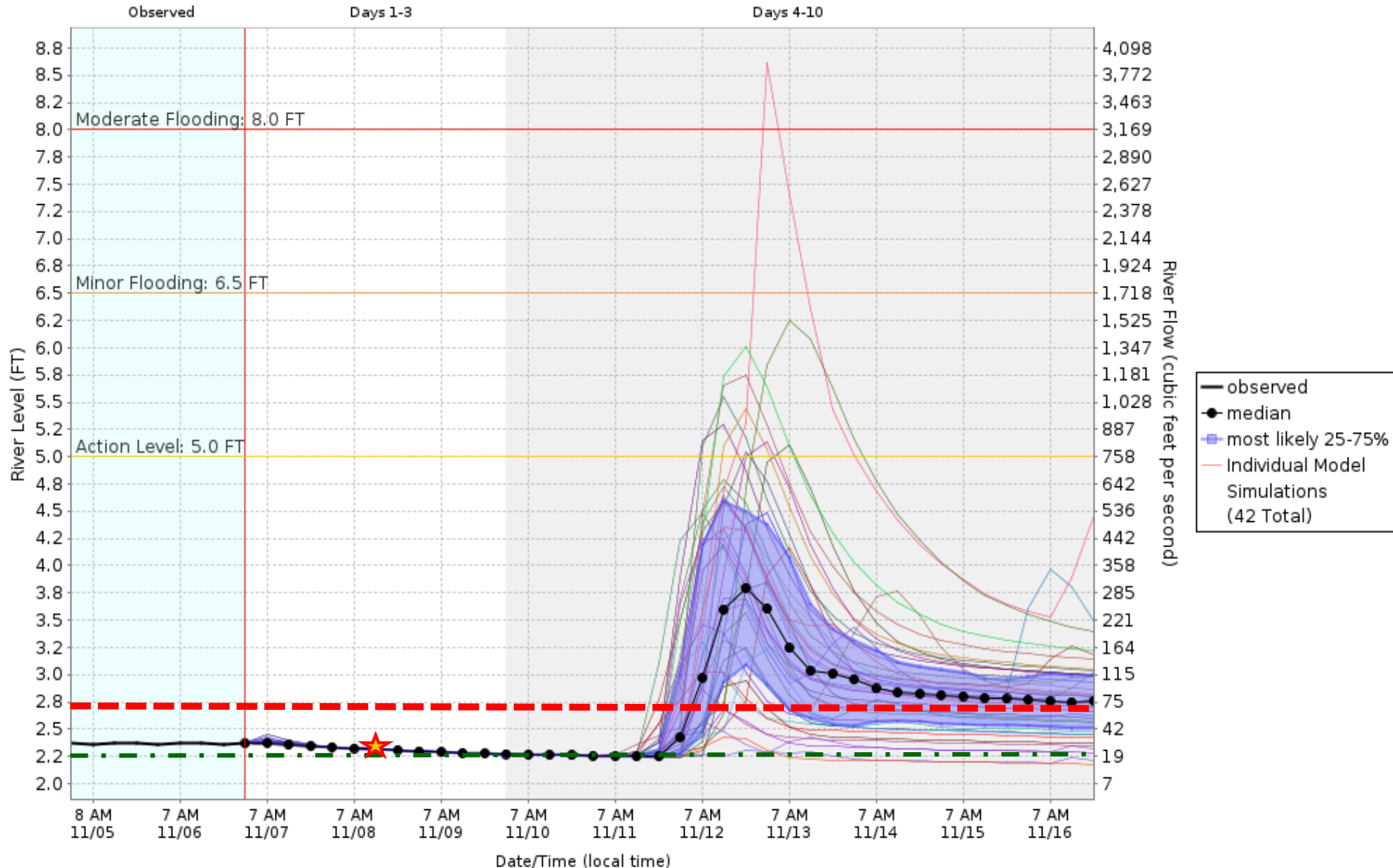


Below normal flows are expected to increase to at or above median by early next week.

NAEFS – FBGM3

Nov 07 - Nov 17, 2022

North Nashua River at Fitchburg, MA (FBGM3)



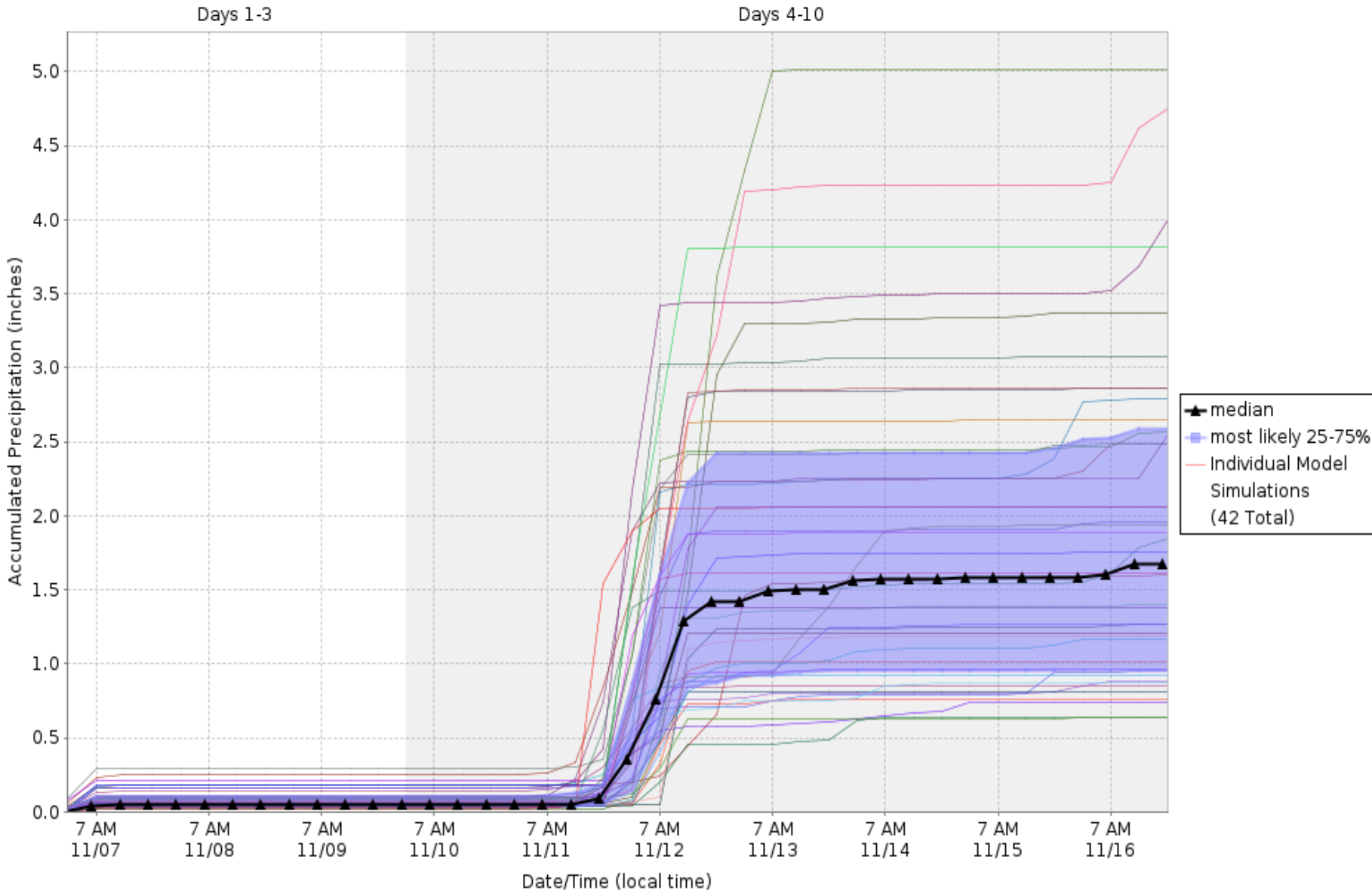
Low flows have become semi-chronic at this site.

Flows could drop to near record low daily levels (green-dashed line) before significant rainfall sends flows higher over the upcoming weekend.

NAEFS PCPN – WILM3

Nov 07 - Nov 17, 2022

Hoosic River at Williamstown, MA (WILM3)

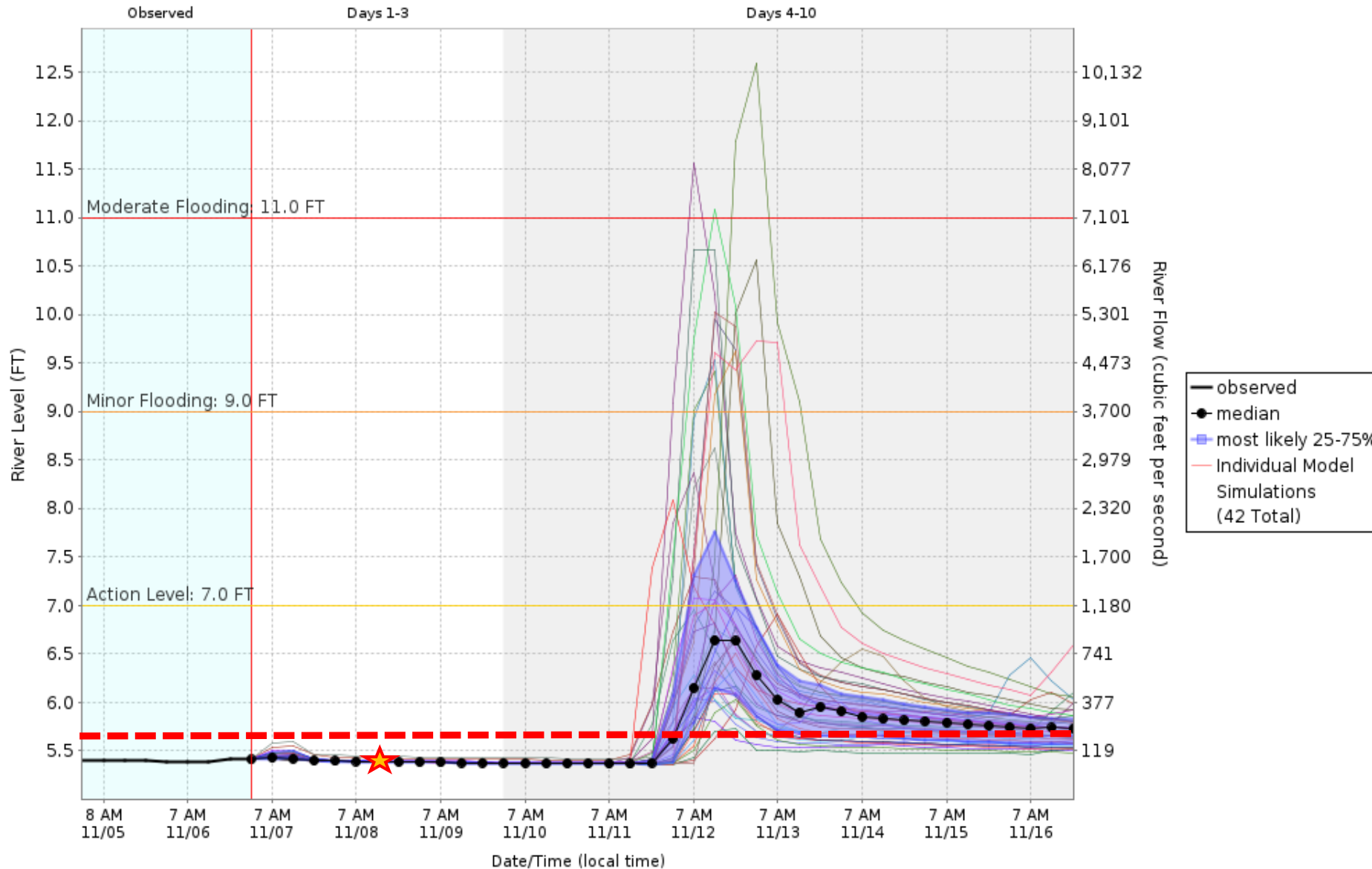


- Rainfall amount confidence seems lower than across eastern Massachusetts. There are more outlier solutions near and above 3 inches.

NAEFS – WILM3

Nov 07 - Nov 17, 2022

Hoosic River at Williamstown, MA (WILM3)

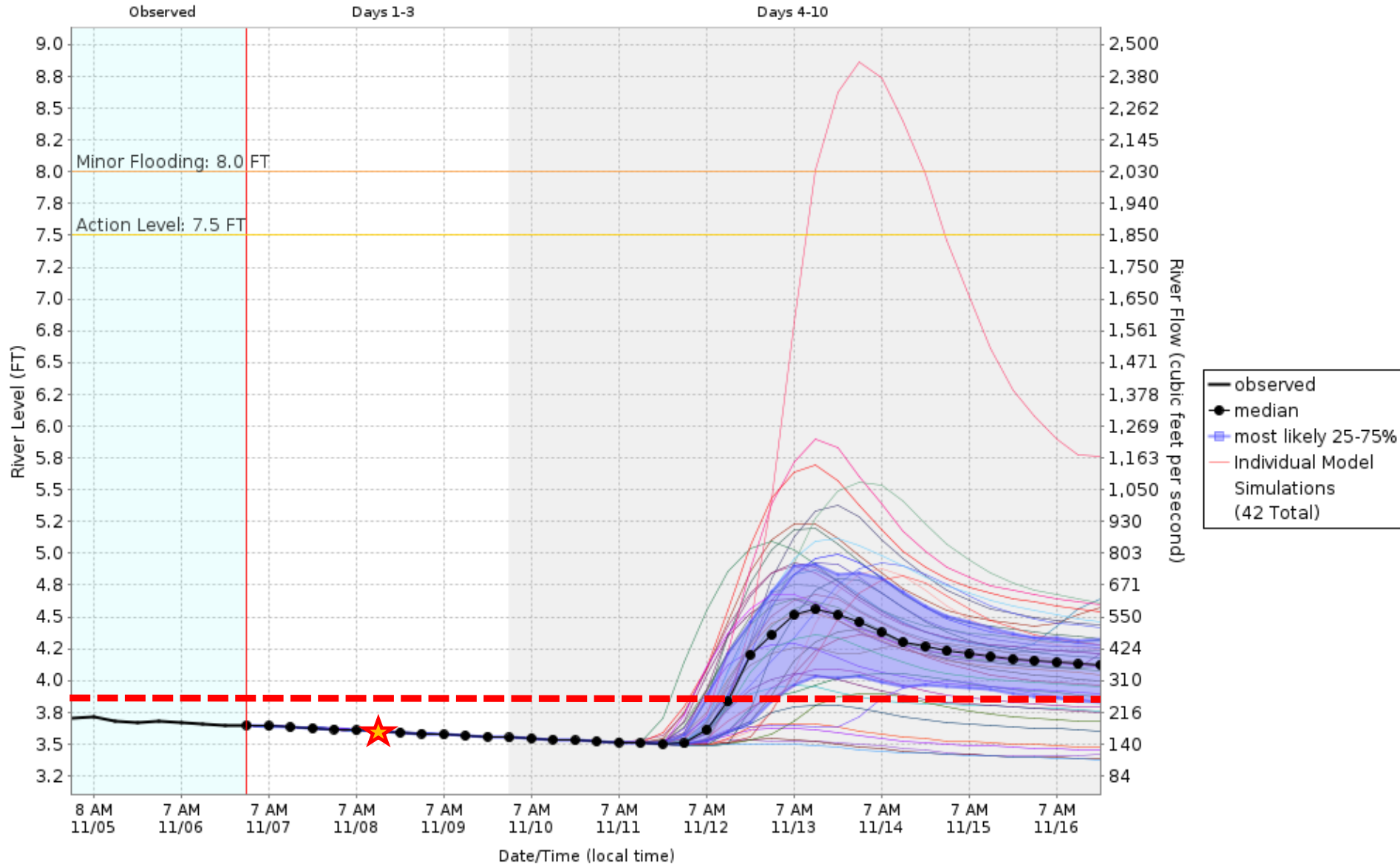


- Significant rises are likely this weekend. The higher of the outlier rainfall solutions could produce flooding if they verify.

NAEFS – BDGM3

Nov 07 - Nov 17, 2022

Taunton River at Bridgewater, MA (BDGM3)



- Below normal flows will likely spike above median right into next week.

CONCLUSIONS

- River flows have deteriorated over the past month across most of the Commonwealth compared to normal. The largest decreases were across southeast Massachusetts and over portions of the Connecticut River Valley.
- Significant rainfall is forecast to take most flows at or above the median monthly level by early next week. If deep tropical moisture from Sub-Tropical Storm Nicole becomes involved...some smaller watersheds could be at risk for flooding.

weather.gov/nerfc