



MASSACHUSETTS RIVER OVERVIEW



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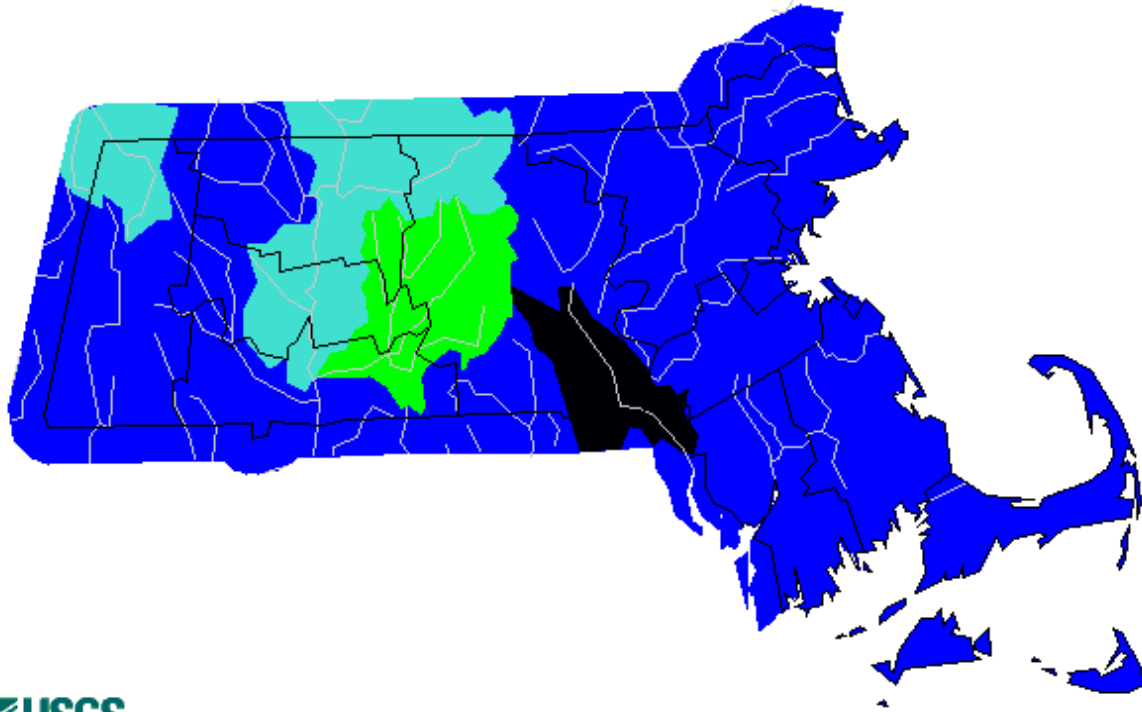
8 June 2023

OUTLINE

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

MASSACHUSETTS RIVER FLOWS

Monday, May 01, 2023



Wednesday, June 07, 2023 10:30ET



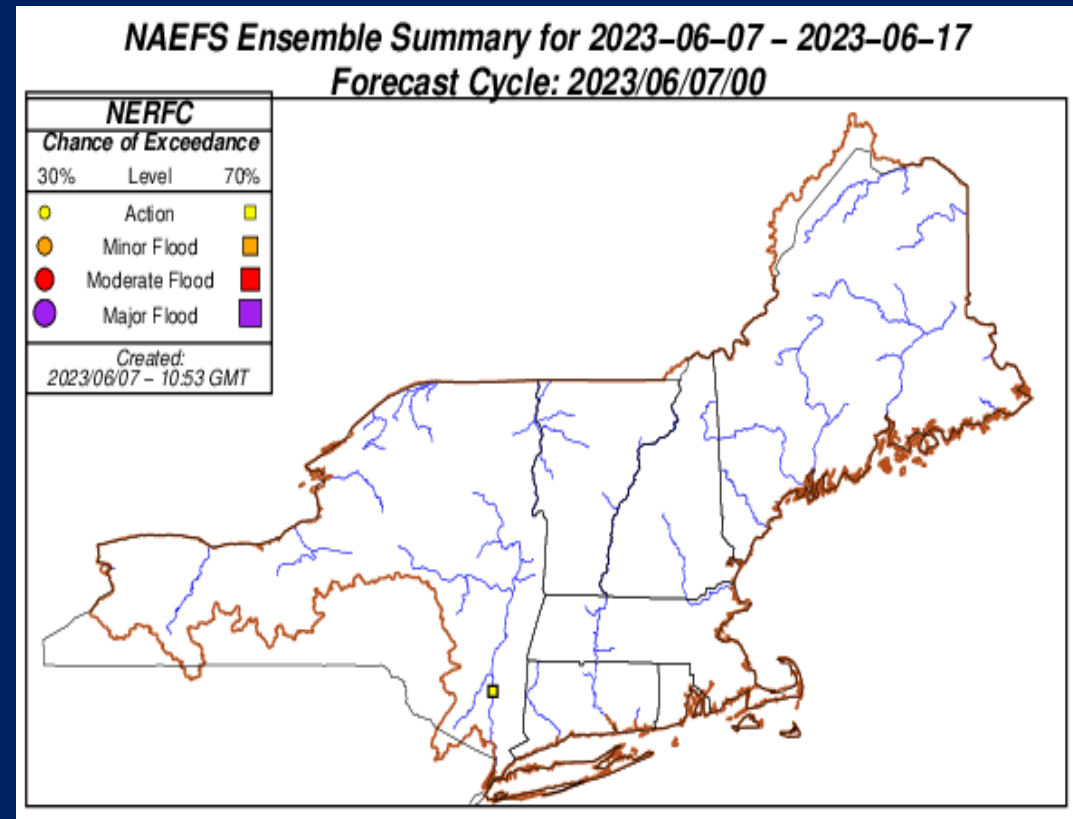
Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

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Over the past month...there has been a sharp and steady decline in streamflow across the Commonwealth. Areas from greater Boston north into Essex County have fared best.

NAEFS ENSEMBLE RIVER FORECAST OUTLOOK

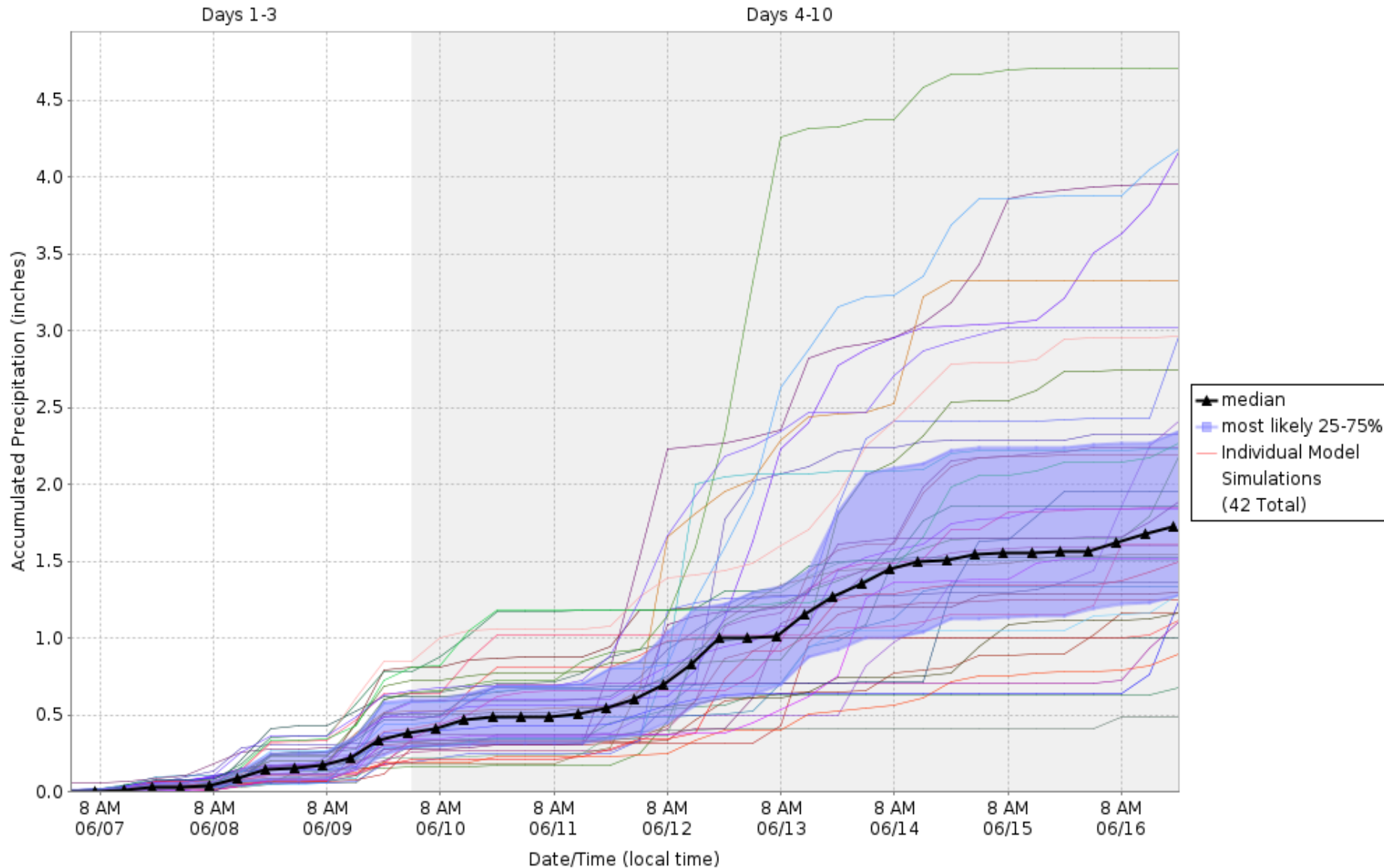
- A 42 member ensemble run for all NERFC forecast points to give us an idea of the possible range of river flows out 10 days.
 - Basically 42 slightly different initial conditions in the weather models lead to 42 different river forecasts based on rainfall and temperature.
- Will show results for...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



NAEFS PCPN – WILM3

Jun 07 - Jun 17, 2023

Hoosic River at Williamstown, MA (WILM3)



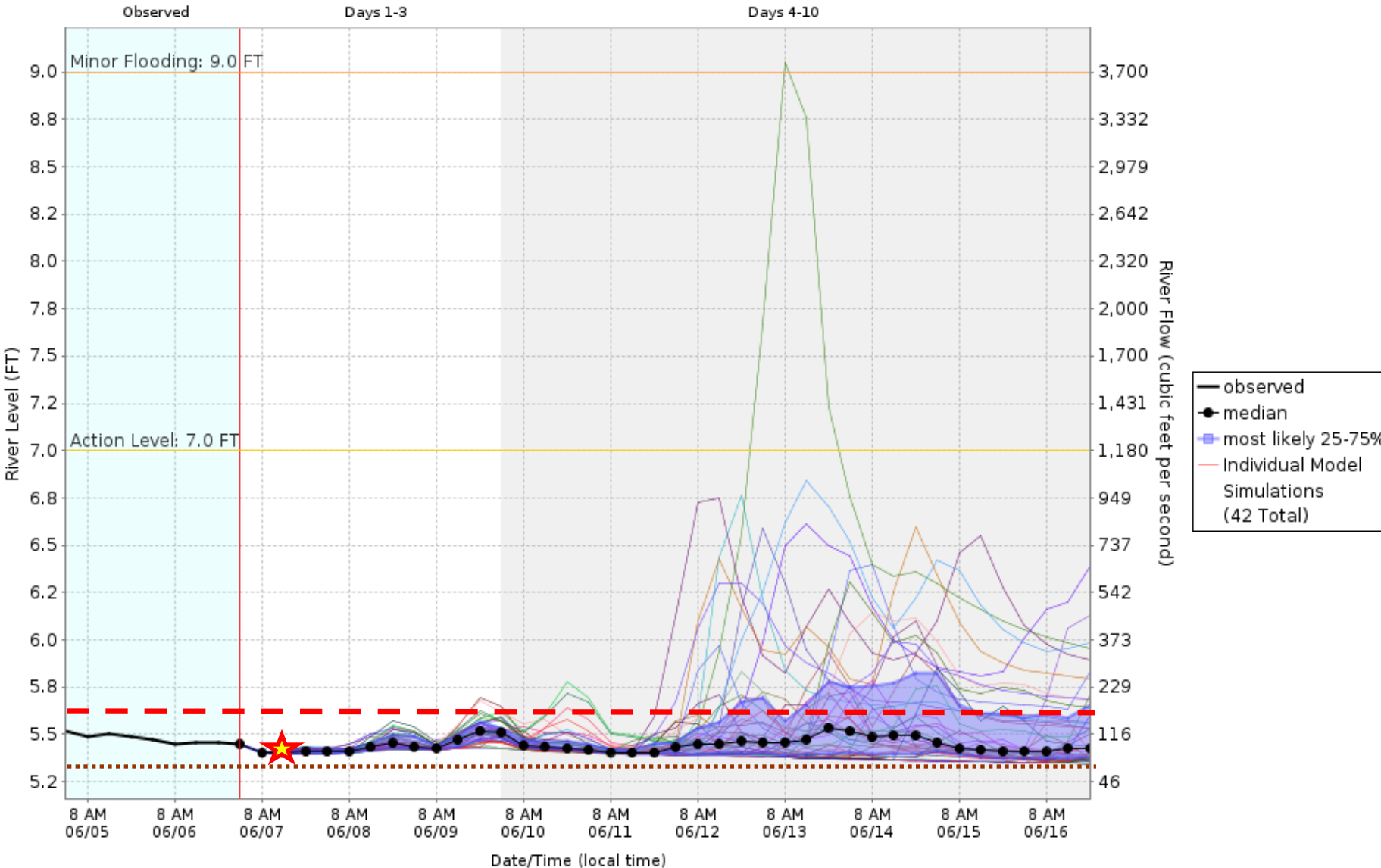
Over the next 10 days...median forecast rainfall is pretty generous at around 1.50 inches.

Decreasing confidence after 11 June (individual traces start to deviate significantly from the median).

NAEFS – WILM3

Jun 07 - Jun 17, 2023

Hoosic River at Williamstown, MA (WILM3)



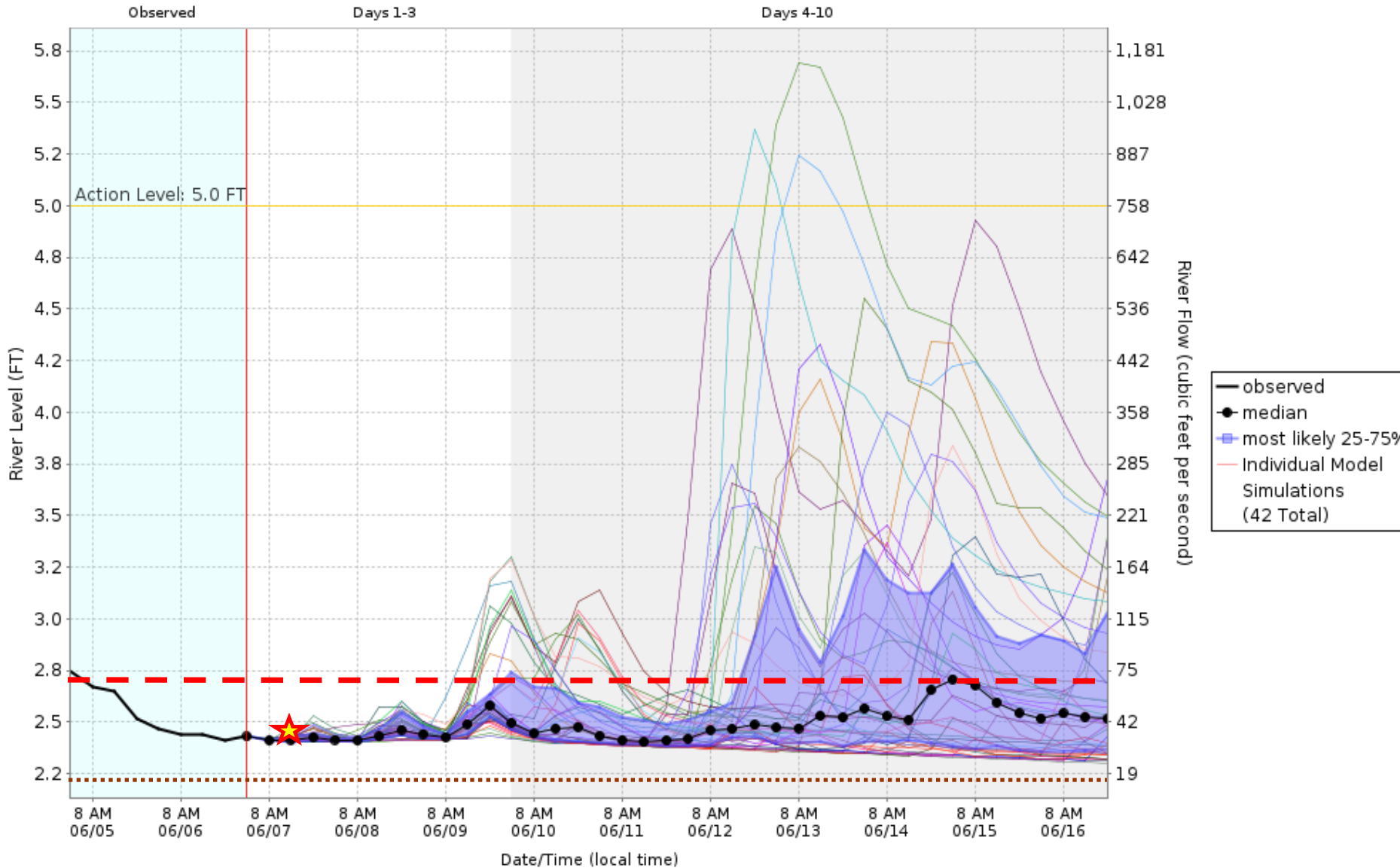
Flows are expected to remain below median early June levels (red dashed line) over the next 10 days but could rise above that at times next week.

There are no indications of flows dropping below record early June lows (brown dashed line).

NAEFS – FBGM3

Jun 07 - Jun 17, 2023

North Nashua River at Fitchburg, MA (FBGM3)

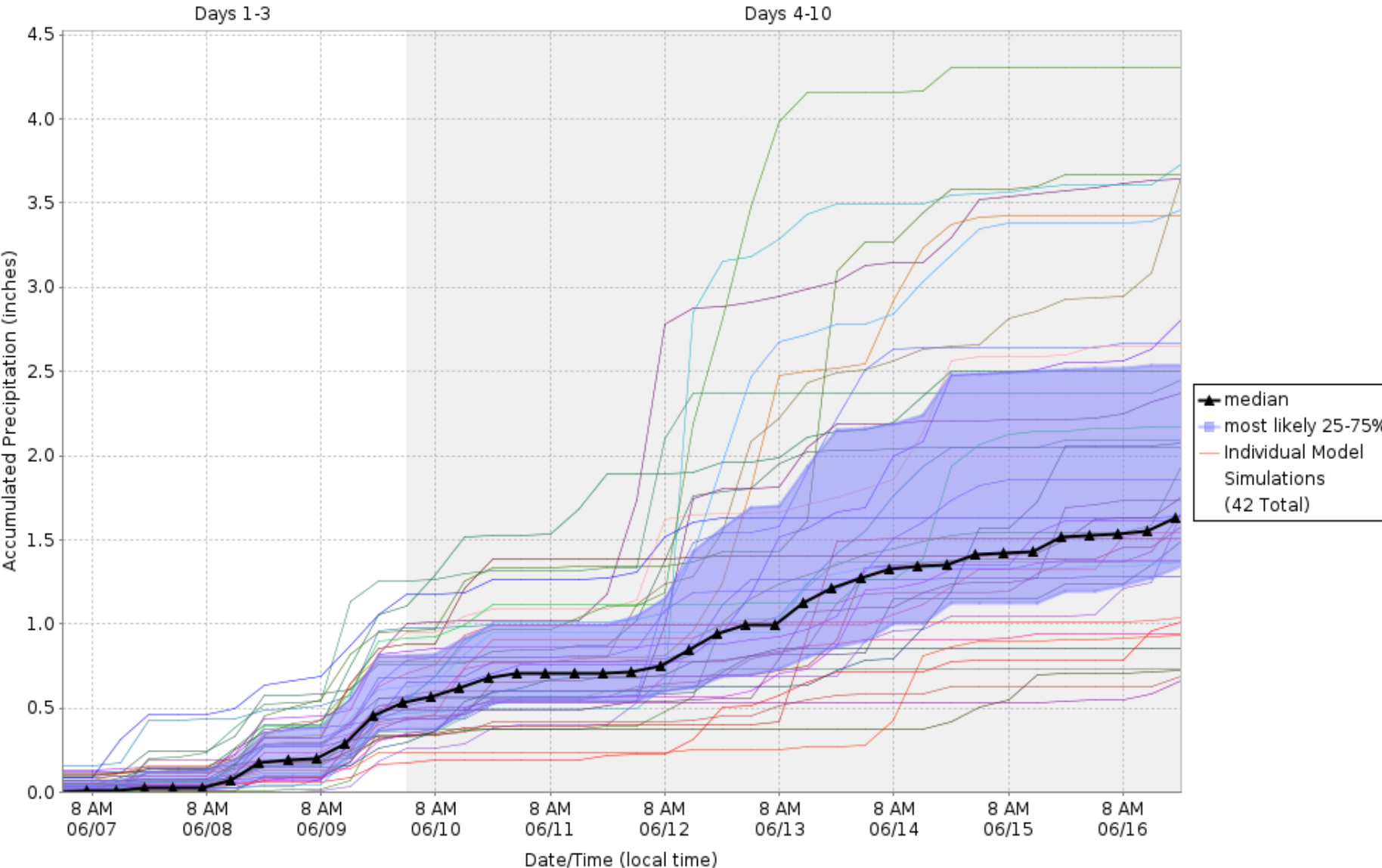


Flows are likely to hold relatively steady or rise slightly over the next 10 days. Again...next week there is a decent chance for rises above median levels.

NAEFS PCPN – DOVM3

Jun 07 - Jun 17, 2023

Charles River at Dover, MA (DOVM3)

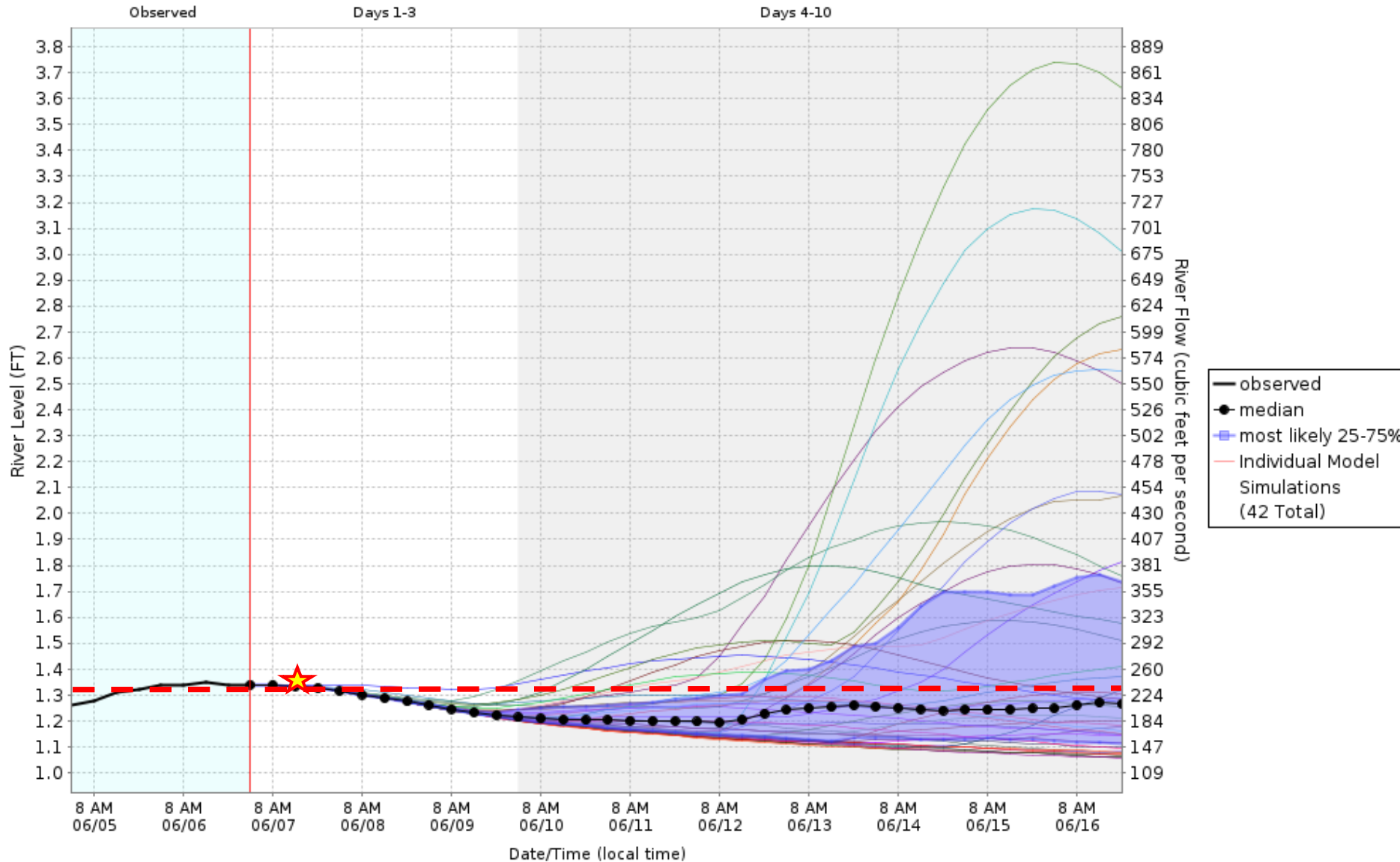


- A very similar rainfall forecast compared to western Massachusetts with a bit more uncertainty in the near term. 10 day median totals are close to 1.50 inches.

NAEFS – DOVM3

Jun 07 - Jun 17, 2023

Charles River at Dover, MA (DOVM3)



- Flows on the Charles River are starting close to the early June median and are forecast to remain relatively steady over the next 10 days.
- The minimum flow levels at this site are below the bottom of the graph.

CONCLUSIONS

- River flows have deteriorated over the past month across most of the Commonwealth. The lowest flows are currently occurring across central and western Massachusetts (especially Berkshire County) where they are now below to much below normal.
- The weather pattern looks fairly active for June with several chances for rainfall over the next 10 days. As a result...the NERFC river forecast ensembles call for rivers and streams to be close to or above current levels as we head into the latter ½ of June.

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