MASSACHUSETTS RIVER OVERVIEW

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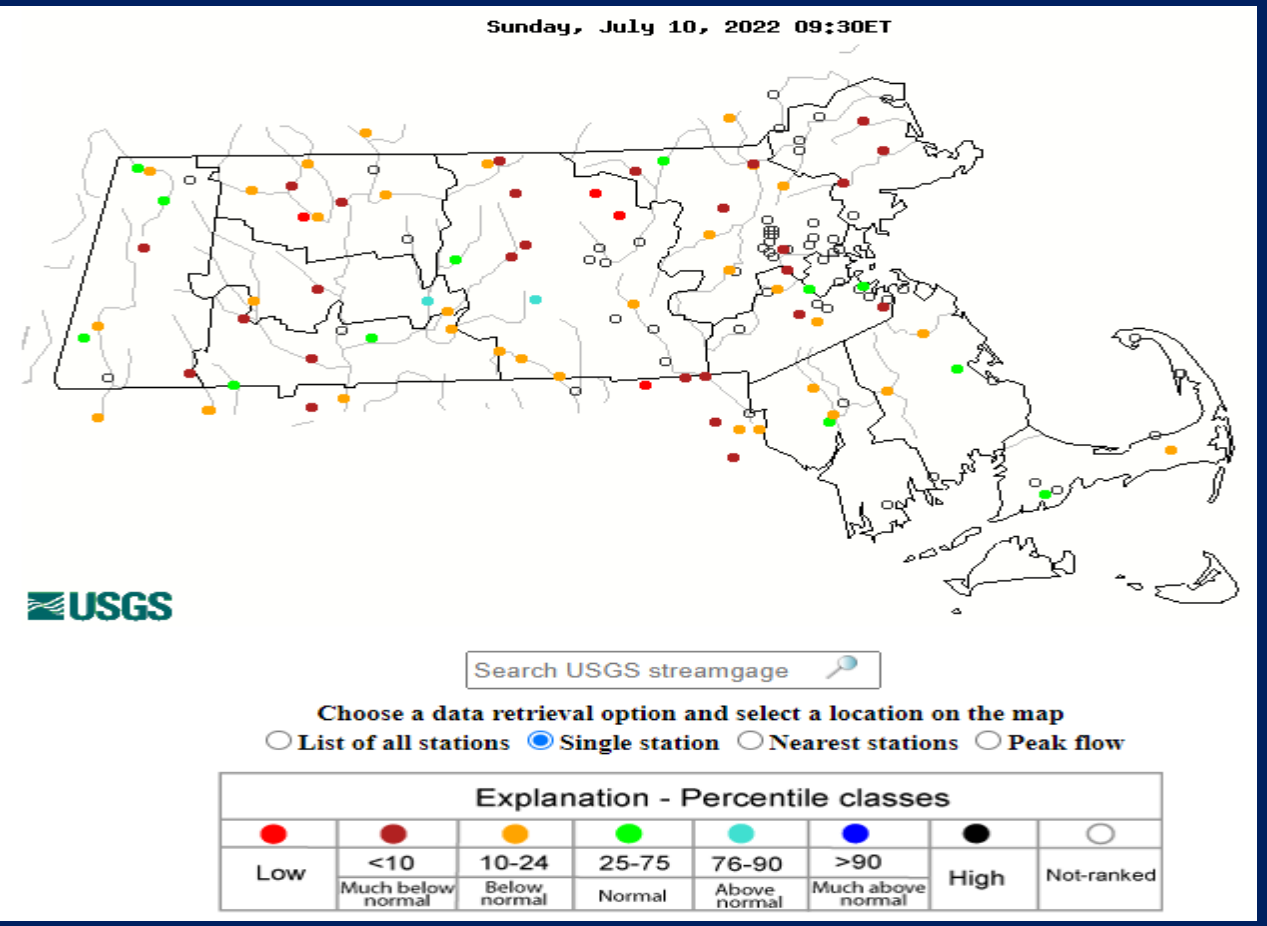
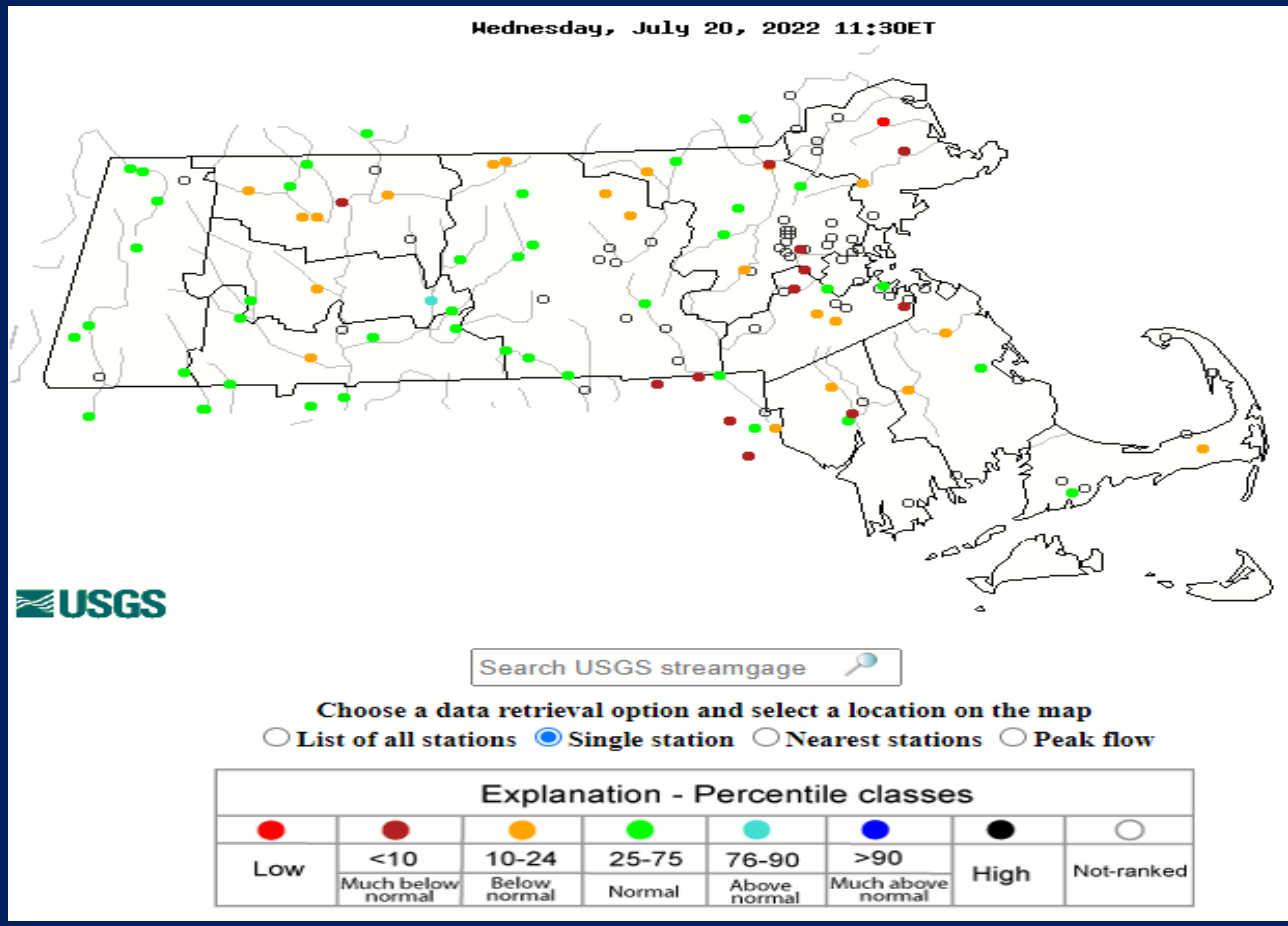
OUTLINE

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

MASSACHUSETTS RIVER FLOWS



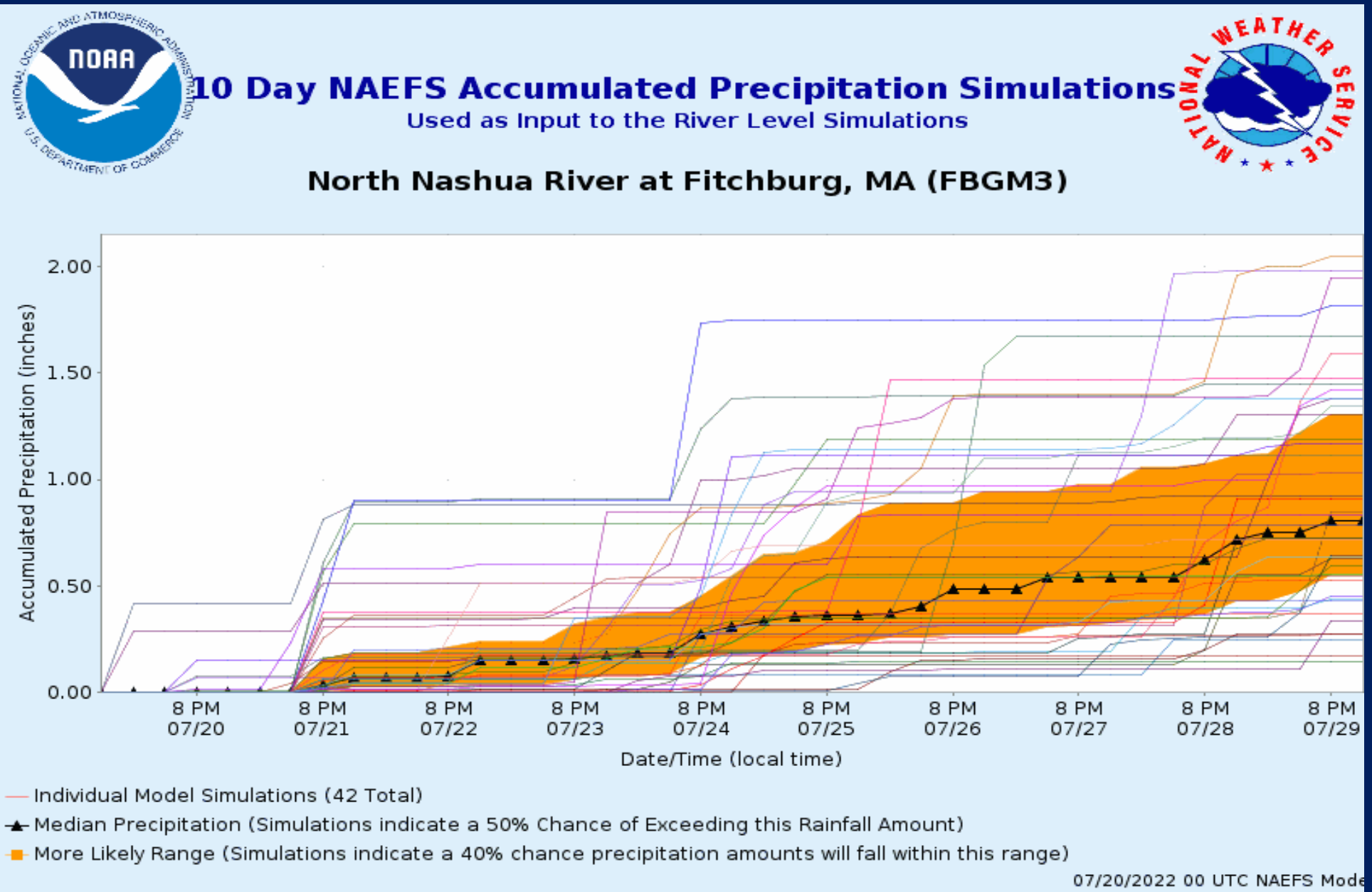


Showers and thunderstorms brought some short term flow relief to central and western Massachusetts. Coastal eastern Massachusetts including Cape Cod and the Islands have largely missed out on the rain.

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…
  - North Nashua River at Fitchburg (FBGM3)
  - Squannacook River at West Groton (WGTM3)
  - Shawsheen River at Wilmington (WLMM3)
  - Charles River at Dover (DOVM3)

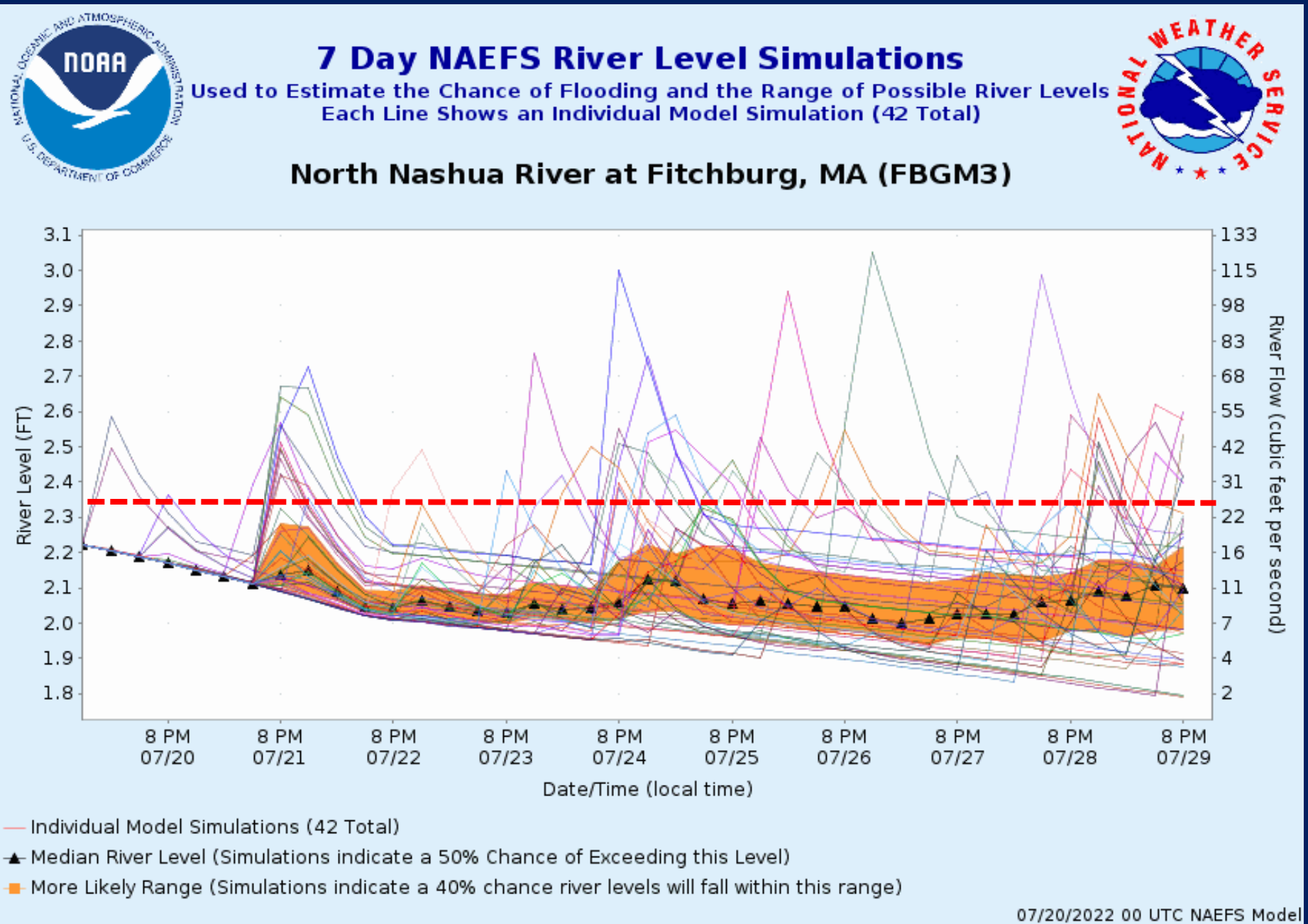
NAEFS – FBGM3



Rainfall forecasts are clustered in the 0.50 – 1.25 inch range over the next 10 days.

No extreme solutions indicated.

NAEFS – FBGM3

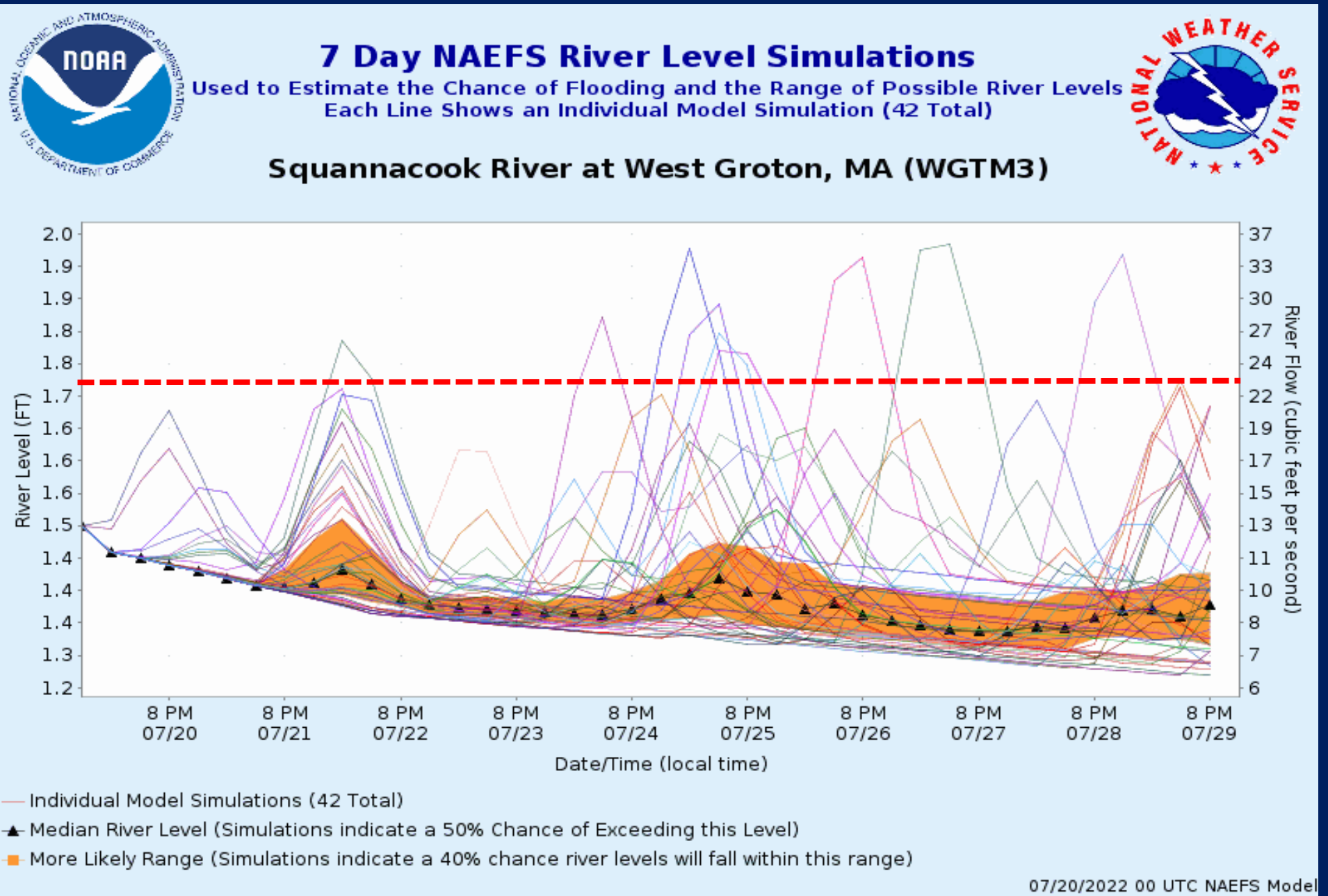


Most solutions agree that flow will not change much over the next 10 days…perhaps decreasing slightly from current levels.

Quick spikes above the median (dashed red line) are possible with thunderstorms.

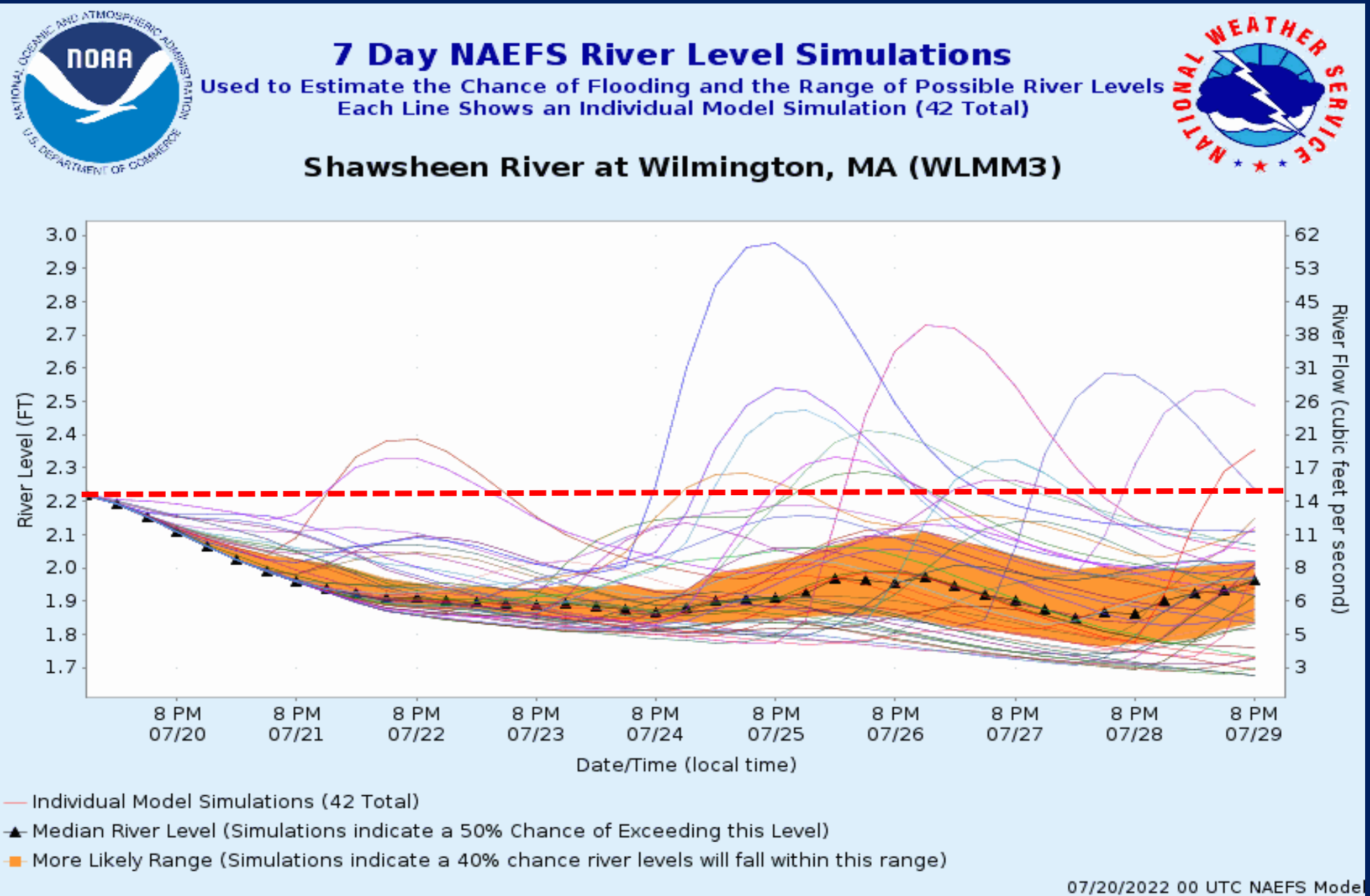
Flows have improved at this site over the last 10 days.

NAEFS – WGTM3



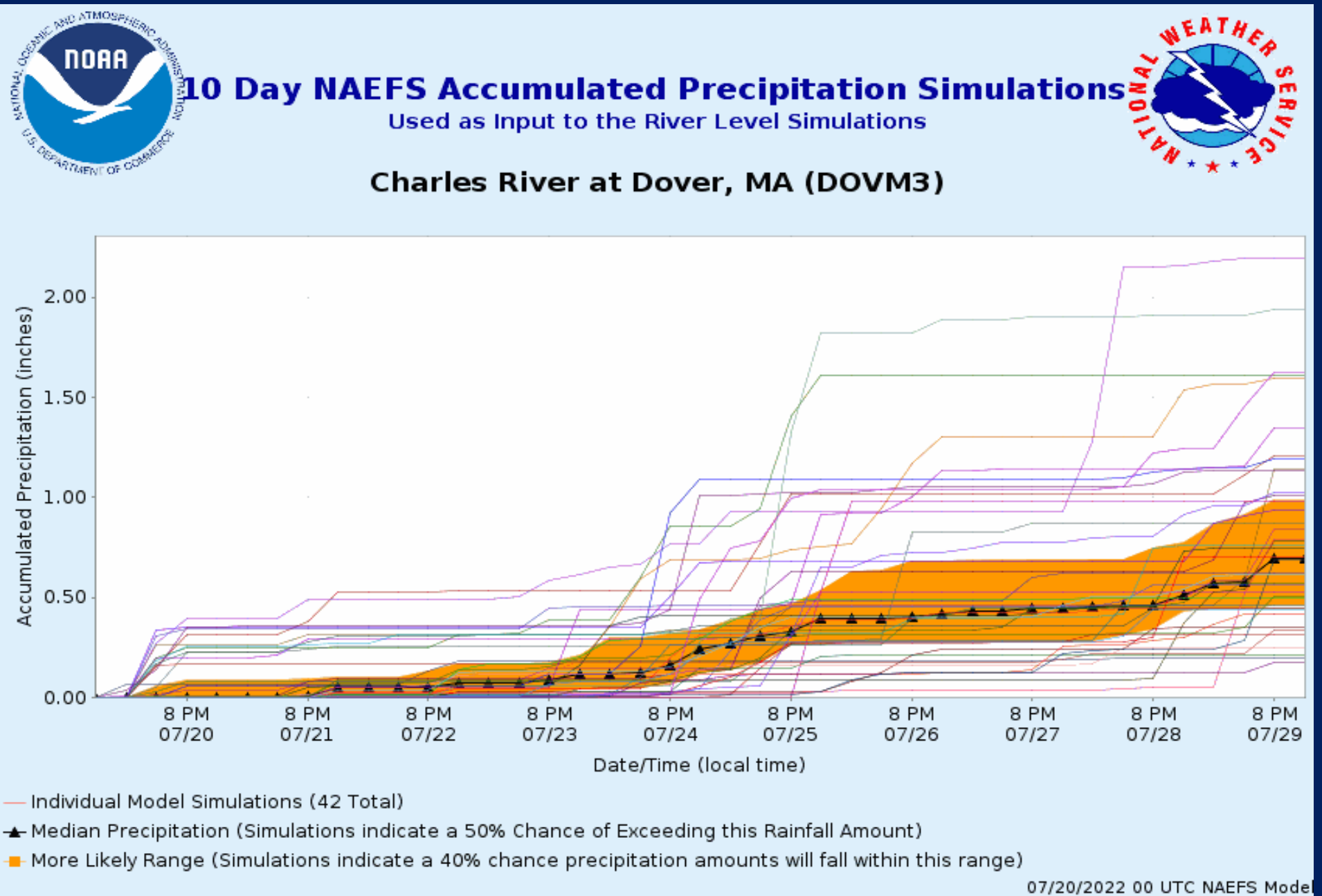
A slow but steady decrease in flows is expected over the next 10 days with very little chance of reaching the median for this time of year.

NAEFS-WLMM3



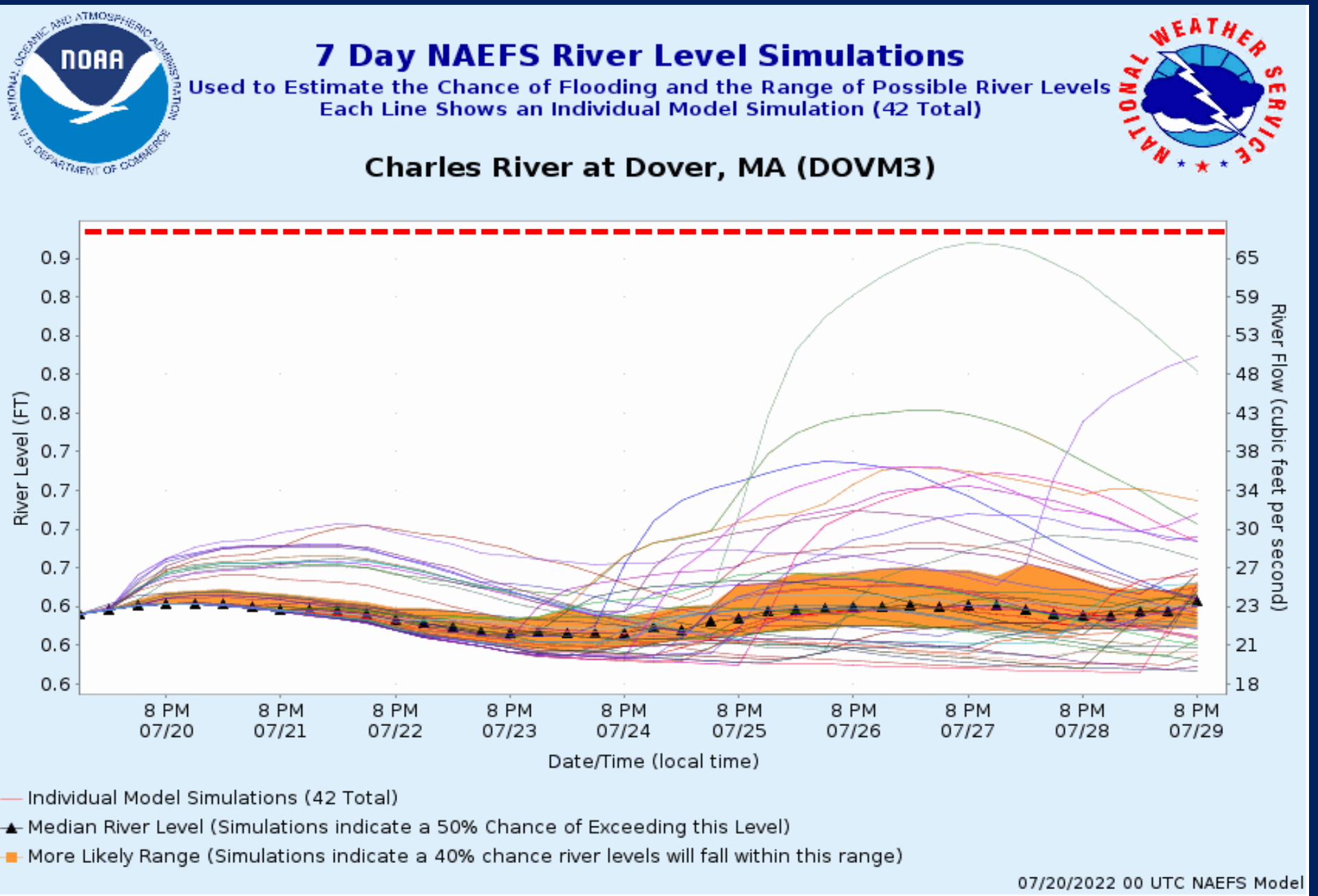
- Flows in 10 days are likely to be lower than their current levels.
- Very little overall spread for a 10 day forecast.

NAEFS – DOVM3



- Rainfall is forecast to be less here than across central Massachusetts over the next 10 days with most likely values under an inch. This is below normal for July.

NAEFS – DOVM3



- Very low flows likely to continue on the Charles over the next 10 days. This is currently among the worst looking basins in Massachusetts forecast by the NERFC.

TAKEAWAYS

- River flows across central and western Massachusetts increased a bit over the last 10 days due to recent showers and thunderstorms.
- The lowest flows are now found in eastern Massachusetts.
  - Parker River at Byfield at record low levels for 20 July (76 years of record).
- Rain chances overall are not that promising over the next 10 days.
  - Best chance for thunderstorms over central and western Massachusetts.
  - Lowest chance for in southeastern Massachusetts.
- NERFC ensemble river forecasts call for steady or slowly falling river levels through the end of July.

weather.gov/nerfc