

NEW

# Drought Task Force Briefing

For Massachusetts

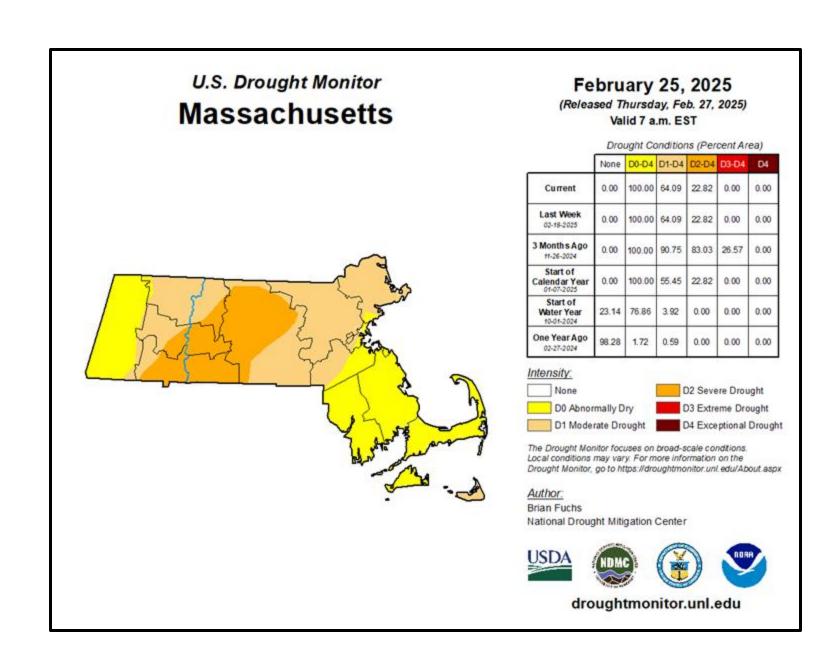
### **Decision Support Briefing**

→ As of March 6, 2025

### **Important Updates**

An increase in streamflows in February across most of the state.

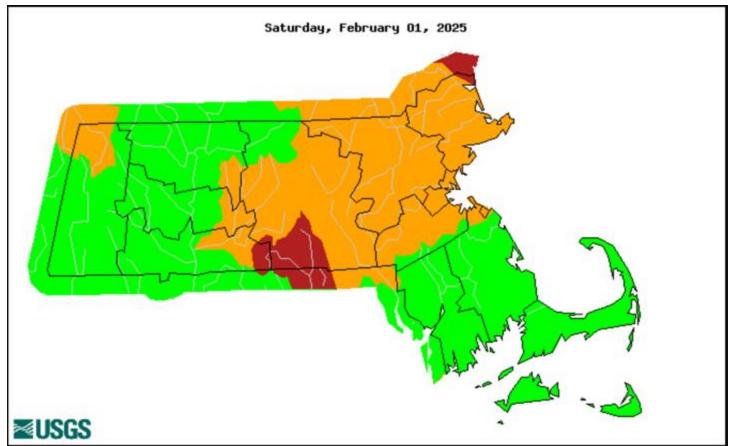
- → Below to near normal snow water equivalents (SWE) observed.
- → Little change in drought conditions since last weekly update.
- → Active weather pattern continues.



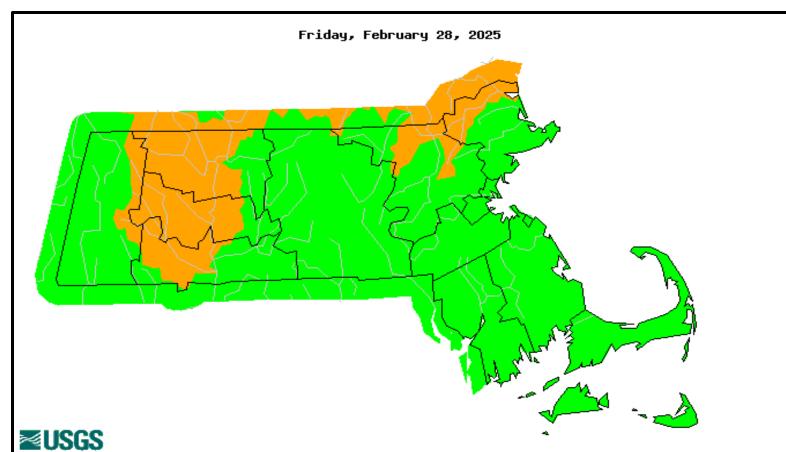


# Since Our Last Briefing

• Feb 1st to 28th: Streamflows increased across central and northeastern portions of the state, and decreased some along the Connecticut River Valley.



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



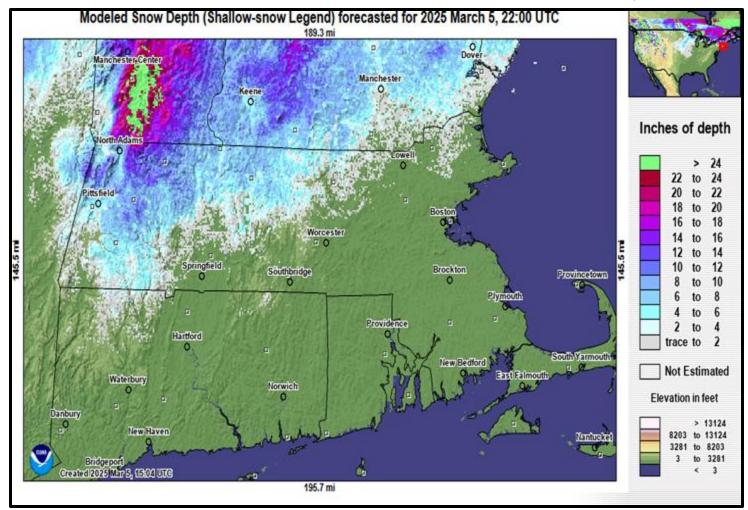
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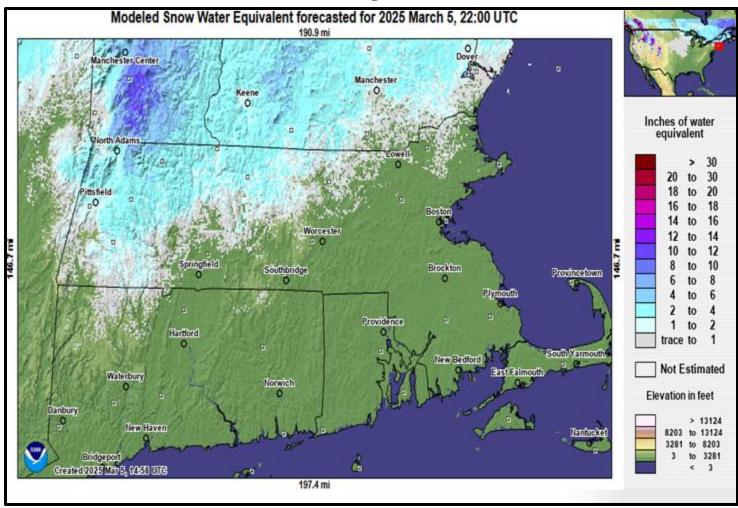




# **Current Snow Status**

- Snow cover was most prevalent March 5th across central and western portions of the state for groundwater recharge.
- Snow depths varied from 6 to 10+ inches over the high terrain of western Massachusetts and northern Worcester County and NIL to 5 inches across lower terrain areas. Greatest snow depth and snow water values: northern Berkshire and western Franklin counties.
- Snow water values were below normal to near normal, under 1.00"-2.50" lower terrain, 3.00"-5.50" high terrain.





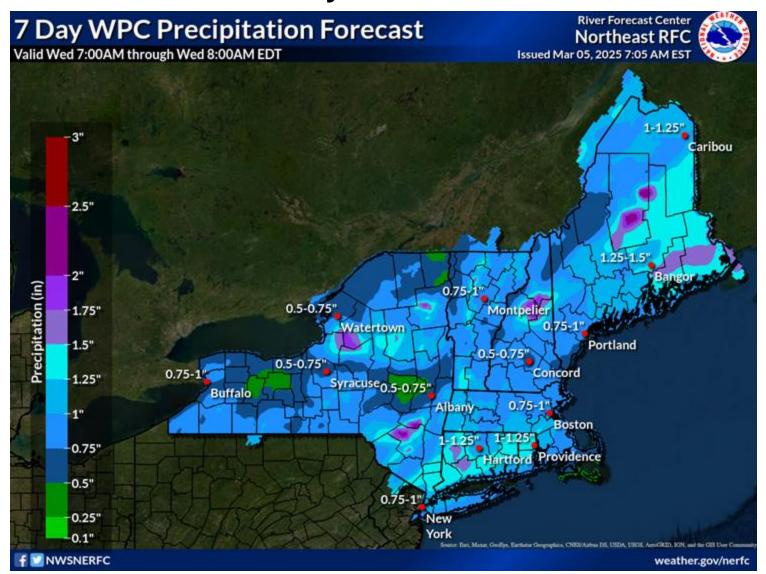


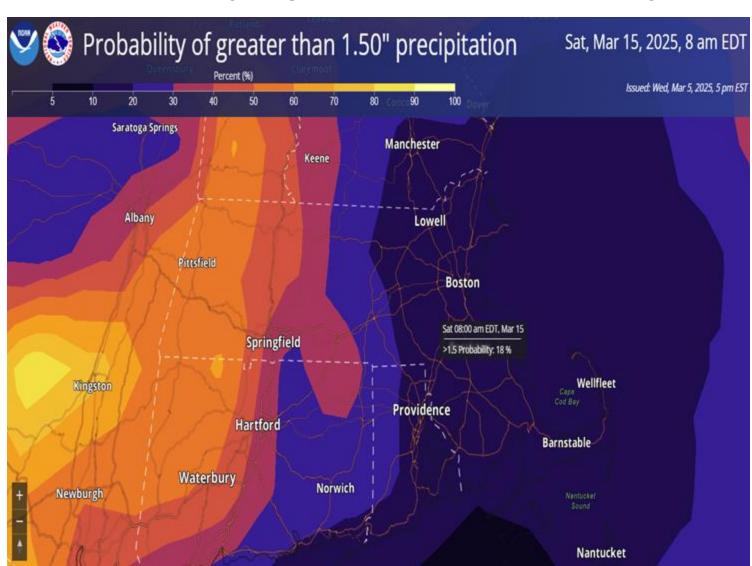


# Future Precipitation Forecast & Probabilities

### 7 Day QPF Forecast

#### Probability of greater than 1.50" next 10 days



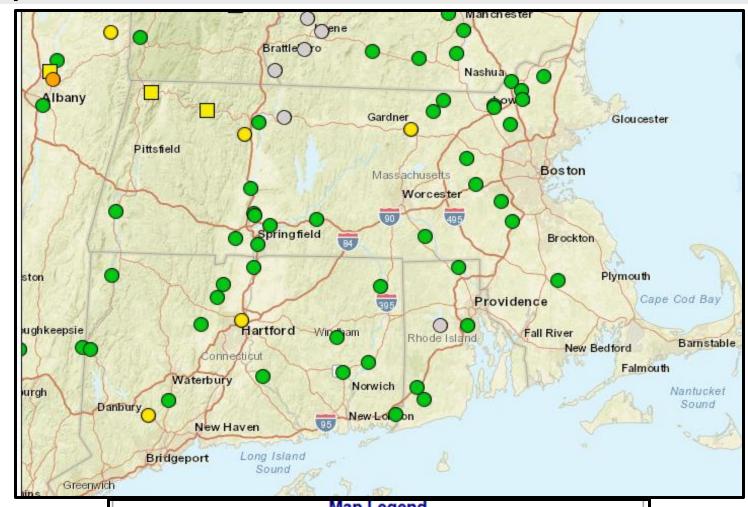




## Latest River Forecasts

Action level river rises forecast across northern portions of the Commonwealth.

- A 52 member ensemble run of the NAEFS for all NERFC forecast points to give us an idea of the possible range of river flows out 10 days.
- Will show results for...
  - North Nashua River at Fitchburg (FBGM3)
  - Westfield River at Westfield (WSFM3)



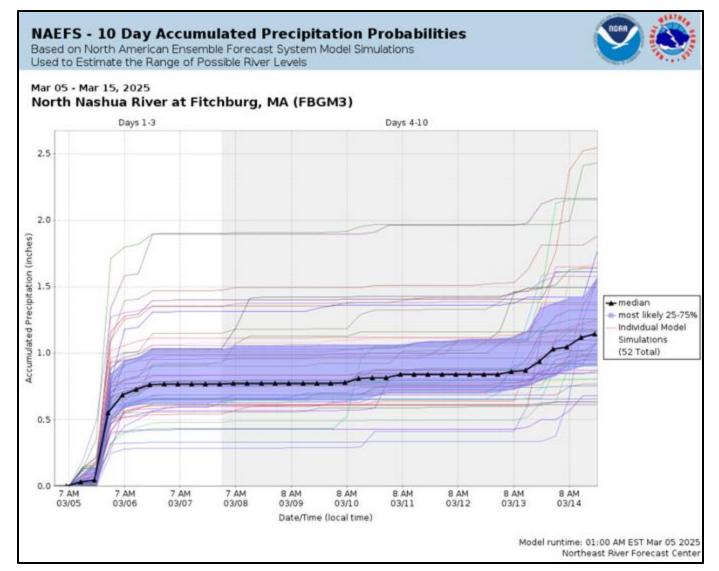


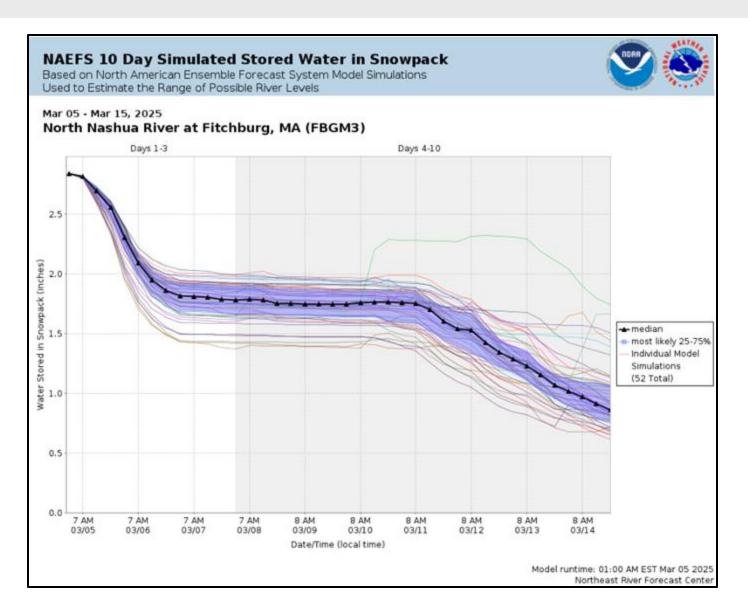




# NAEFS Precipitation & Simulated Snow Water

#### North Nashua River at Fitchburg (FBGM3)





- Forecast precipitation totals including the most recent event most likely 0.50" to 1.00" near term, 0.25" to 0.50" longer term through March 14th.
- Snowmelt contribution most likely forecast values around 1.00" near term and another 1.00" longer term through March 14th.

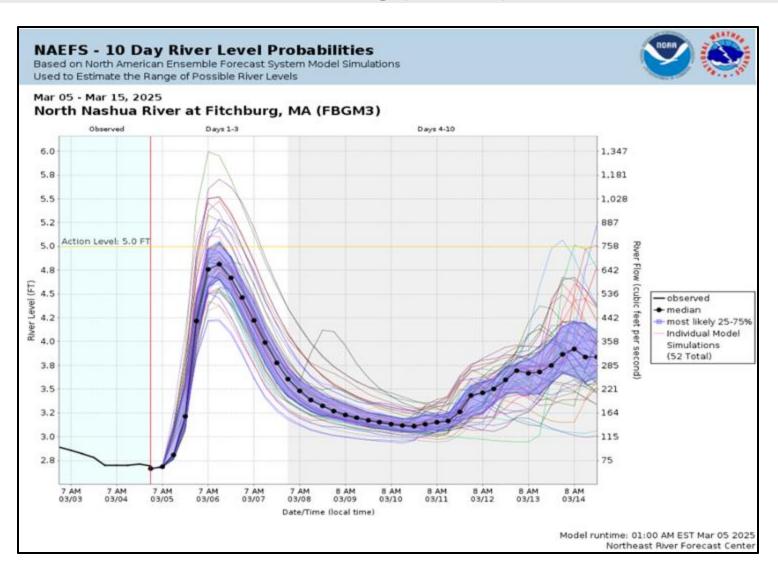


National Weather Service Northeast River Forecast Center



### NAEFS Simulated River Flows

#### North Nashua River at Fitchburg (FBGM3)



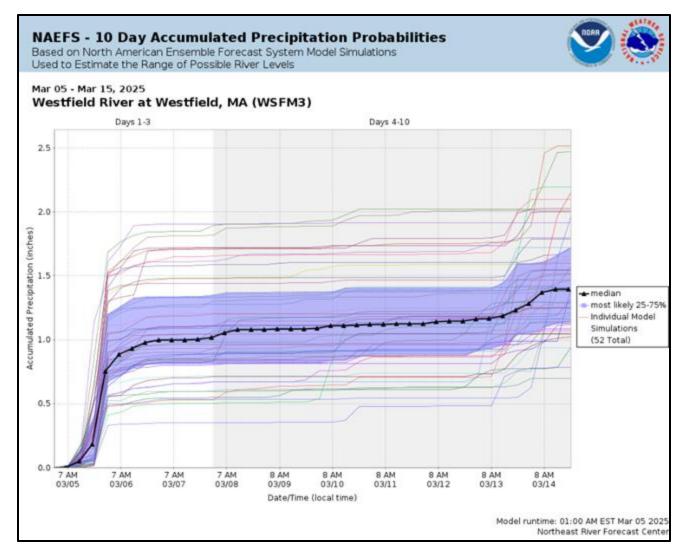
- Streamflows were below the 25th percentile range on March 5th.
- Streamflows increase above the median values near term, benefiting from snowmelt and rainfall, receding, then possibly rising again near to above median values around March 13-14th.

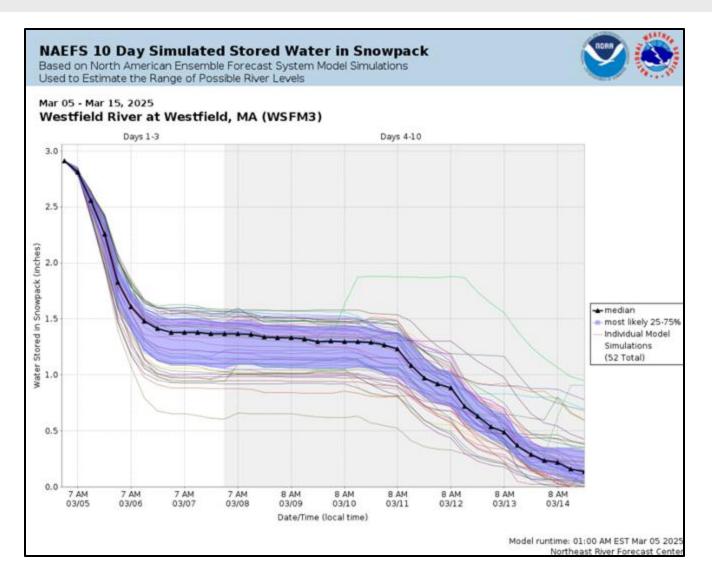




# NAEFS Precipitation & Simulated Snow Water

#### Westfield River near Westfield, Ma (WSFM3)





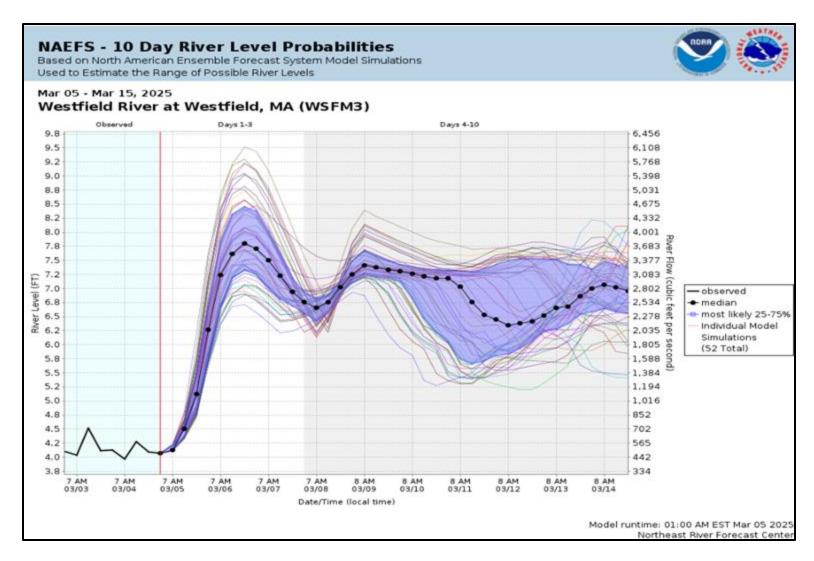
- Forecast precipitation totals including the most recent event most likely 0.75" to 1.25" near term, 0.25" to 0.50" longer term through March 14th.
- Snowmelt contribution most likely forecast values around 1.25-1.50" near term and another 1.00-1.25" longer term through March 14th.





### NAEFS Simulated River Flows

#### Westfield River at Westfield Ma (WSFM3)



- Streamflows were below the 25th percentile range on March 5th.
- Streamflows increase above the median values near term, benefiting from snowmelt and rainfall, receding some then possibly rising again near to above median values around March 13-14th.



### **Key Messages**

- During February...observed river flows have increased across most of the Commonwealth with the exception of decreasing flows noted in the Connecticut River Valley region. Streamflows were ranging from below normal to near normal.
- Snow water and snow depth values were below normal across most of the state at the end of February except closer to normal across far northwestern Massachusetts.
- The weather pattern remains active but progressive over the next 10 days. Increasing streamflows due to combined snowmelt and precipitation runoff near term with the most notable rises across northwestern portions of the state. More gradual melt runoff is forecast longer term.
- No additional significant precipitation is currently forecast until perhaps March 13-14th. Thus after a brief increase in streamflows, nearly steady or decreasing streamflows are forecast to prevail approaching mid March.

