



## Decision Support Briefing #1

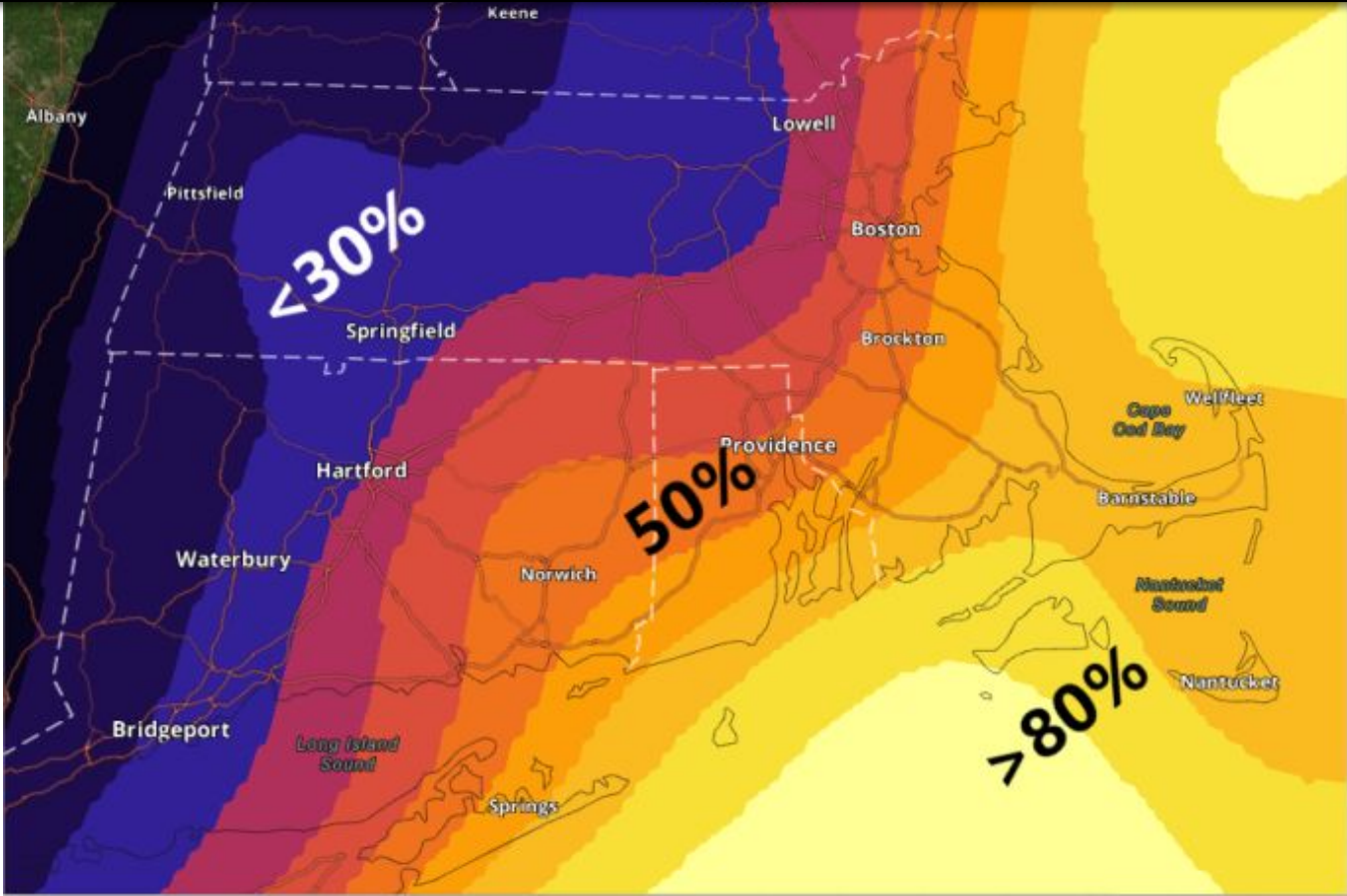
→ Friday December 15th 2023, 4PM

**NEW** Potential for:

- Strong to damaging winds
- Coastal Flooding
- Flooding Rain
- Hazardous Marine Travel

**Timing: Overnight Sunday and Monday**





## Probability of Wind Gusts Greater than 58 mph





# Key Points

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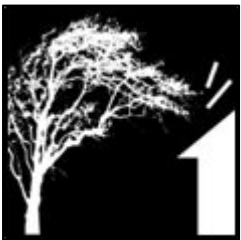
Hazard		Impacts	Location	Timing
<b>Damaging Wind</b>		Downed trees/power lines and power outages	RI/MA south coast, including Cape/Islands	Overnight Sunday into Monday
<b>Coastal Flooding</b>		Minor to moderate flooding coastal roads	Narragansett Bay, and RI/MA south coast	Monday noon high tide
<b>Flooding Rain</b>		Significant street flooding & Minor/moderate river/stream flooding	West of I-95 corridor, especially CT into adjacent MA	Overnight Sunday into Monday
<b>Hazardous Winds/Seas</b>		Dangerous sea conditions for vessels	MA and RI waters	Sunday evening through Monday night





# Summary of Greatest Impacts

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<b><u>Wind:</u></b>	All of southern New England, especially coast				
None	Limited	Elevated	Significant	Extreme	



<b><u>Coastal Flooding:</u></b>	<b>South Coastal MA and RI</b>				
<b>None</b>	<b>Limited</b>	<b>Elevated</b>	<b>Significant</b>	<b>Extreme</b>	



<b><u>Flooding Rain:</u></b>	<b>CT and western MA</b>				
<b>None</b>	<b>Limited</b>	<b>Elevated</b>	<b>Significant</b>	<b>Extreme</b>	



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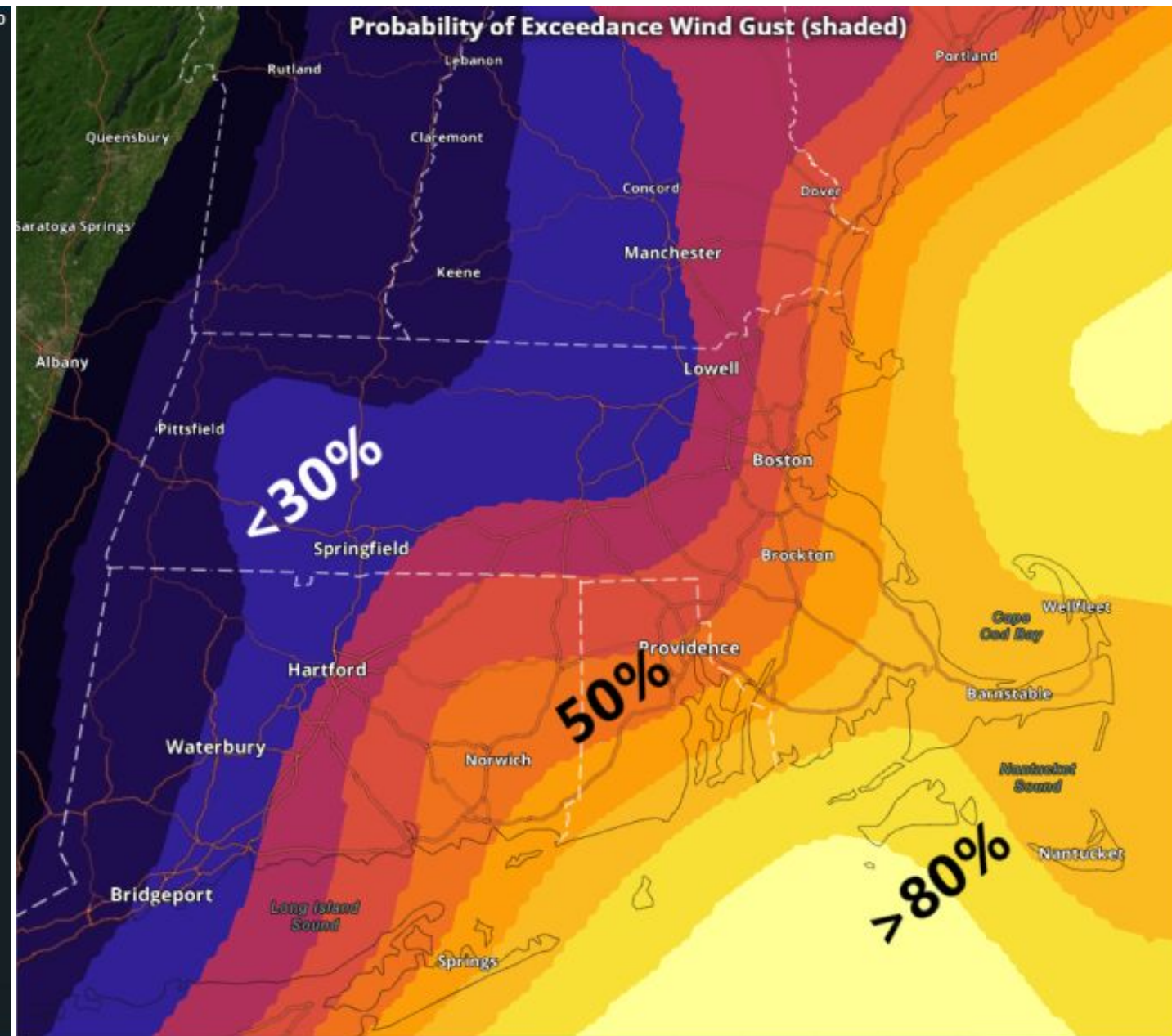
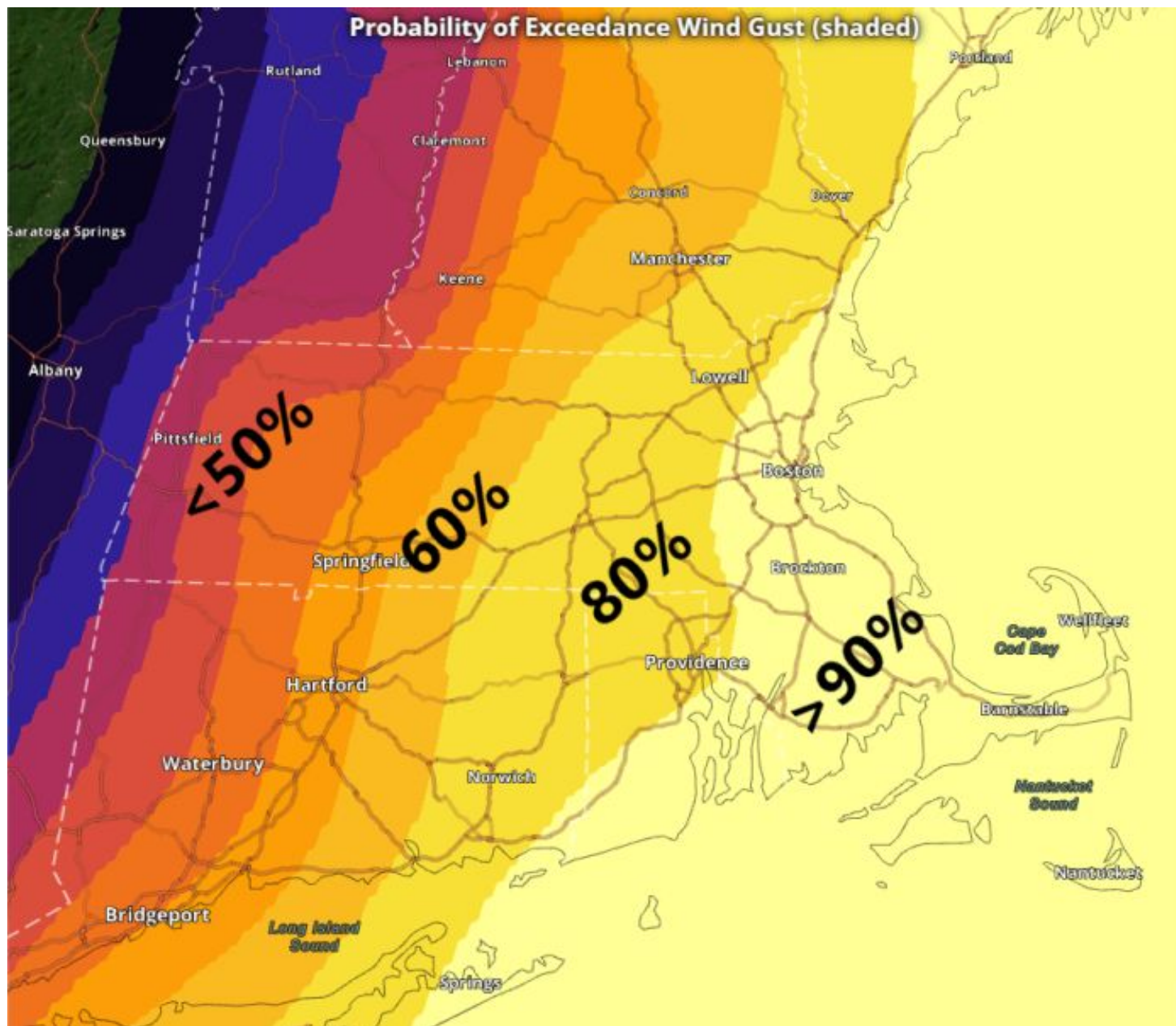
# Wind Probabilities

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Wind Advisory: 46 MPH

High Wind Warning: 58 MPH



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Atmospheric Administration  
U.S. Department of Commerce

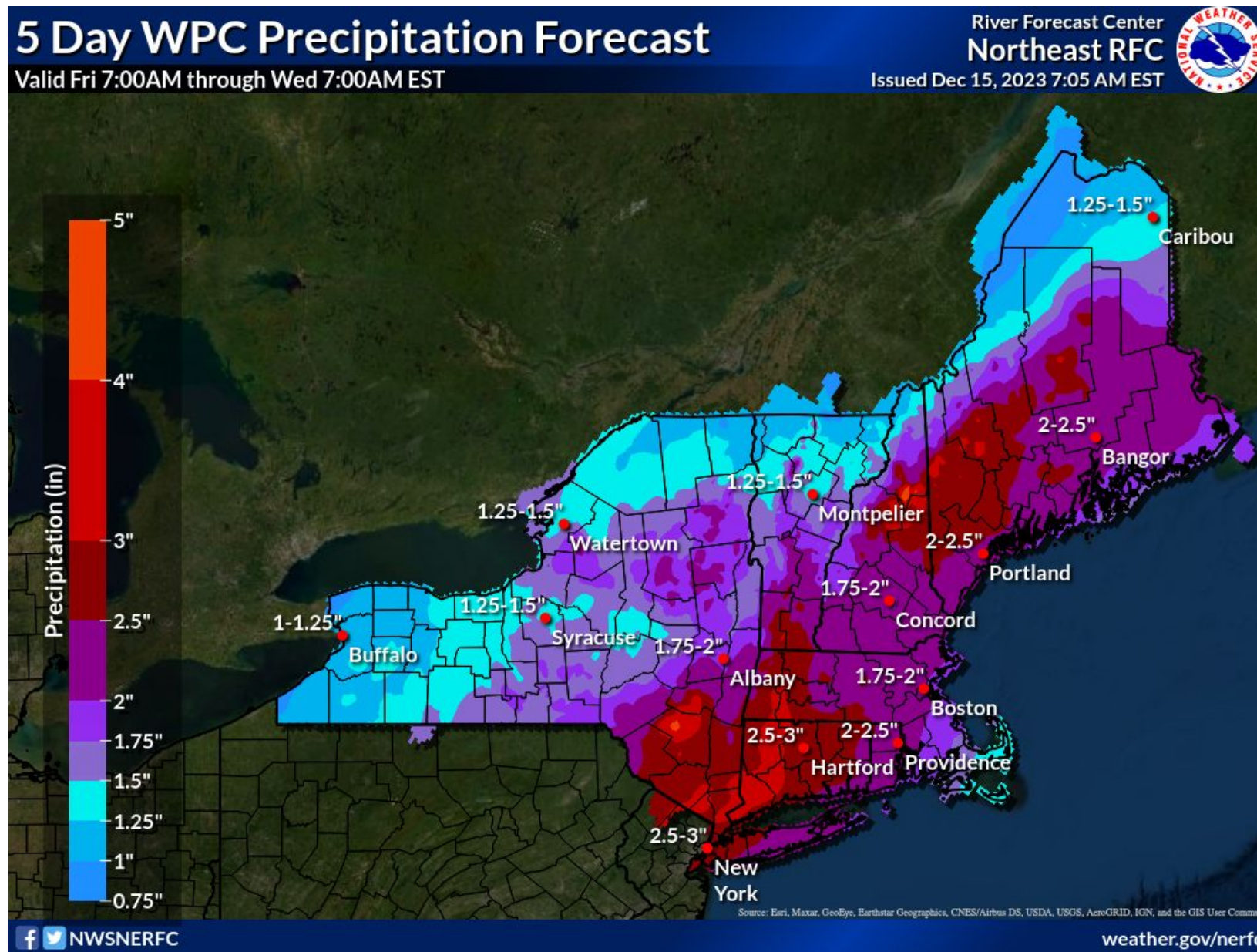
National Weather Service  
Boston / Norton, MA





# Anticipated Rain Totals

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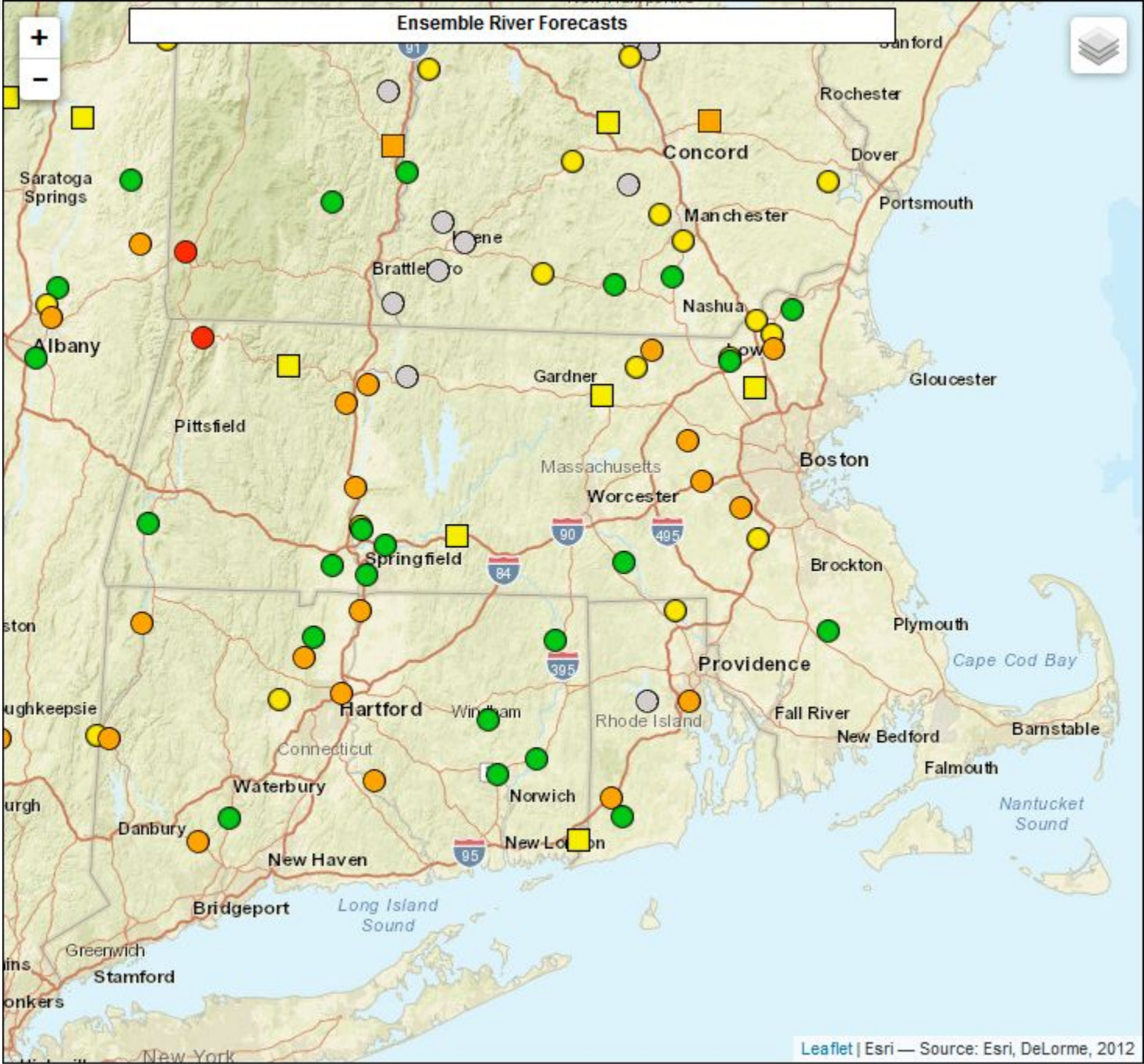
National Weather Service  
Boston / Norton, MA





# River Flood Outlook

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- Minor river flooding is possible
- Extent and level of flooding is highly dependent on rainfall amounts
- Still uncertainty regarding highest rainfall totals

(Orange circles = 30% chance)

*Extent and level of flooding is dependent upon rainfall amounts*

Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		
= no critical levels defined for this point		



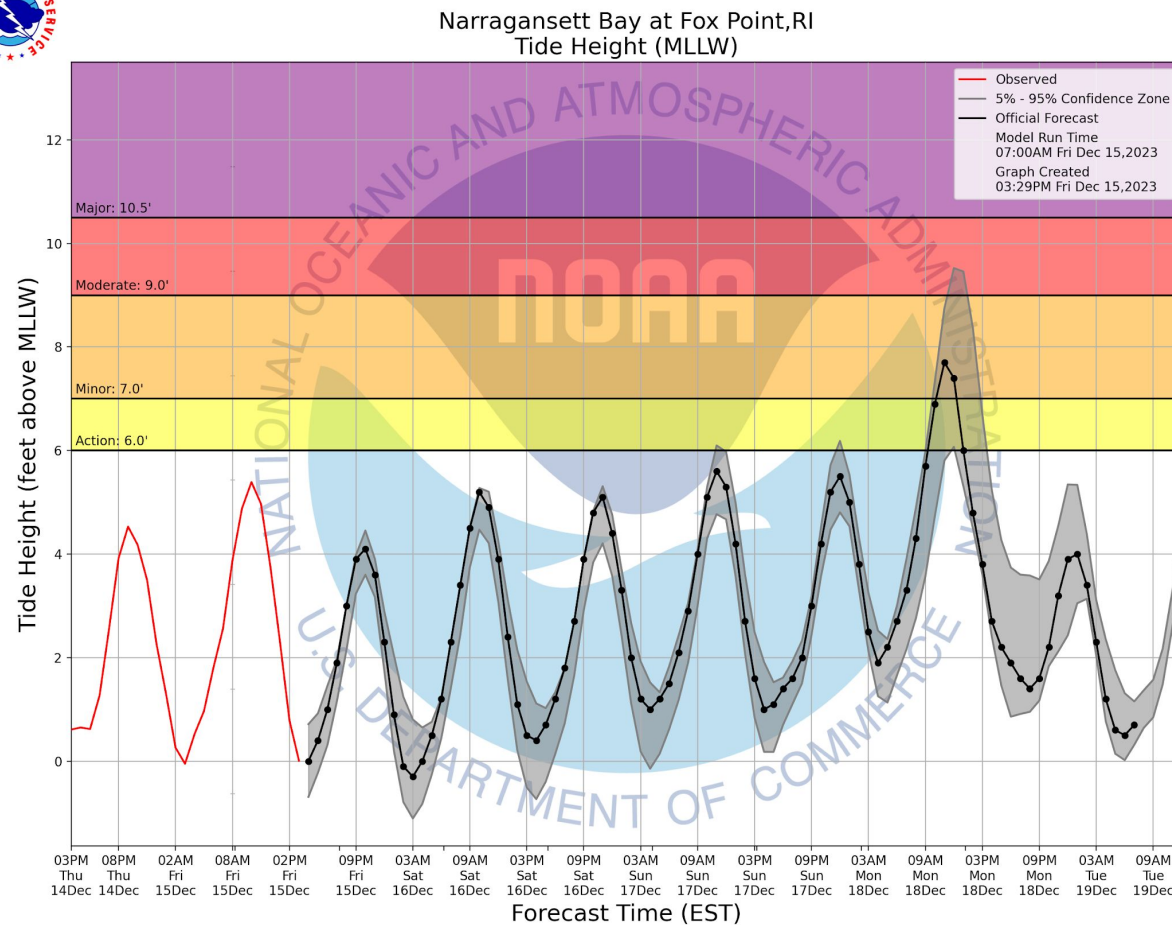




# Coastal Flooding

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## Total Water Level Forecast: Providence



- Minor to moderate flooding most likely during the Monday noon high tide for areas adjacent to Narragansett Bay
- Lower risk of very minor flooding along the rest of RI/MA south and east coasts



*Minor*

*Moderate*

**Minor:** flooding less than one foot deep

**Moderate:** flooding 1 to 2 feet deep



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National Weather Service  
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# Coastal Flood Forecast

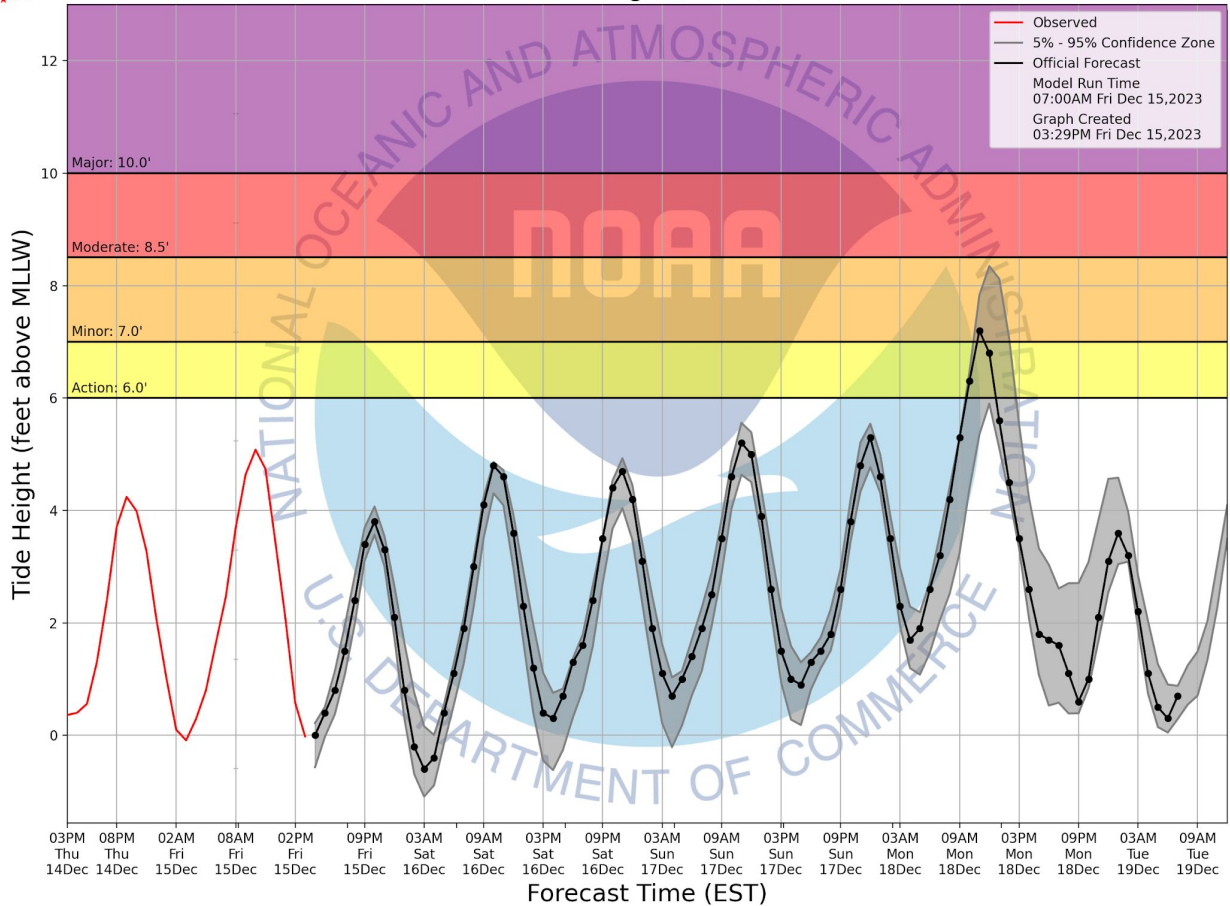
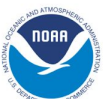
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Increased Threat for Minor to Moderate Coastal Flooding for Coastal RI and Southern MA

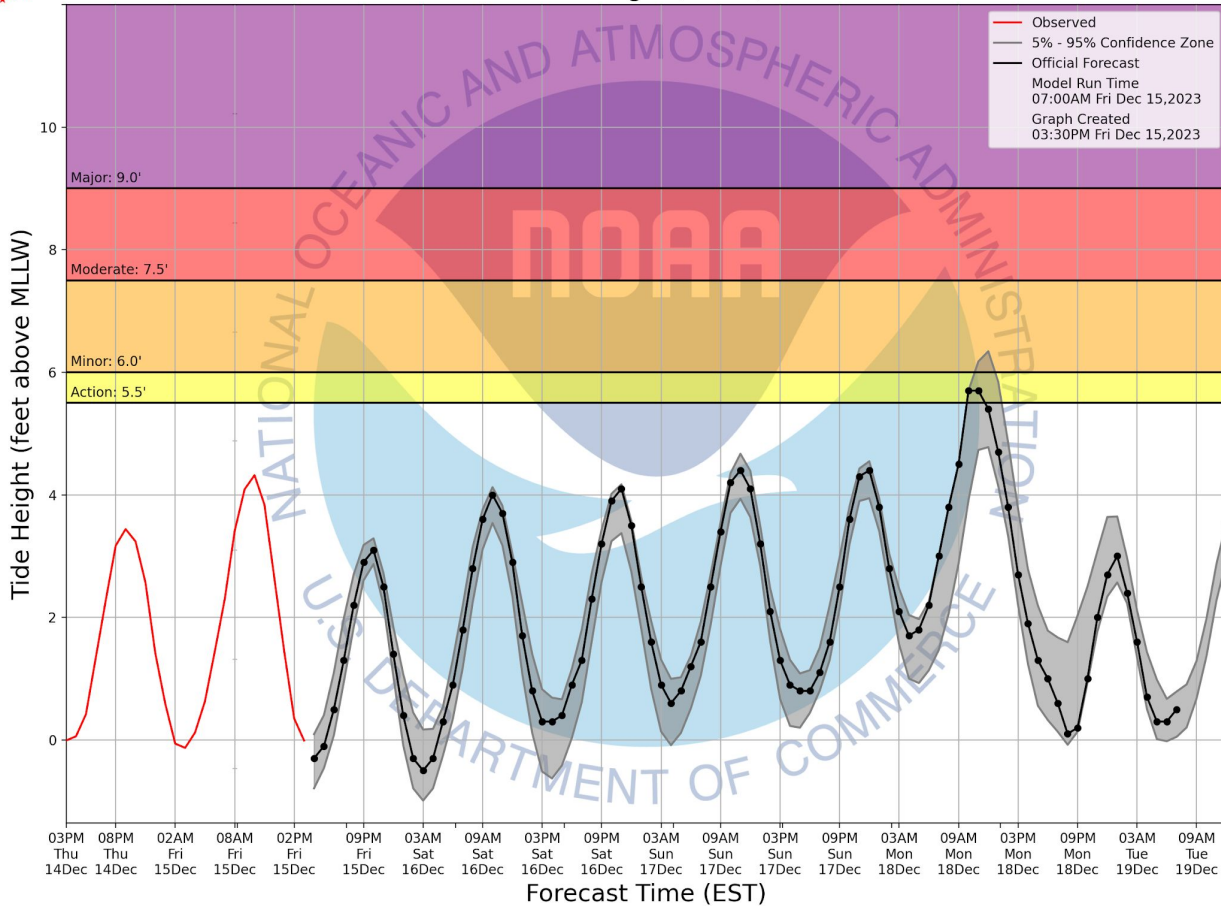
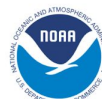
**\*\*Flood threat is contingent on the Monday lunchtime high tide coinciding with the timing of highest southeast winds.\*\***



Narragansett Bay at Conimicut Light, RI  
Tide Height (MLLW)



Narragansett Bay at Newport Harbor, RI  
Tide Height (MLLW)







# Threat Event Summary

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➤ **Confidence:** Moderate (50%) on a high impact storm

➤ **What:**



Downed trees/power lines from 40-60 mph winds, strongest coast



Minor to moderate coastal flooding, especially along Narragansett Bay



Minor to moderate river/stream flooding. Significant street flooding likely



Dangerous conditions for marine vessels Sun evening through Monday

➤ **Where:** All of southern New England (CT, MA, and RI)

➤ **When:** Overnight Sunday into Monday





# 6 AM Saturday

A detailed map of New England, including parts of Maine, New Hampshire, Vermont, Massachusetts, Connecticut, and Rhode Island. The map shows major cities such as Portland, Bangor, Nashua, Manchester, Boston, Worcester, Springfield, Hartford, New Haven, and Providence. It also displays major highways like I-95, I-84, I-90, and I-495. Geographical features like Lake Umbagog and the Atlantic Ocean are also visible. The map is color-coded with green for land and blue for water.

