



National Weather Service Boston / Norton

Decision Support Briefing Sunday, December 10, 2023 4:00 AM

Potential for:

- Damaging Winds
- Coastal Flooding
- Flooding Rain
- Hazardous Marine Travel

Late Today - Monday



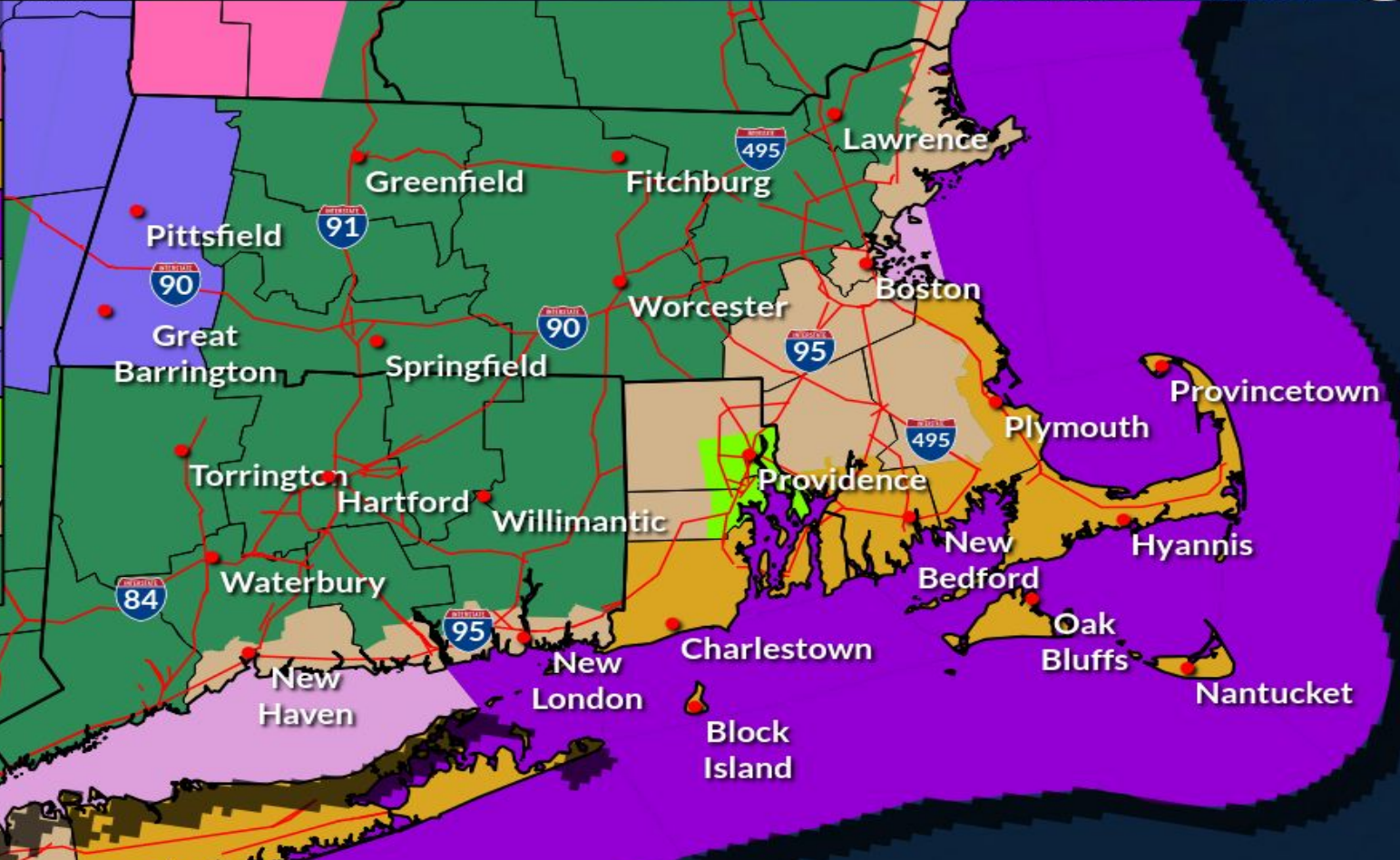
What Has Changed:

- High Wind Warning for south coast and Cape/Islands
- Wind Advisory for rest of RI and eastern MA along I-95 corridor
- Coastal Flood Advisory for Narragansett Bay and south coast of RI/MA

Max Wind Gusts (knots)

Tonight into Monday

Hazards
Winter Storm Warning
High Wind Warning
Storm Warning
Gale Warning
Winter Weather Advisory
Coastal Flood Advisory
Wind Advisory
Flood Watch



Weather Forecast Office
Boston/Norton, MA
Issued Dec 10, 2023 4:29 AM EST







National Oceanic and
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Key Points

December 10, 2023
4:31 AM

Hazard		Impacts	Location	Timing
Damaging Wind		Downed trees/power lines and power outages	RI/MA south coast, including Cape/Islands	Tonight into Monday morning
Coastal Flooding		Minor flooding of coastal roads	Narragansett Bay, and RI/MA south coast	Monday morning high tide
Flooding Rain		Significant street flooding and Minor river/stream flooding	West of I-95 corridor, especially CT into adjacent MA	Tonight into Monday morning
Hazardous Winds/Seas		Dangerous conditions for vessels	MA and RI waters	Tonight into Monday





Summary of Greatest Impacts

December 10, 2023
4:31 AM



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



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



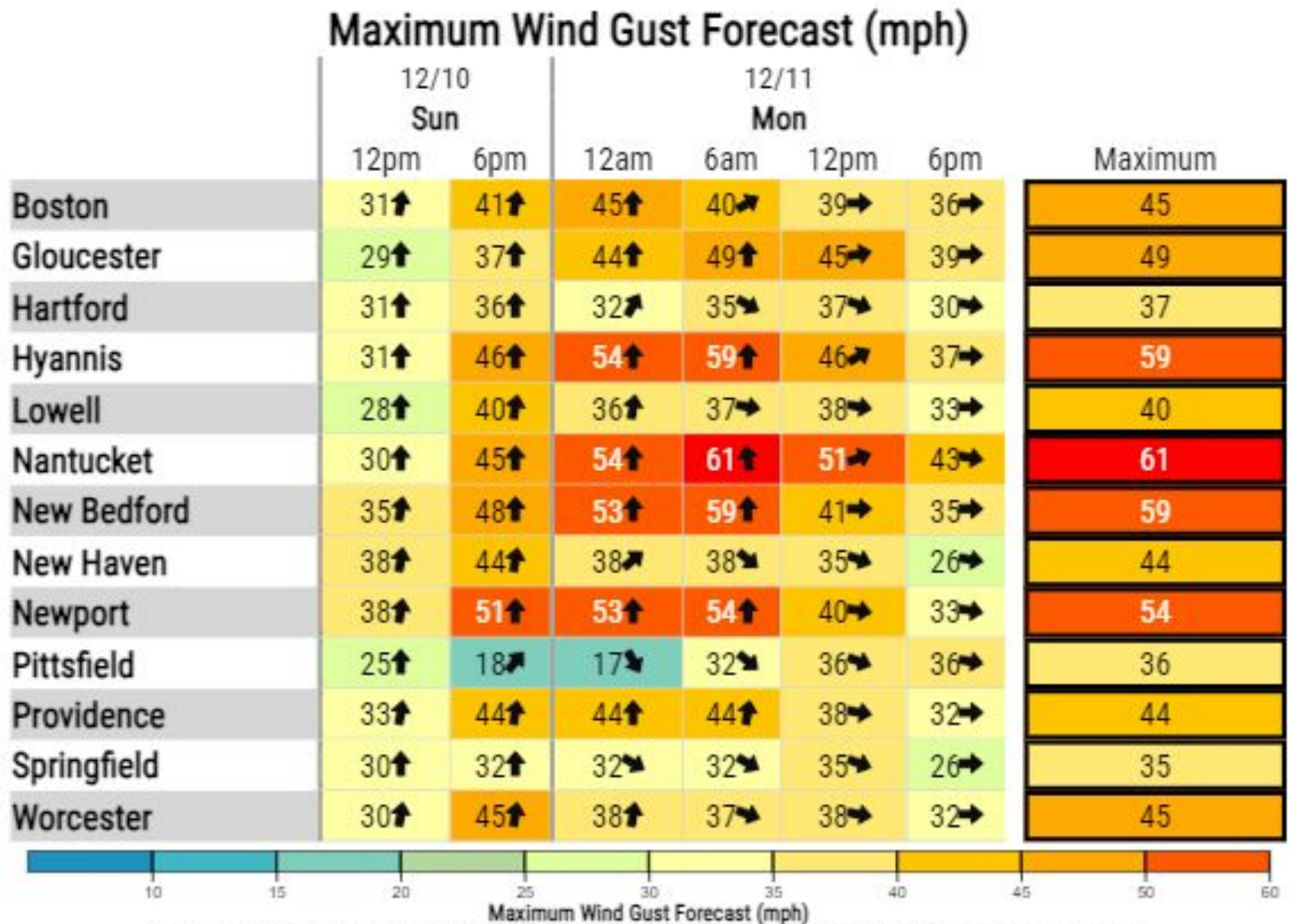
<u>Flooding Rain:</u>	CT and western MA				
None	Limited	Elevated	Significant	Extreme	





Wind Gust Forecast

December 10, 2023
4:31 AM



Created: 3 am EST Sun 12/10/2023 | Values are maximums over the period beginning at the time shown.

- Strongest wind gusts peak after midnight tonight into Monday morning from west to east





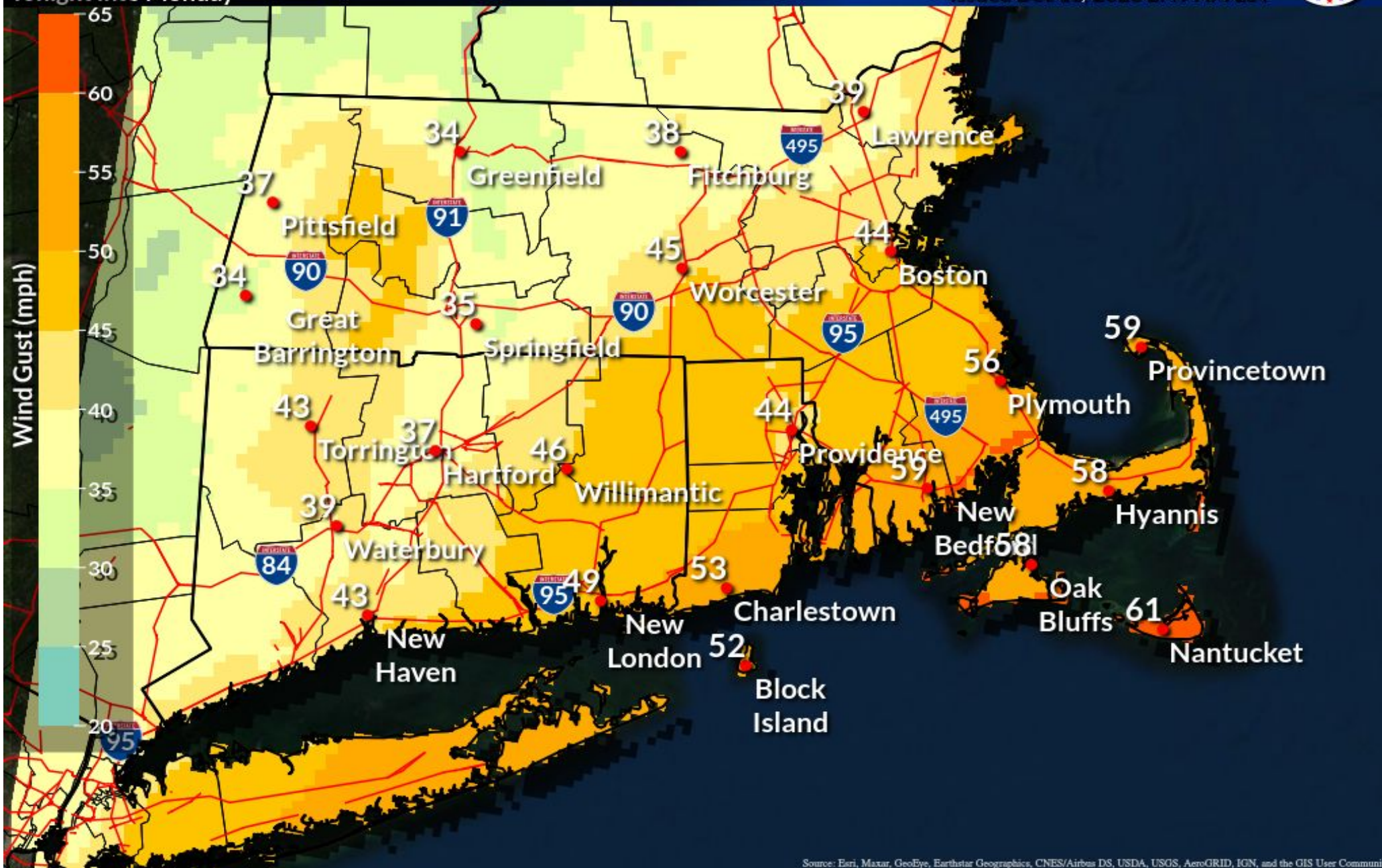
Wind Gust Forecast

December 10, 2023
4:31 AM

Max Wind Gusts

Tonight into Monday

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Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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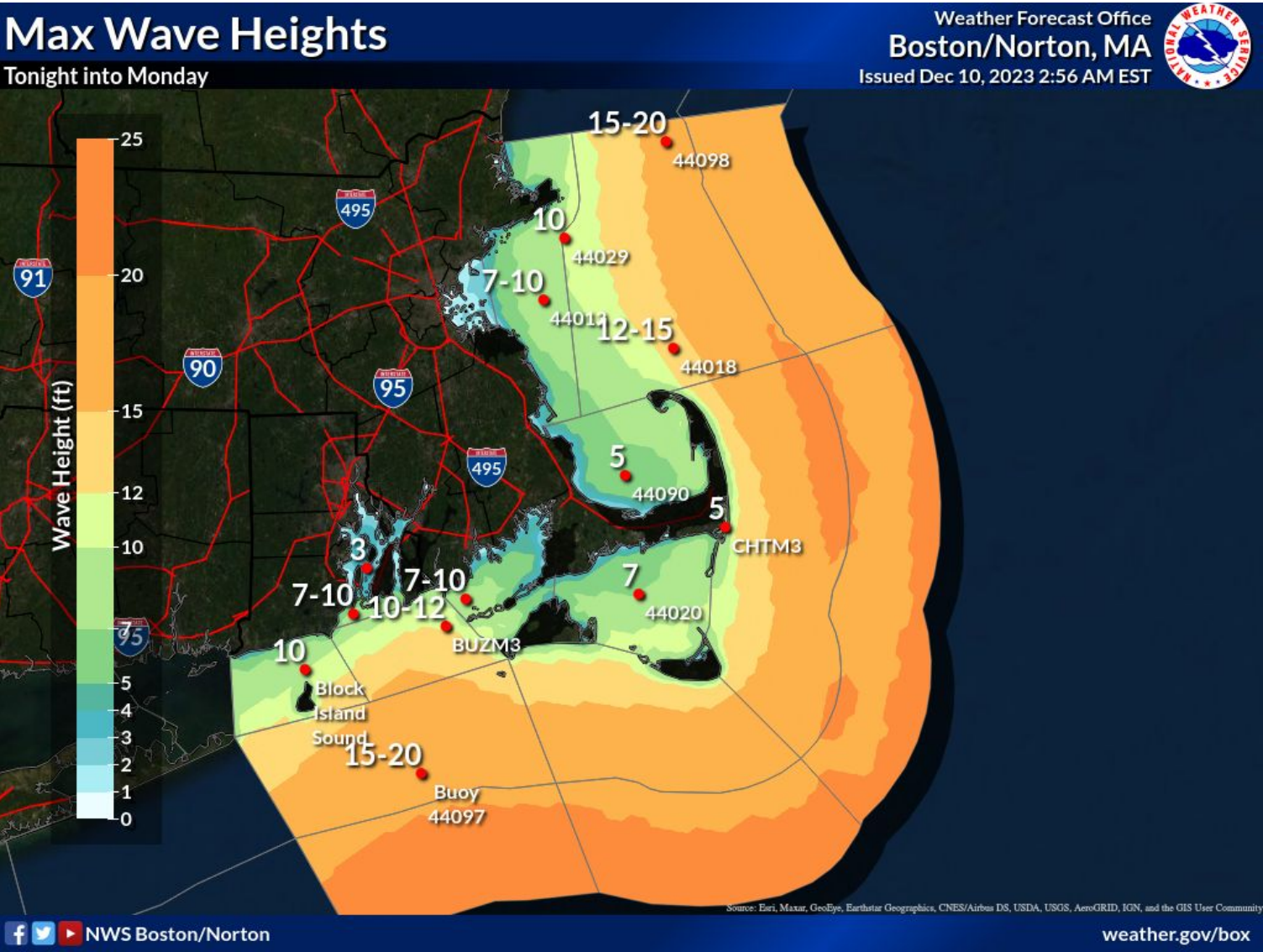
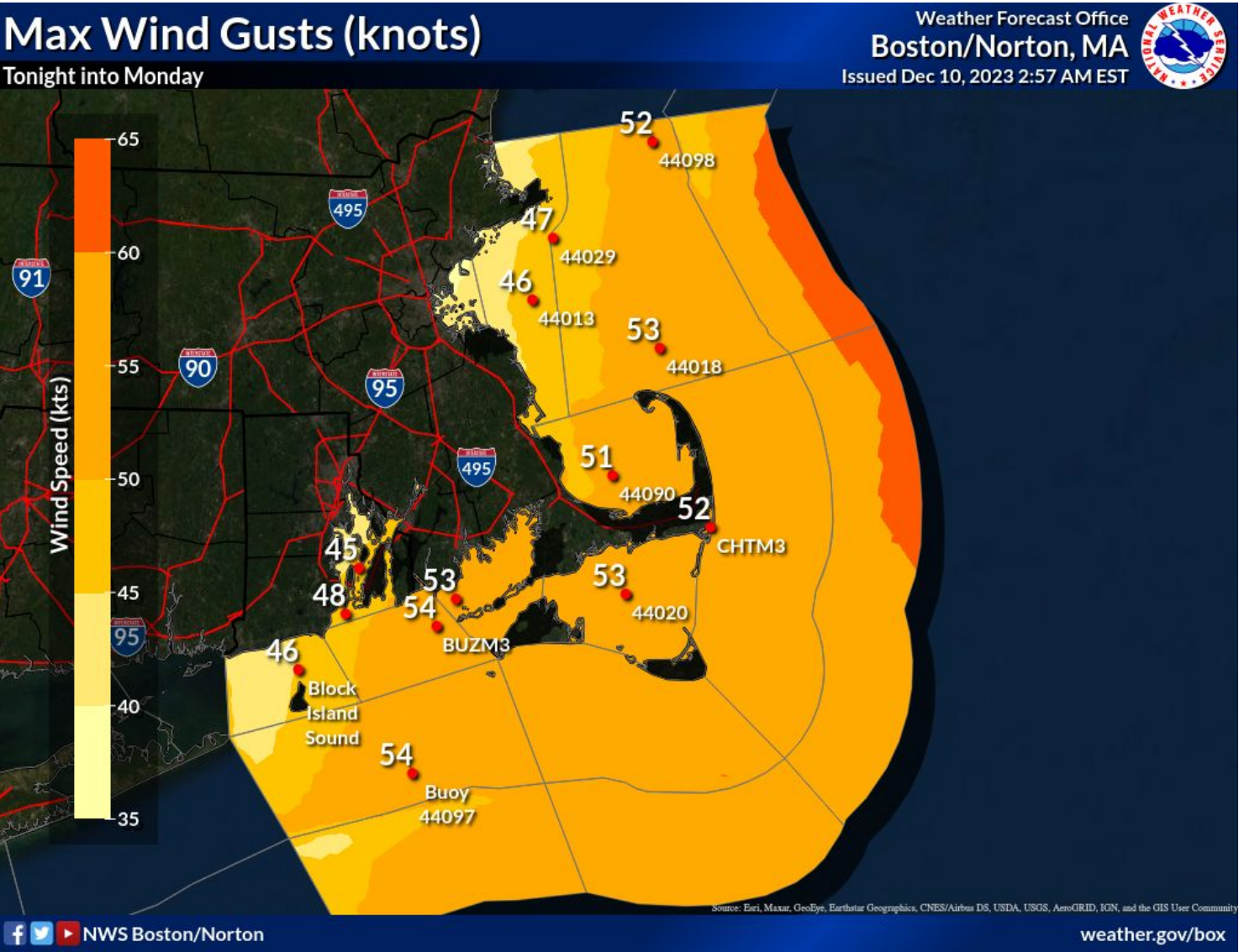
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Coastal Waters Winds and Seas

December 10, 2023
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Winds peak tonight into Monday morning

Highest seas Monday



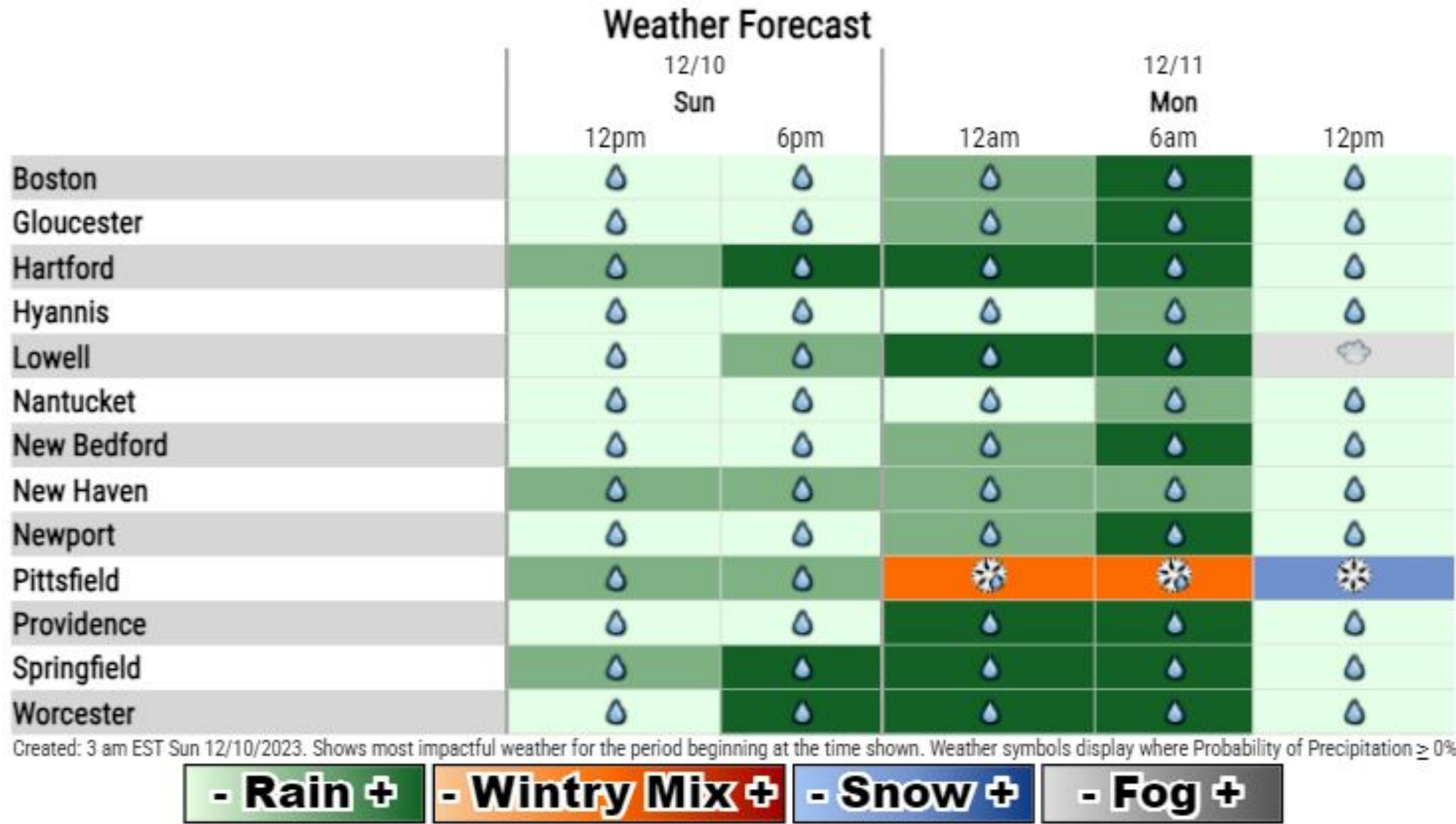
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Expected Weather

December 10, 2023
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- Heaviest rain tonight into Monday morning
- Rain changes to wet snow Monday morning in the higher elevations of the Berkshires





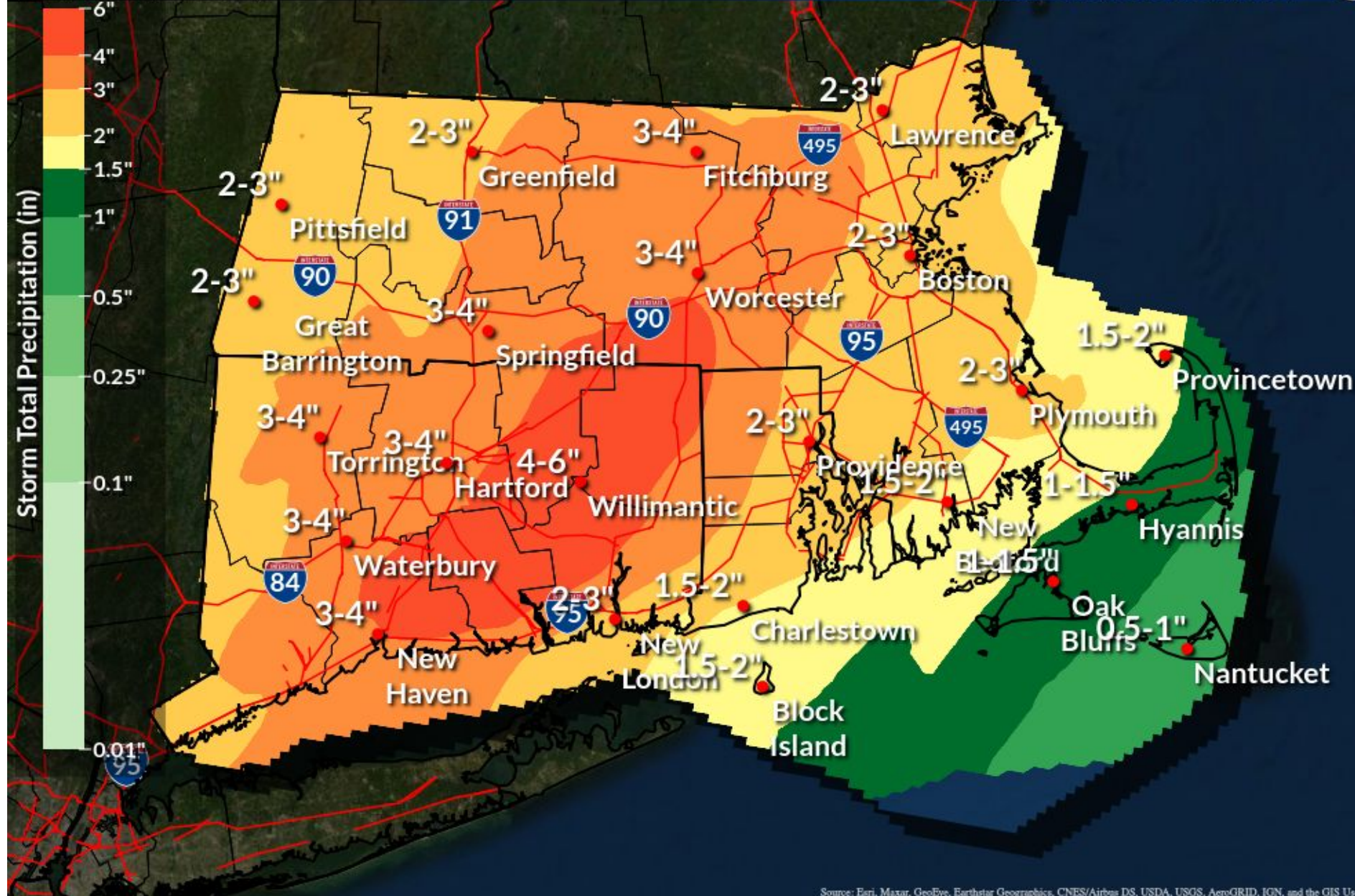
Rainfall Forecast

December 10, 2023
4:31 AM

Storm Total Rainfall

Today through Monday

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Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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- Heaviest rain tonight into Monday morning
- Widespread rainfall 2-4 inches, locally 6+ inches across portions of CT/adjacent MA
- Significant street flooding possible for the Monday morning commute, especially across portions of CT into central/W MA

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Snowfall Forecast

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Storm Total Snowfall

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- Rain changes to wet snow Monday morning in the Berkshires
- Heaviest accumulations confined to west slopes of Berkshires

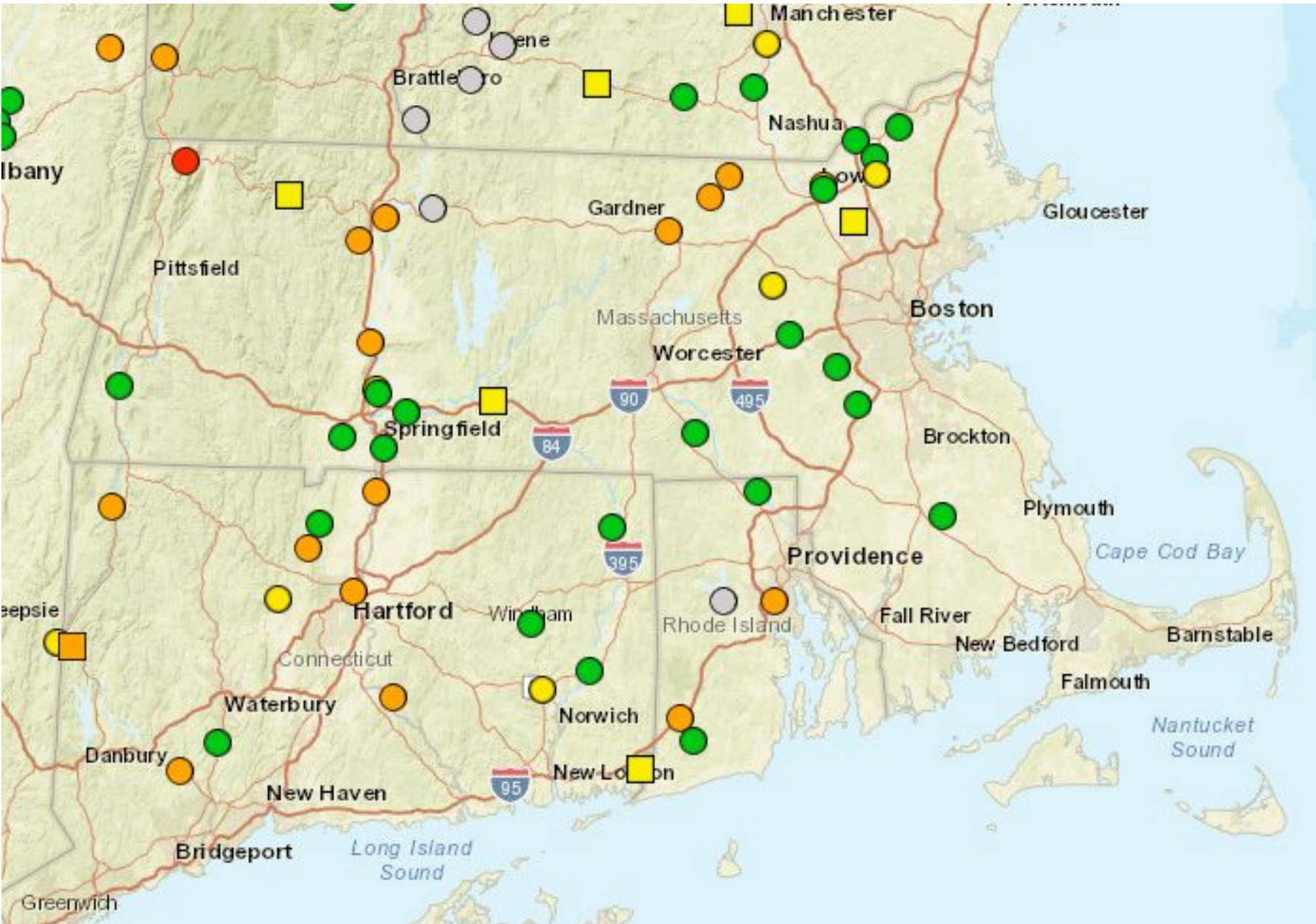


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River Flood Outlook

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- **Minor river flooding is likely (around 60%) Monday along the tributaries of the mainstem Connecticut River. There is a low (10-20%) probability a few spots could experience moderate flooding**

(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		

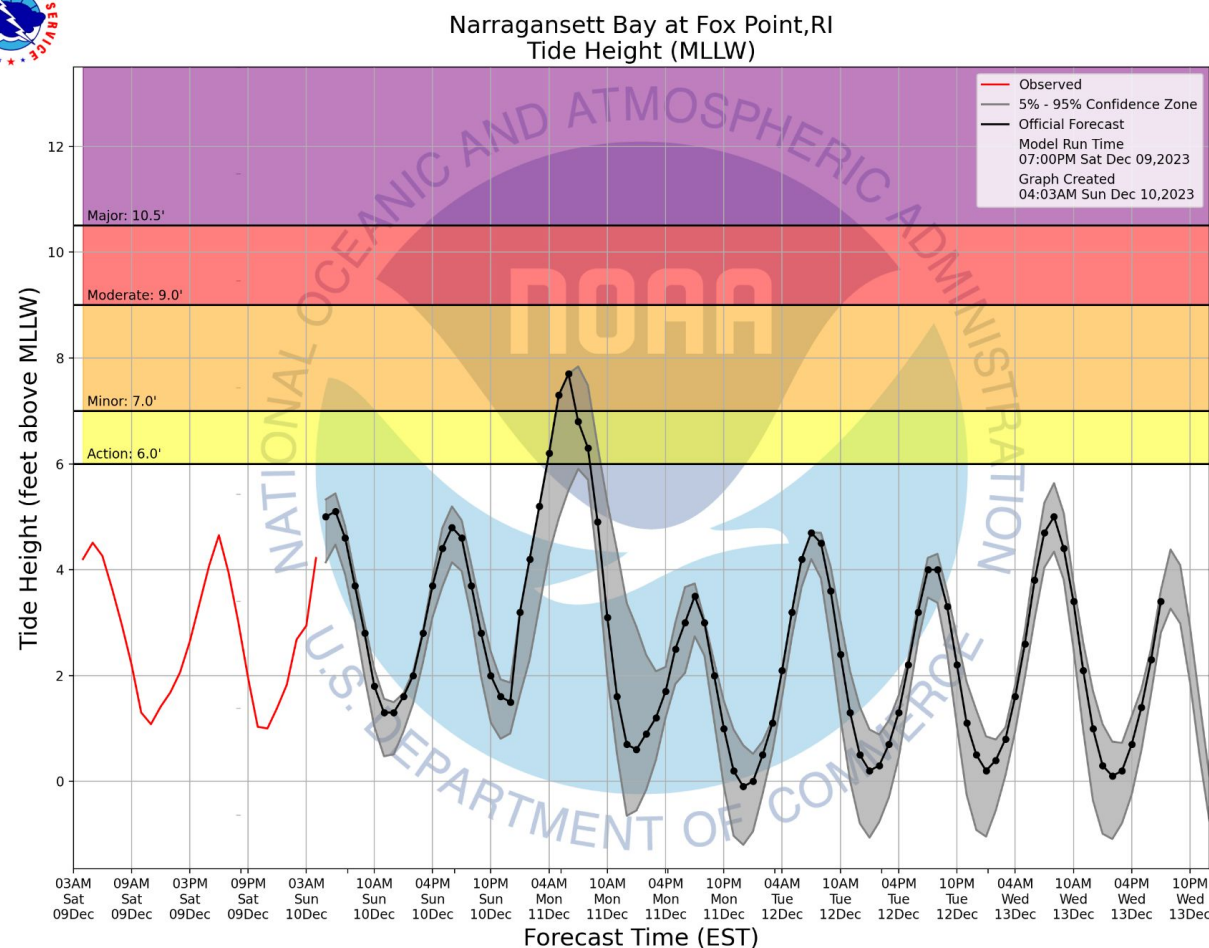




Coastal Flooding

December 10, 2023
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Total Water Level Forecast: Providence



- Minor flooding most likely during the Monday morning high tide for areas adjacent to Narragansett Bay
- Lower risk of very minor flooding along the rest of RI/MA south coast



Minor

Moderate

Minor: flooding less than one foot deep

Moderate: flooding 1 to 2 feet deep



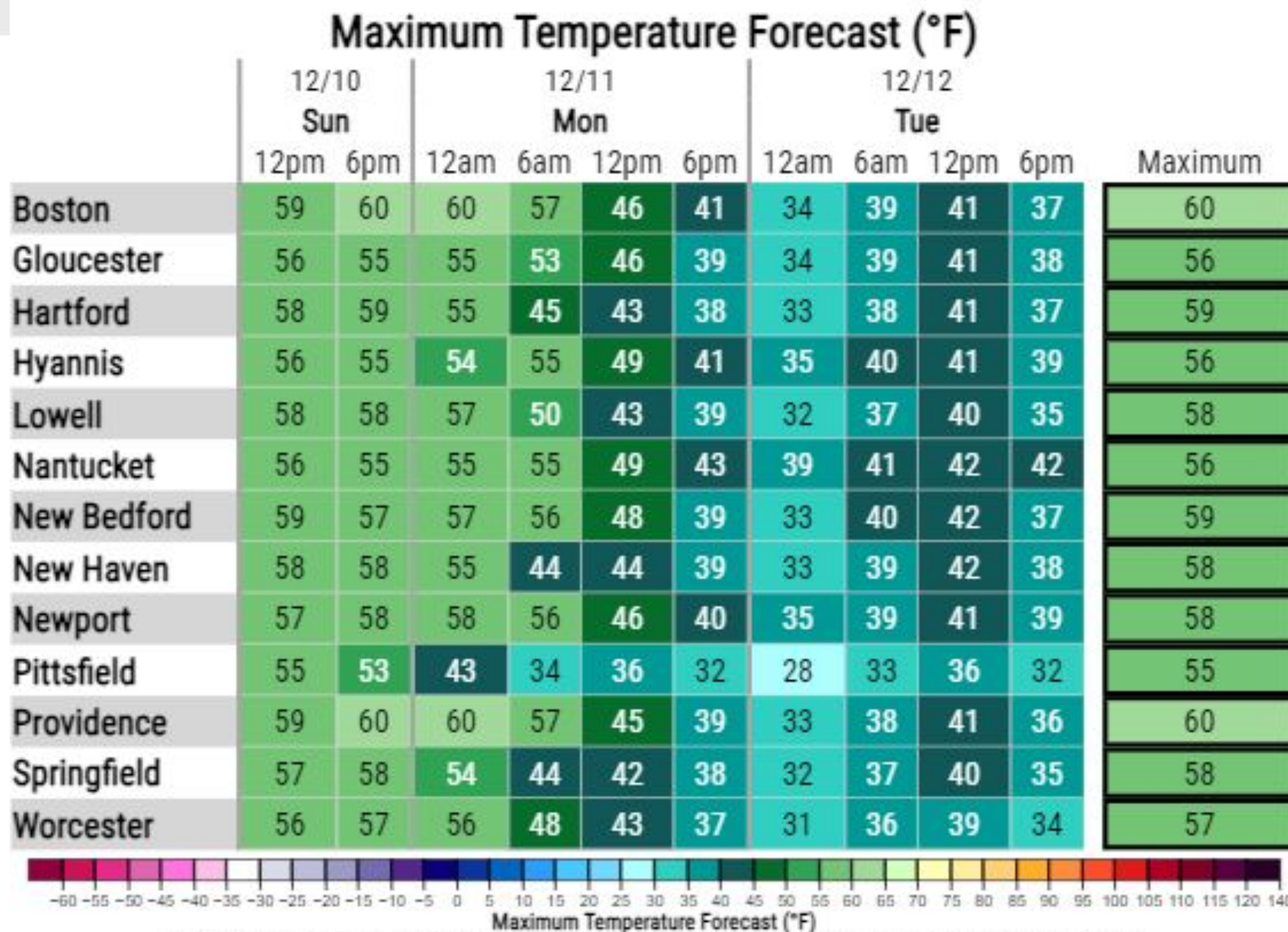
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Temperature Forecast

December 10, 2023
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Threat Event Summary

December 10, 2023
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➤ **Confidence:** High (80%) on a high impact storm

➤ **What:**



Downed trees/power lines from 45-65 mph winds, strongest coast



Minor coastal flooding, especially along Narragansett Bay



Minor river/stream flooding in CT and western MA. Significant street flooding possible



Dangerous conditions for marine vessels Sun night into Mon

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

➤ **When:** Tonight into Monday





Next Briefing:

When: 6 PM Sunday, December 10

Method: Email

Disclaimer: The information contained within this briefing is time-sensitive, do not use after 6 PM, Sunday, December 10



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