

Significant Winter Storm Monday Into early Tuesday Morning

National Weather Service
 Decision Support Briefing # 5
 Sunday, January 31, 2021 4:15 PM

What Has Changed?

- ✓ A Coastal Flood Watch for Mon & Tue
- ✓ Winter Storm Watch upgraded to Winter Storm Warning
- ✓ High Wind Watch upgraded to High Wind Warning
- ✓ Storm Watches upgraded to Storm Warnings

Current Winter Weather Hazards





Winter Weather Hazards



Marine / Coastal Hazards







Wind Related Hazards



Flooding Hazards



Main Points

Hazard	Impacts	Location	Timing
Heavy Snow 	<p>Significant snow accumulations of 8 or more inches possible along with high snowfall rates, resulting in hazardous travel</p>	<p>A significant part of Southern New England will be impacted. Less likely on Cape Cod and the islands</p>	<p>Monday and early Tuesday morning</p>
Strong Winds 	<p>Power outages possible along with some downed trees</p>	<p>Eastern MA and RI</p>	<p>Later Monday into Tuesday</p>
Coastal Flood 	<p>Widespread minor with pockets of moderate coastal flooding and beach erosion</p>	<p>Eastern Massachusetts coastline including Nantucket</p>	<p>Monday night into Tuesday</p>
Marine 	<p>High seas and strong winds will result in dangerous conditions for mariners</p>	<p>MA and RI Coastal Waters</p>	<p>Monday afternoon into Wednesday</p>

Summary of Potentially Greatest Impacts



Heavy Snow: Potential for 8 or more inches across parts of the region

None	Limited	Elevated	Significant	Extreme
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Strong Winds: Eastern MA and RI

None	Limited	Elevated	Significant	Extreme
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Coastal Flood/Beach Erosion: Eastern MA coastline

None	Limited	Elevated	Significant	Extreme
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Marine: MA and RI Coastal Waters

None	Limited	Elevated	Significant	Extreme
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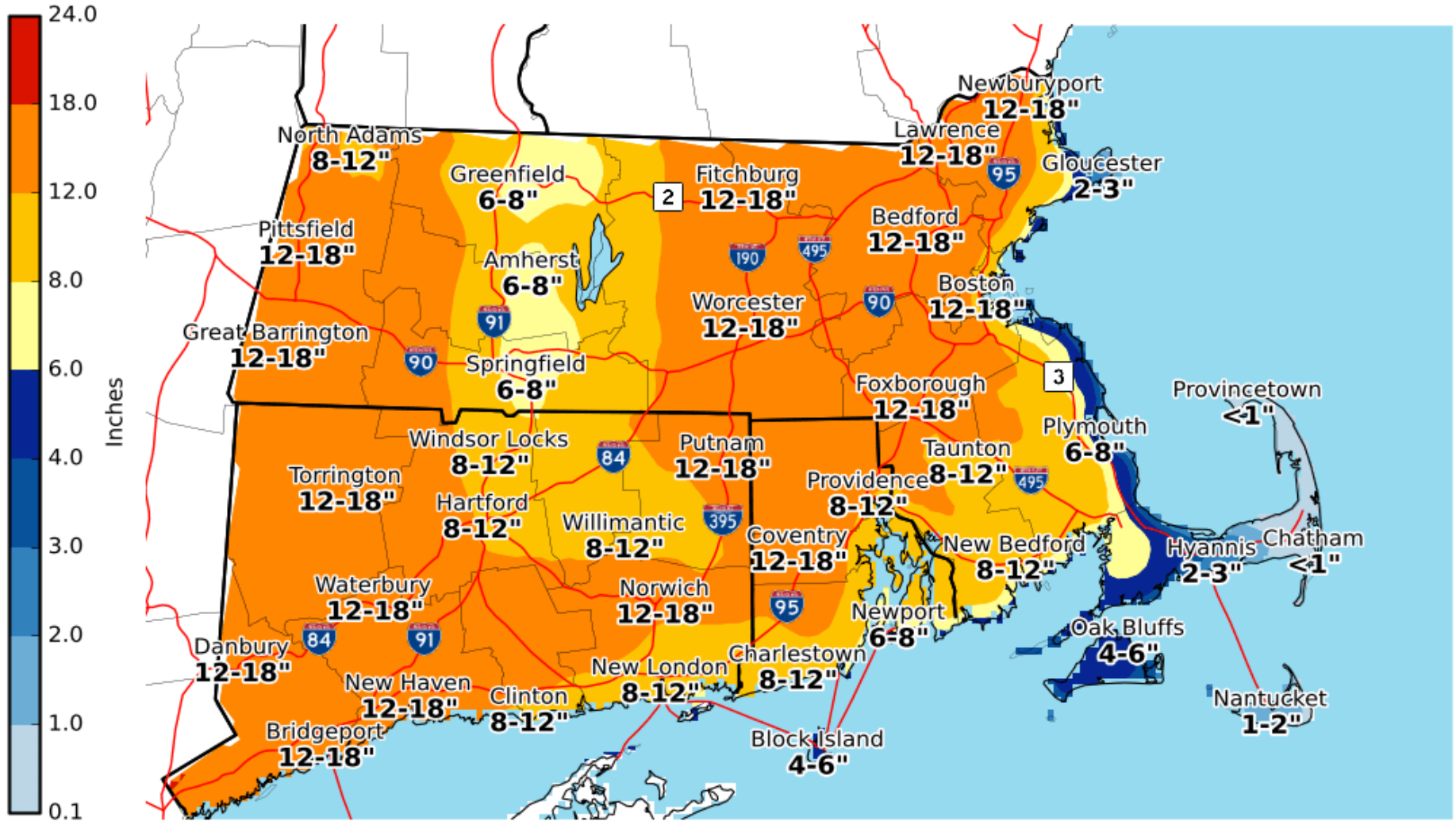




Forecast Storm Total Snowfall

Expected Snowfall - Official NWS Forecast

Valid: Monday into Tuesday Morning

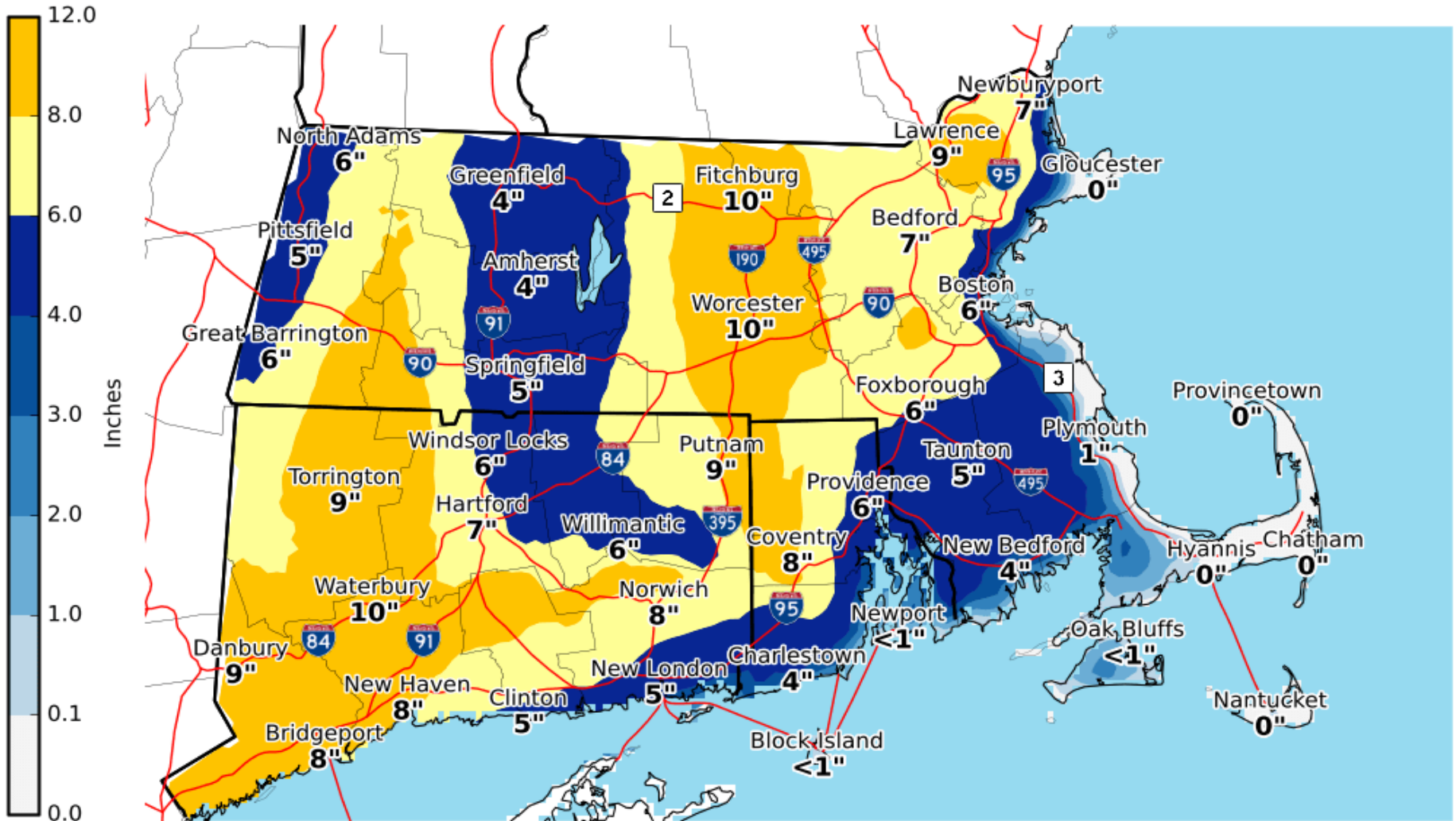




Forecast Storm Total Snowfall (Best Case)

Low End Amount - 9 in 10 Chance (90%) Of Higher Snowfall

Valid: Monday into Tuesday Morning

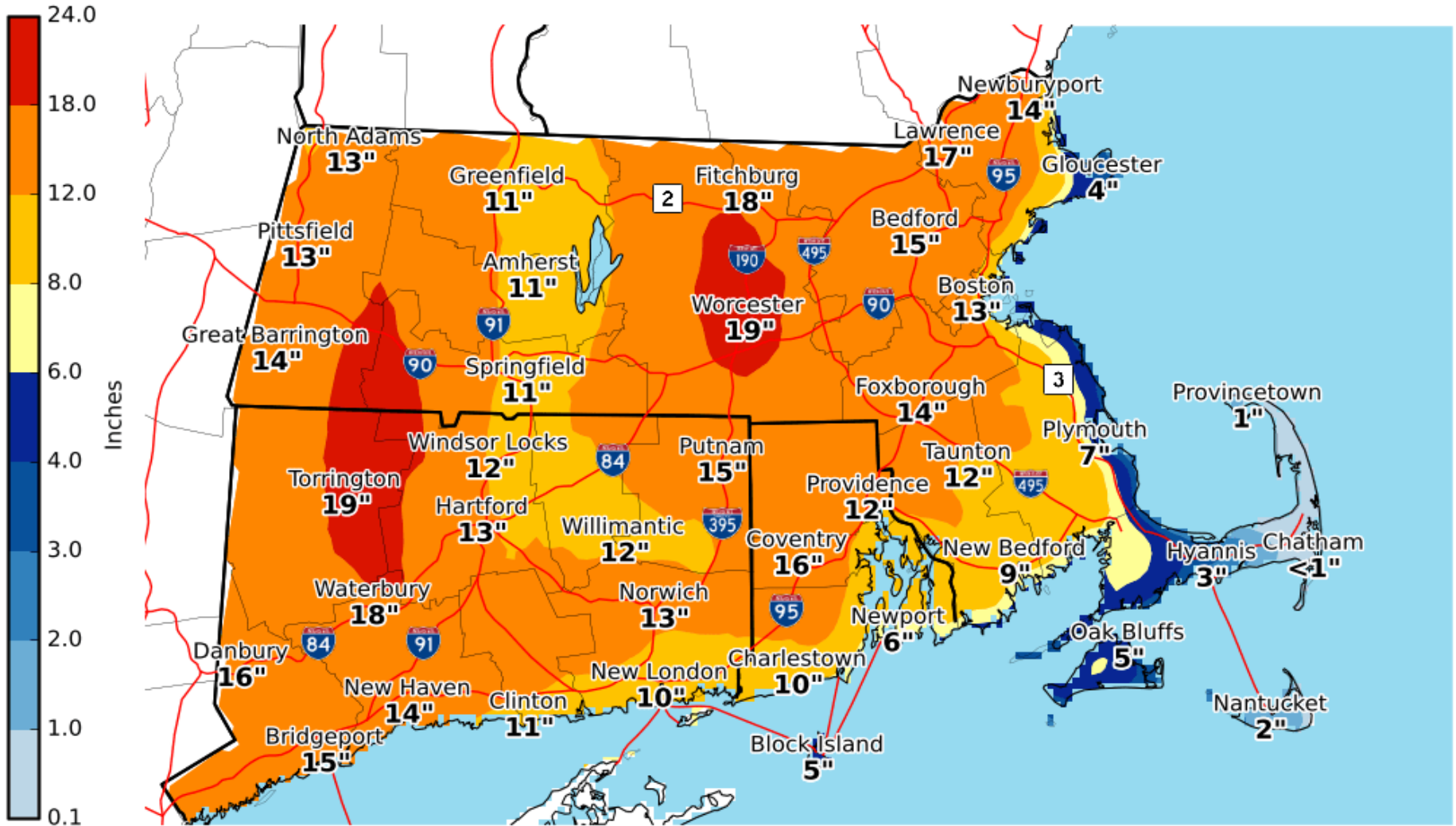




Forecast Storm Total Snowfall (Worst Case)

High End Amount - 1 in 10 Chance (10%) Of Higher Snowfall

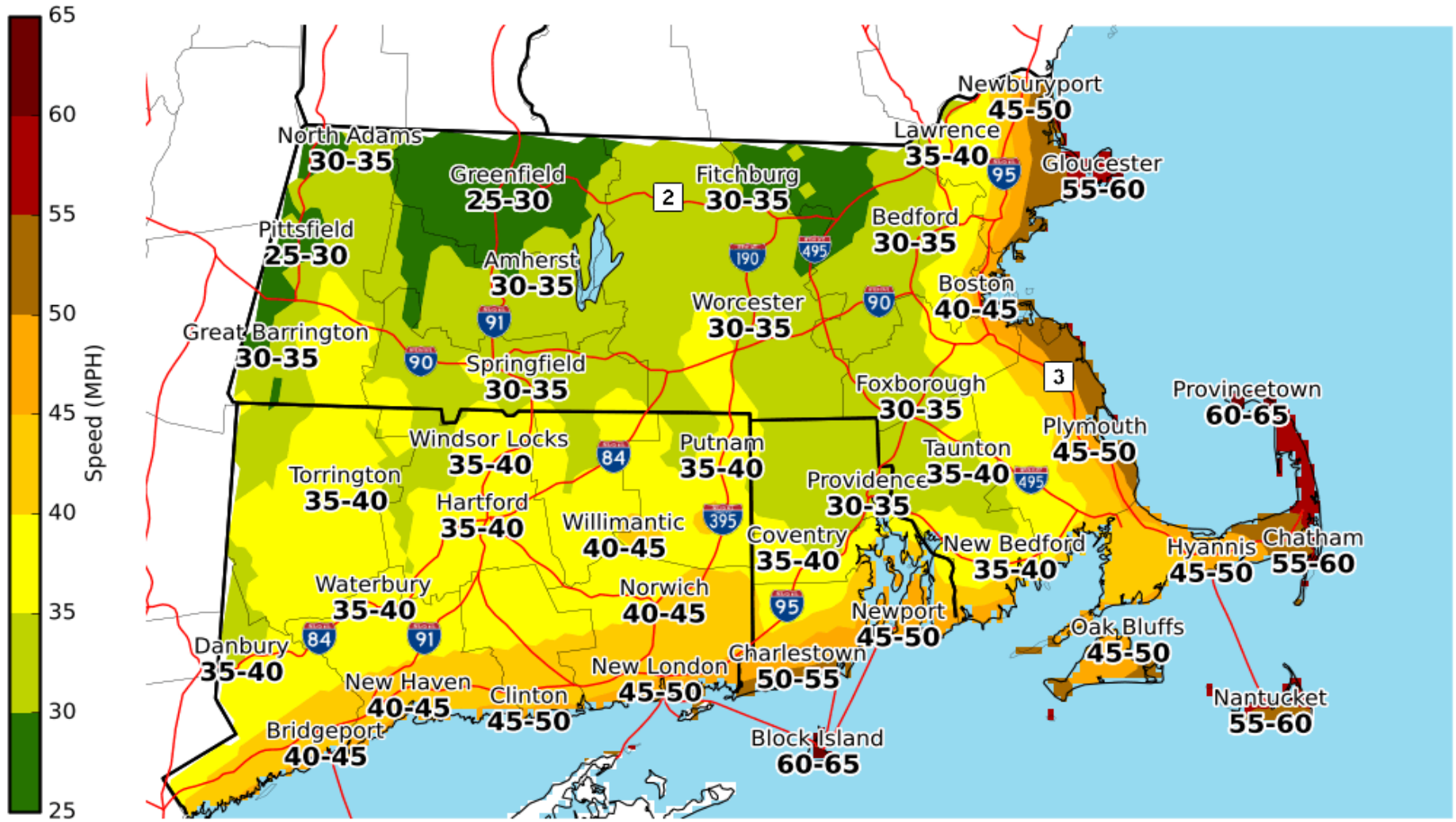
Valid: Monday into Tuesday Morning





Forecast Maximum Wind Gusts

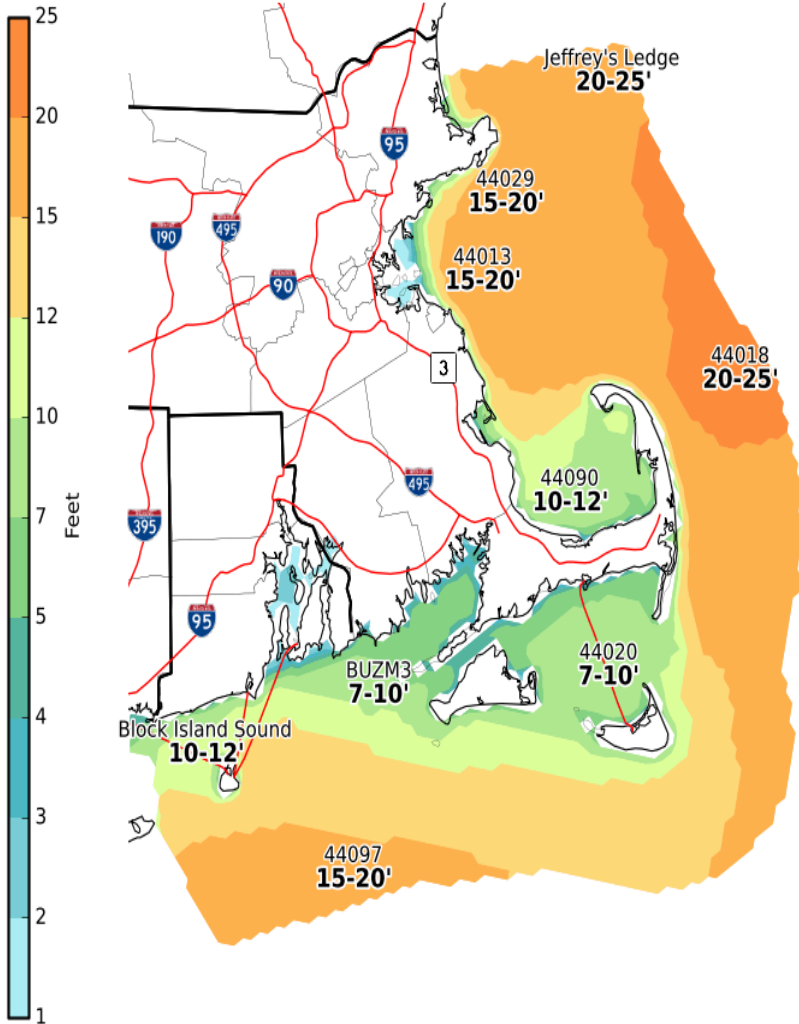
Max Wind Gusts (MPH) Valid: Monday into Tuesday Morning



Forecast Maximum Wave Heights and Wind Gusts (in kts)

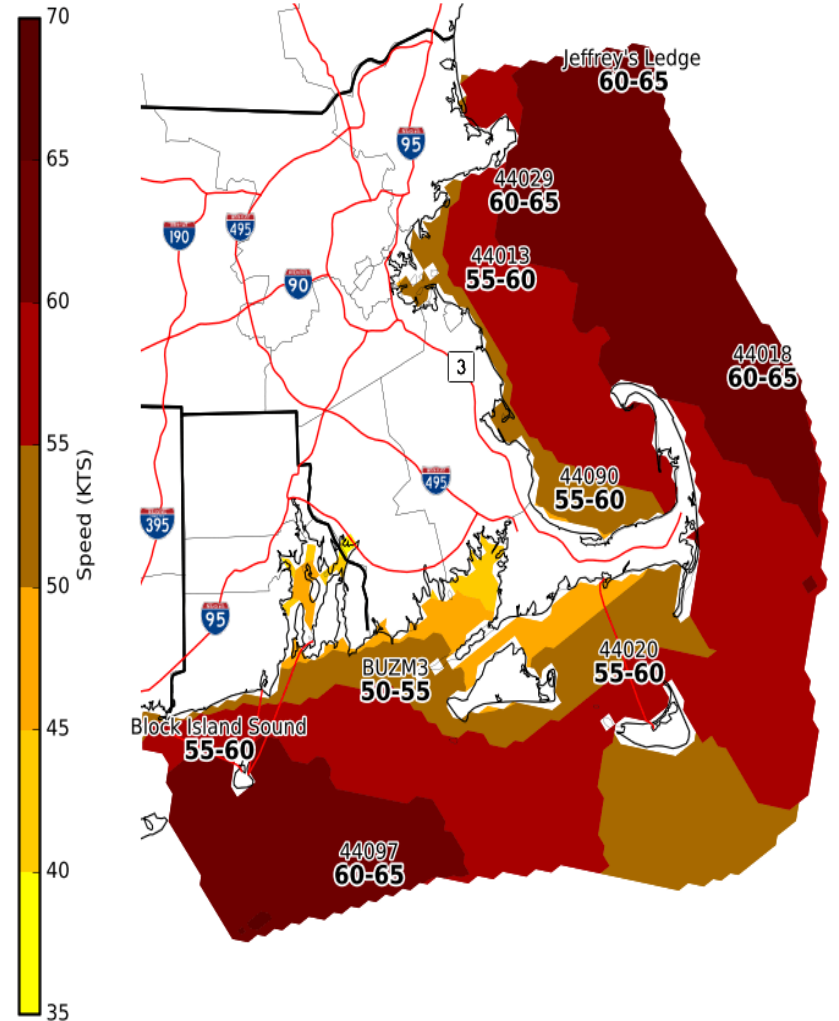
Maximum Wave Height

Valid: Monday and Tuesday

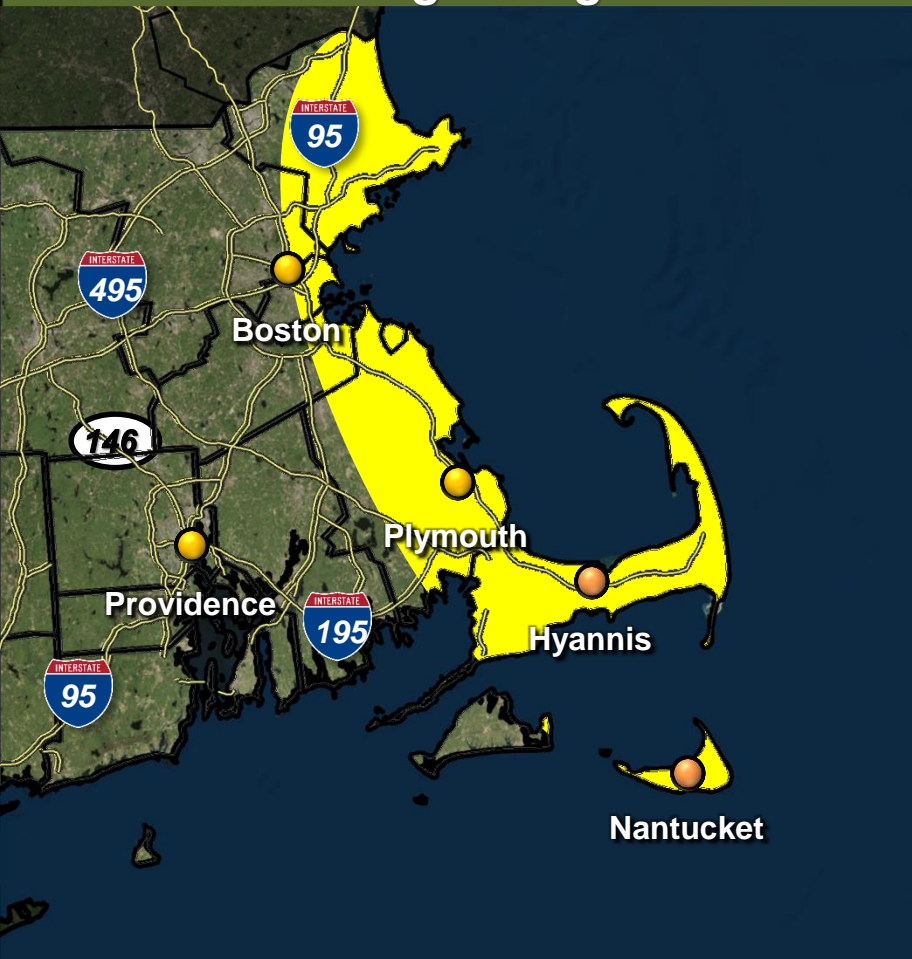


Max Wind Gusts (KTS)

Valid: Monday and Tuesday



Coastal Flooding – Surge / Inundation



Minor Coastal Flooding

- Widespread minor coastal flooding expected
- Pockets of moderate coastal flooding including structural damage possible
- Vulnerable shore roads with up to a foot of water inundation possible. May be flooding of a few vulnerable basements.
- Some beach erosion with heavy surf.

Timing

- Spanning multiple tide cycles, from Monday night into Tuesday

	Storm Surge Threat	Potential Impacts from Storm Surge
Little to None	0 to 1 feet above ground	No immediate preparations needed. Little to no potential storm surge flooding impacts
Elevated	1 to 3 feet above ground	To be safe, prepare for the potential of limited storm surge flooding impacts
Moderate	3 to 6 feet above ground	To be safe, earnestly prepare for the potential of significant storm surge flooding impacts
High	6 to 9 feet above ground	To be safe, aggressively prepare for the potential of significant storm surge flooding impacts
Extreme	> 9 feet above ground	To be safe, aggressively prepare for the potential of devastating to catastrophic storm surge flooding impacts

Threat Event Summary

✓ **Confidence:** High confidence for a winter storm, with greatest uncertainty in total accumulations for locations that will switch to rain.

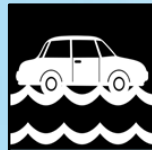
✓ **What:**



Significant snow across much of southern New England



Strong winds may result in power outages and a few downed trees across eastern MA & RI.



Coastal flooding and beach erosion will be possible along the eastern MA coastline during the high tides Monday night and Tuesday.

✓ **Where:** The potential for significant snow accumulations exists across the entire region, least on Cape Cod and the Islands. The strong wind and coastal flood threat will be maximized across eastern MA & RI.

✓ **When:** Monday Into early Tuesday morning

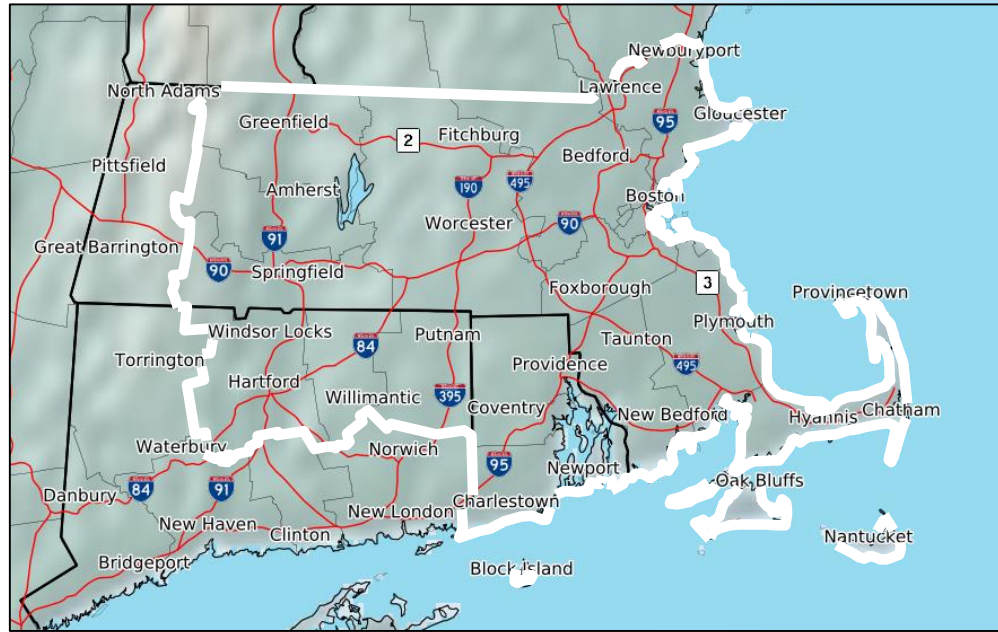


Contact and Next Briefing Information

Next Briefing

When: 6 am, Monday, February 1st

Method: via email



www.weather.gov/boston



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