

Multi-Faceted Winter Storm Saturday Night – Sunday Night

National Weather Service

Decision Support Briefing # 3

Thursday, January 17, 2019 3:32 PM






What Has Changed?

- ✓ Slightly lower snow totals due to more sleet/freezing rain.
- ✓ Winter Storm Watch expanded to include the rest of southern New England.
- ✓ Coastal Flood Watch issued for East Coastal MA for Sunday AM high tide.
- ✓ Gale Watch issued for the MA and RI coastal waters.

Winter Weather Related Hazards



Main Points

Hazard		Impacts	Location	Timing
Heavy Wet Snow		Precipitation begins as heavy, wet snow. 2+ inch/hour rates.	All of Southern New England, except the extreme south coast.	10 PM Saturday – Mid Morning Sunday for some. Some locations remain all snow through Sunday.
Freezing Rain/Sleet		A period of freezing rain and sleet with 0.25 to 0.5 inch ice accumulations possible.	Greatest ice accumulations across the central to northeast interior.	Sunday morning – afternoon.
Flash Freeze		Temperatures drop rapidly below freezing. Rain changes back to sleet or freezing rain. Wet surfaces freeze. Bitter cold by Sunday night.	All of Southern New England	Late Sunday afternoon – Sunday Night
Strong Winds		Some power outages, exacerbated by snow/ice.	Strongest across Rhode Island and Southeastern Massachusetts.	Sunday morning – Sunday afternoon.
Coastal and Inland Flooding		Minor to moderate coastal flooding Sun morning high tide. Some minor river flood possible in RI.	Highest risk for coastal flooding is across the east coast. Low risk for the south coast.	Coastal Flood Sunday Morning Inland Flood: Sunday – Sunday night

Summary of Greatest Impacts



<u>Heavy Wet Snow:</u>		Most of Southern New England		
None	Limited	Elevated	Significant	Extreme



<u>Freezing Rain/Sleet:</u>		Especially Interior Southern New England		
None	Limited	Elevated	Significant	Extreme



<u>Flash Freeze:</u>		All of Southern New England		
None	Limited	Elevated	Significant	Extreme



<u>Strong Winds:</u>		Strongest Southeastern New England		
None	Limited	Elevated	Significant	Extreme



<u>Inland/Coastal Flooding:</u>		Inland = Interior Southern New England		
None	Limited	Elevated	Significant	Extreme



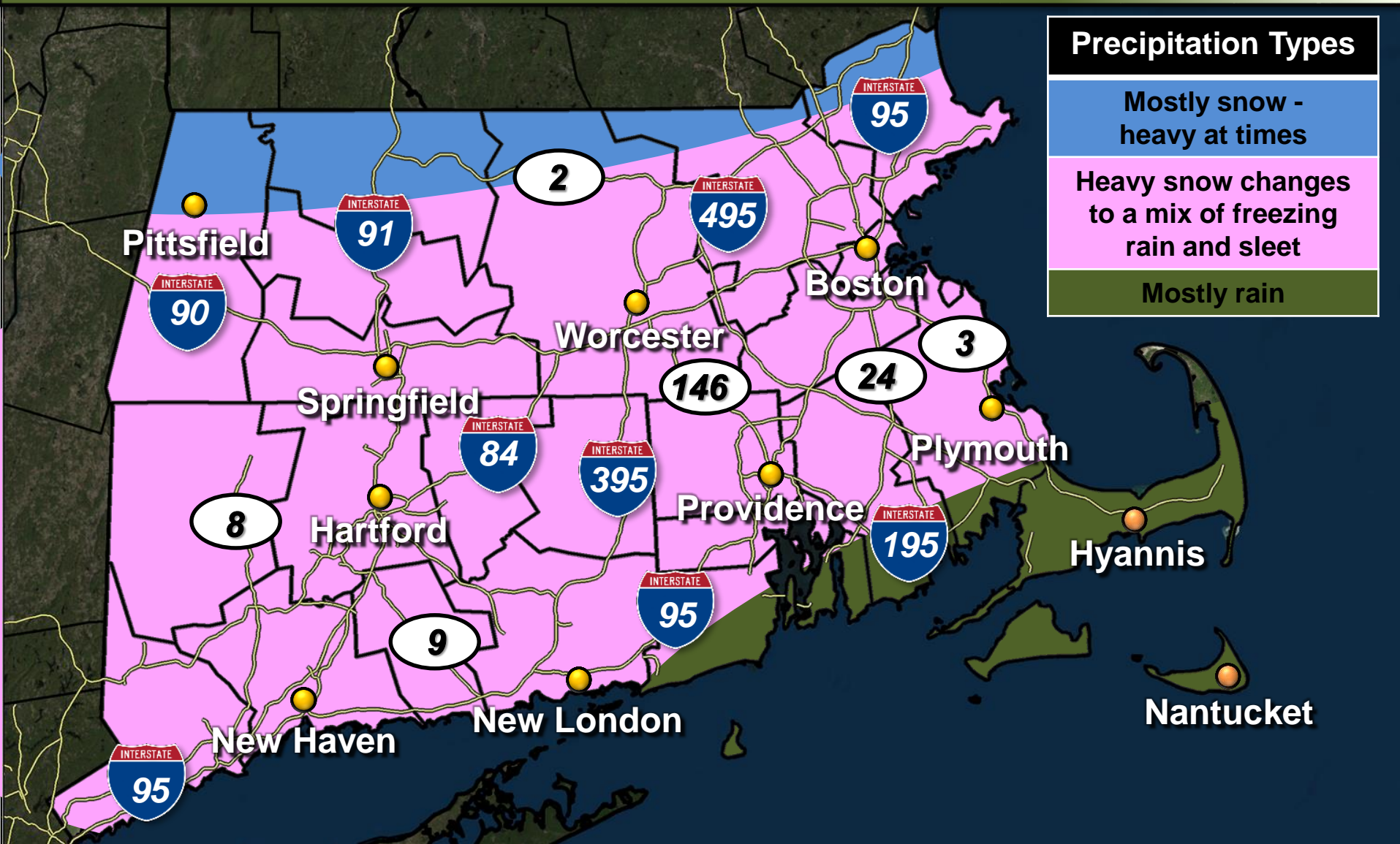
Precipitation types, note these are likely to shift...

Precipitation Types

Mostly snow -
heavy at times

Heavy snow changes
to a mix of freezing
rain and sleet

Mostly rain

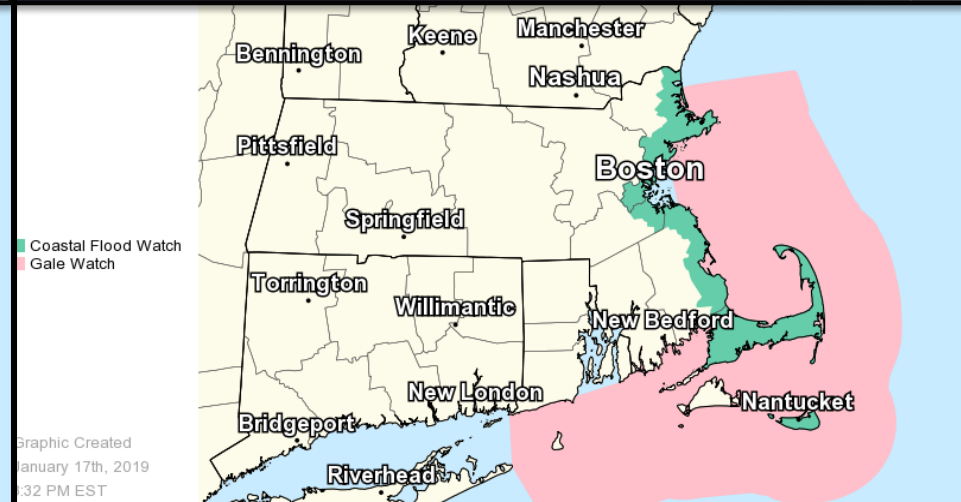




Winter Weather Hazards



Marine / Coastal Hazards



Wind Related Hazards



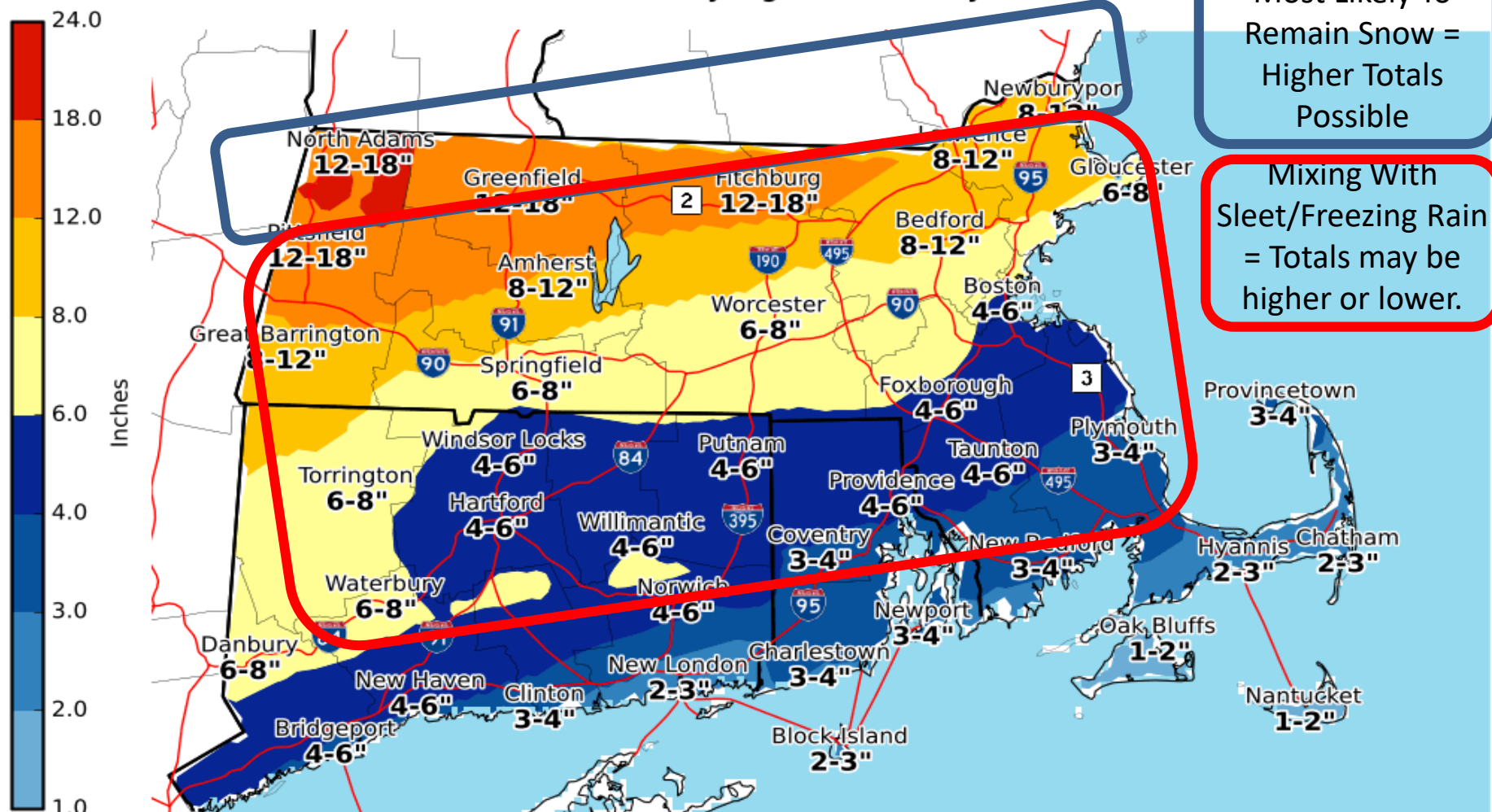
Flood Hazards



Forecast Storm Total Snowfall

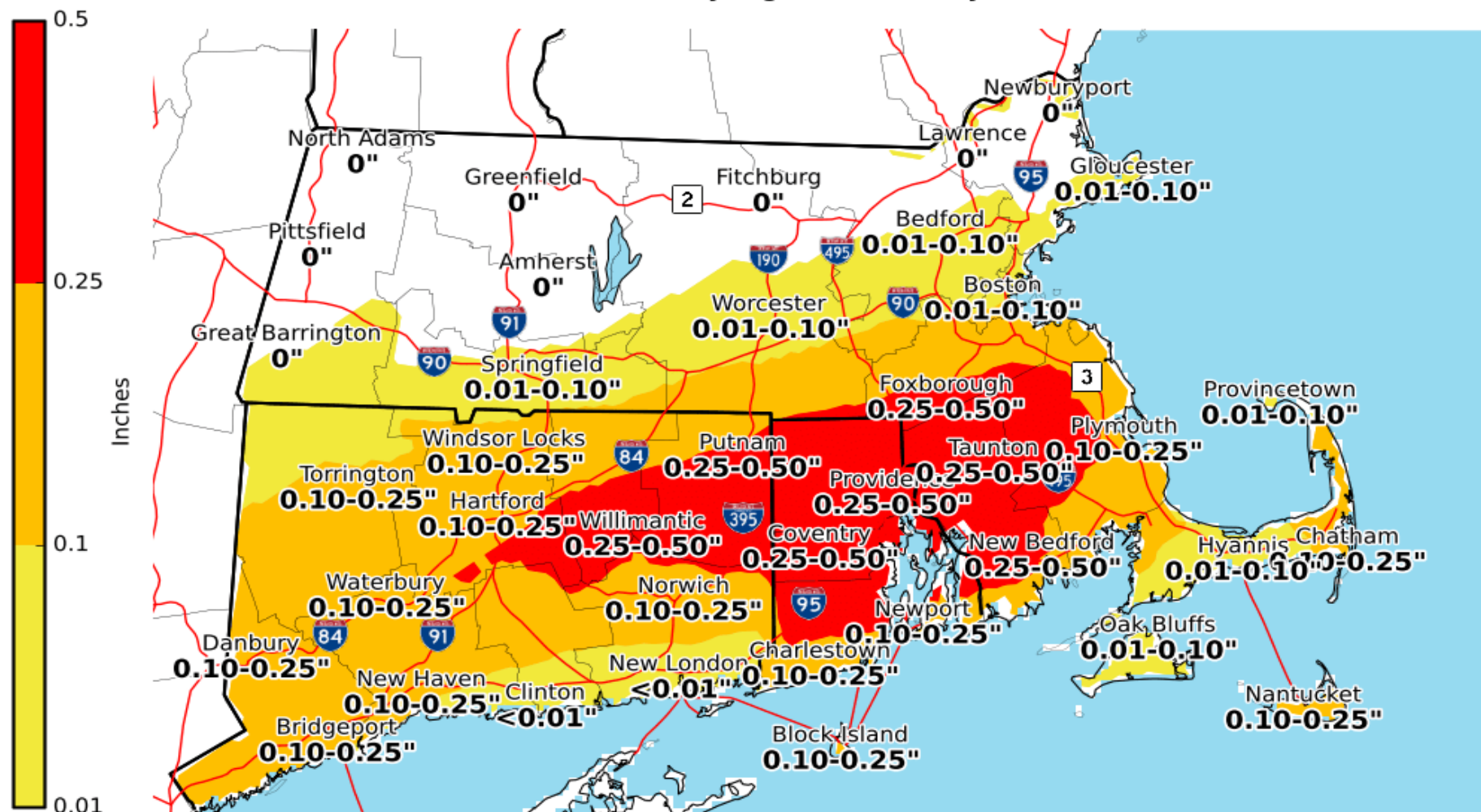
Expected Snowfall - Official NWS Forecast

Valid: Saturday Night into Sunday

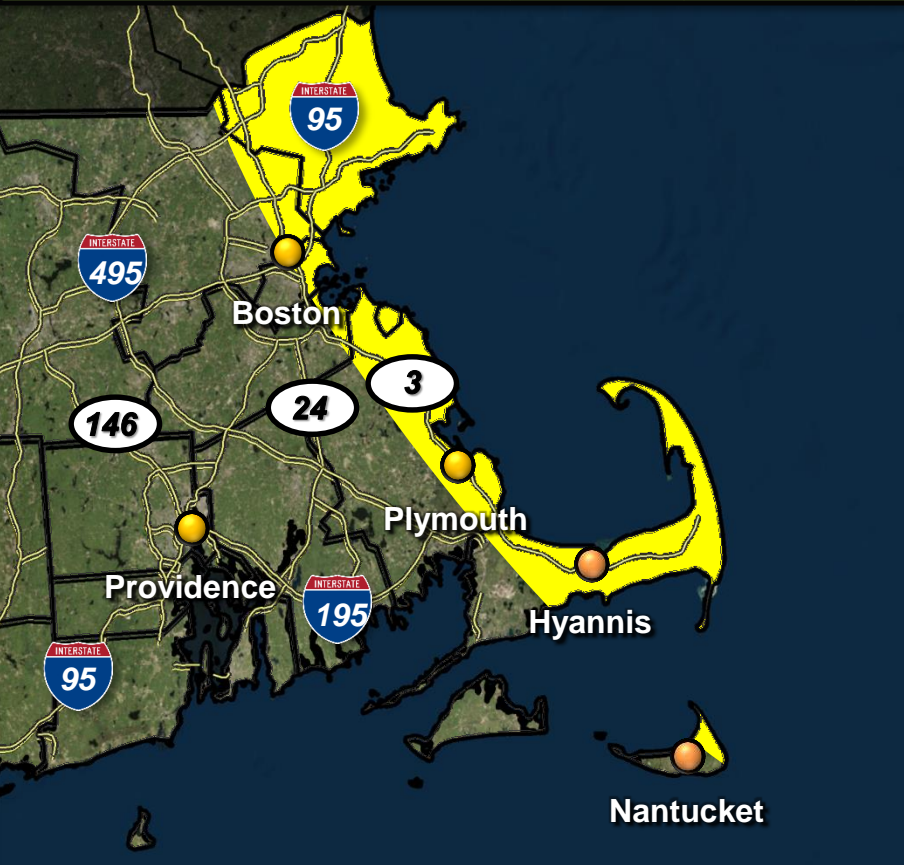


Forecast Storm Total Ice

Expected Icing - Official NWS Forecast Valid: Saturday Night into Sunday



Coastal Flooding – Surge / Inundation – Sunday Morning High Tide



Minor Coastal Flooding

- Some inundation within the flood zone, especially for low-lying areas.
- 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

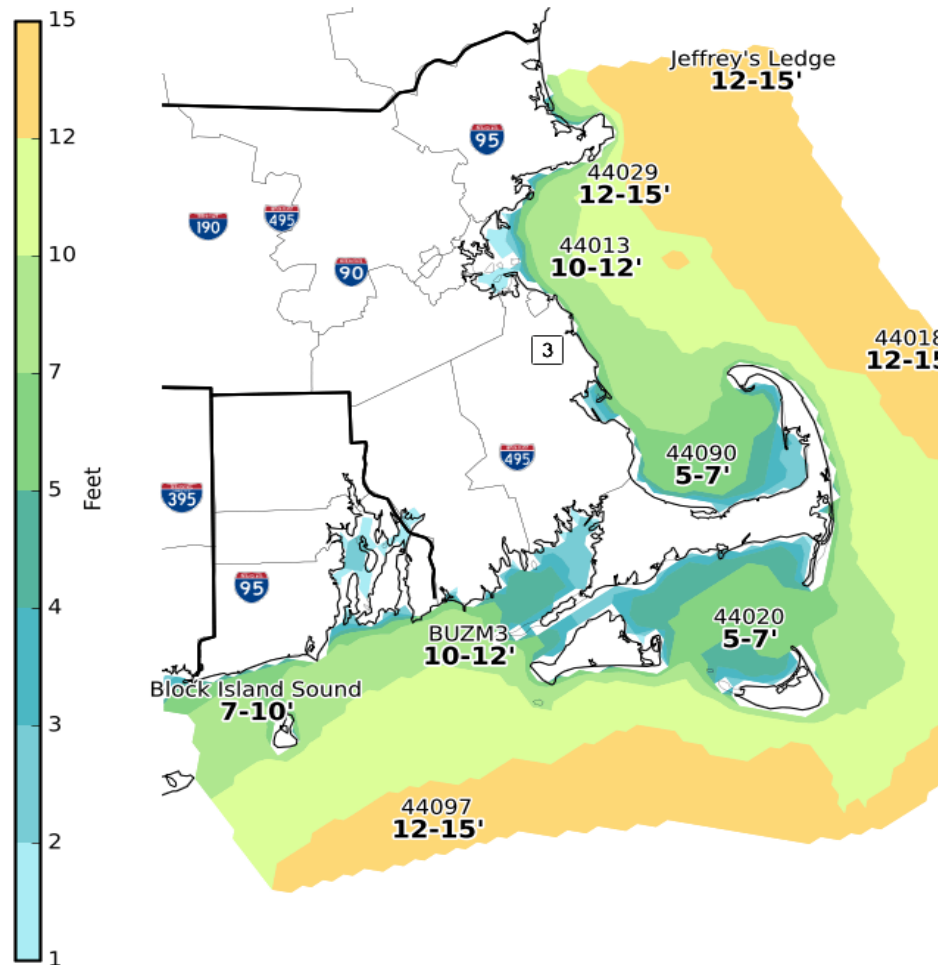
- Impacts most likely with the Sunday morning high tide (about 10AM).

	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

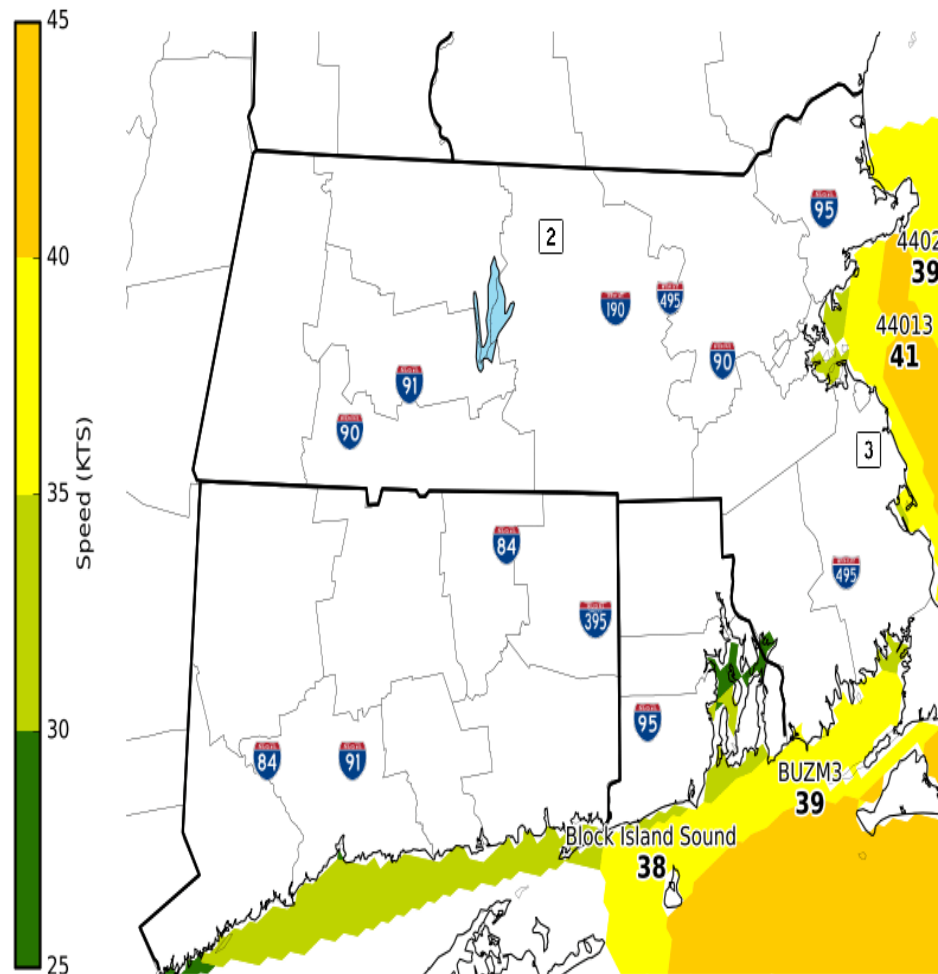
None
Minor
Moderate
Major
Extreme

Forecast Maximum Wave Heights and Wind Gusts (in kts)

Maximum Wave Height
Valid: Saturday Night into Sunday



Max Wind Gusts (KTS)
Valid: Saturday Night into Sunday



Threat Event Summary

✓ **Confidence**: High confidence for a moderate-high impact event. Low confidence on exact details/timing.

✓ **What:**



Heavy wet snow with high snowfall rates.



Strong winds exacerbates power outage risk.



Freezing Rain/Sleet with some ice accumulation likely.



Minor to moderate coastal flooding possible with Sunday morning high tide Some inland flooding with heavy rain.



Flash Freeze late Sunday and Sunday night. Bitter cold follows.

✓ **Where:** All of Southern New England

✓ **When:** Saturday Night – Sunday Night. Bitter cold follows early next week.

Contact and Next Briefing Information

Next Briefing

When: 5 AM, Friday, January 18th

Method: via email



www.weather.gov/boston



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