

Winter Weather Briefing

For Southern New England

Decision Support Briefing #3

As of 4:15 PM Monday, March 13, 2023 **Important Updates**



- **Remaining Winter Storm Watch areas** (CT River Valley, Eastern MA) converted to Winter Weather Advisory
- **Coastal Flood Watch converted to Coastal Flood Advisory**



3:21 PM CDT



Active Headlines

Winter Weather Hazards

Winter Storm Warning Winter Weather Advisory

Graphic Created March 13th, 2023

2:38 PM CDT



Marine / Coastal Hazards





Wind Related Hazards

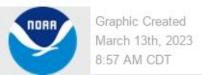
High Wind Warning



Flooding Hazards

2:50 PM CDT







Main Points

Hazard	Impacts	Location	Timing
Wind/ Damaging Wind	25-35 mph w/ gusts 50-60 mph Tree limbs/power lines/ isolated trees downed Power outages likely	Eastern MA	Late tonight into Wednesday Peaking Tuesday Afternoon/Evening Diminishing below 30 mph Wednesday night
Snow	Snow loading on trees/power lines; morning commute (west) and evening commute (east) Power outages likely	Anywhere that receives 4+ inches of heavy, wet snow	Tonight (higher terrain) through Tuesday night Lingering into Wed. AM in eastern MA
Marine	Storm conditions with 12-18 ft seas eastern MA; Gales with 5-10 ft seas RI coast	Eastern MA waters	Tonight through Wednesday
Coastal Flooding	Widespread minor coastal flooding	Eastern MA from Cape Cod northward	Three high tide cycles, from 4-5 AM Tuesday through 5-6 AM Wednesday

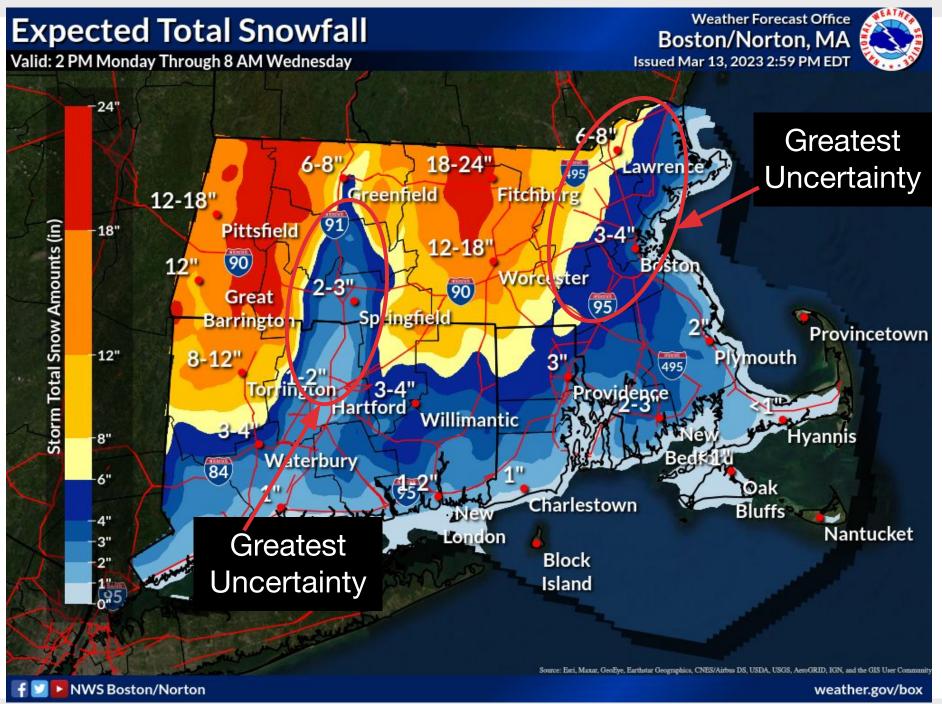




Forecast Storm Total Snowfall

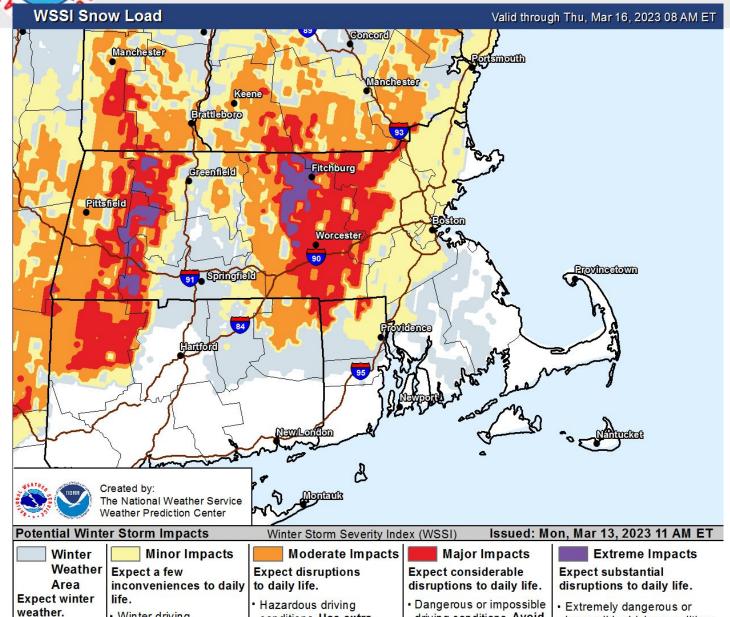
Snowfall amounts will vary greatly depending on elevation

Snowfall gradient in the greatest uncertainty areas could shift east or west depending on exact storm track and intensity





Snow Loading on Trees/Powerlines



- Dangerous or impossible conditions. Use extra driving conditions. Avoid caution while driving. travel if possible.
- Closures and disruptions Widespread closures and to infrastructure may disruptions to infrastructure may occur. occur.
- Extremely dangerous or impossible driving conditions. Travel is not advised.
 - Extensive and widespread closures and disruptions to infrastructure may occur.
 - Life-saving actions may be needed.

Winter Storm Severity Index (WSSI)

https://www.wpc.ncep.noaa.gov/wwd/wssi/wssi.php

Snow Load Component highlights the higher elevation regions with the highest risk of impacts from significant accumulations of wet/heavy snow on trees and powerlines

Expectation is that minor impacts will occur with at least 4" of snow

Winter driving

while driving.

Winter driving

Drive carefully.

conditions.

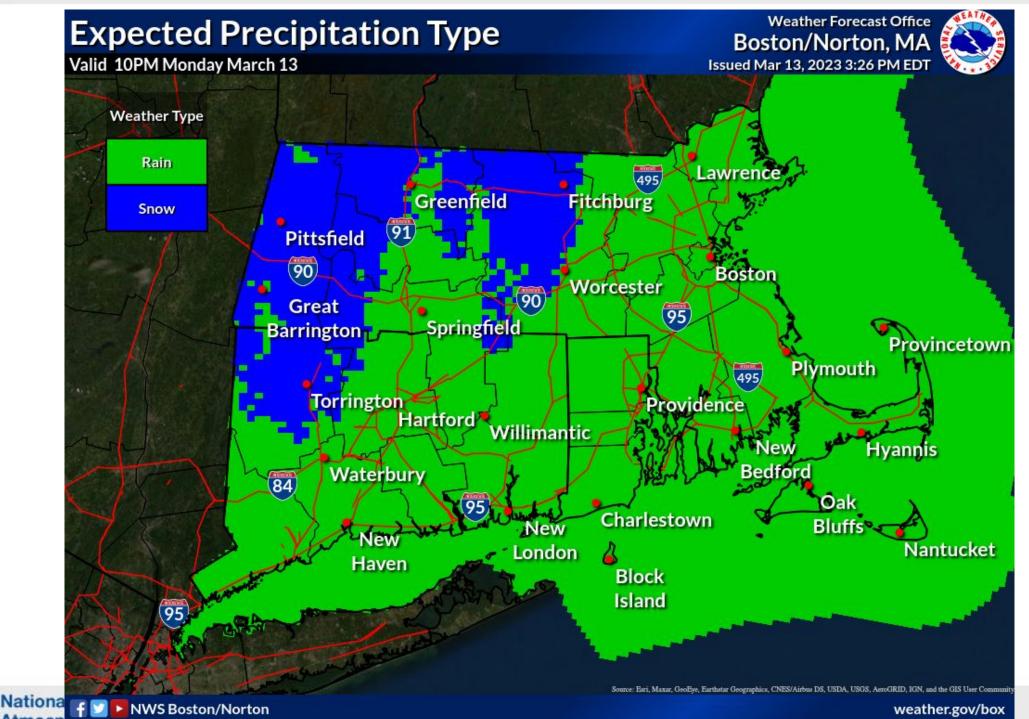
conditions. Use Caution



U.S. Department of Commerce

Precipitation Type 10 PM Monday

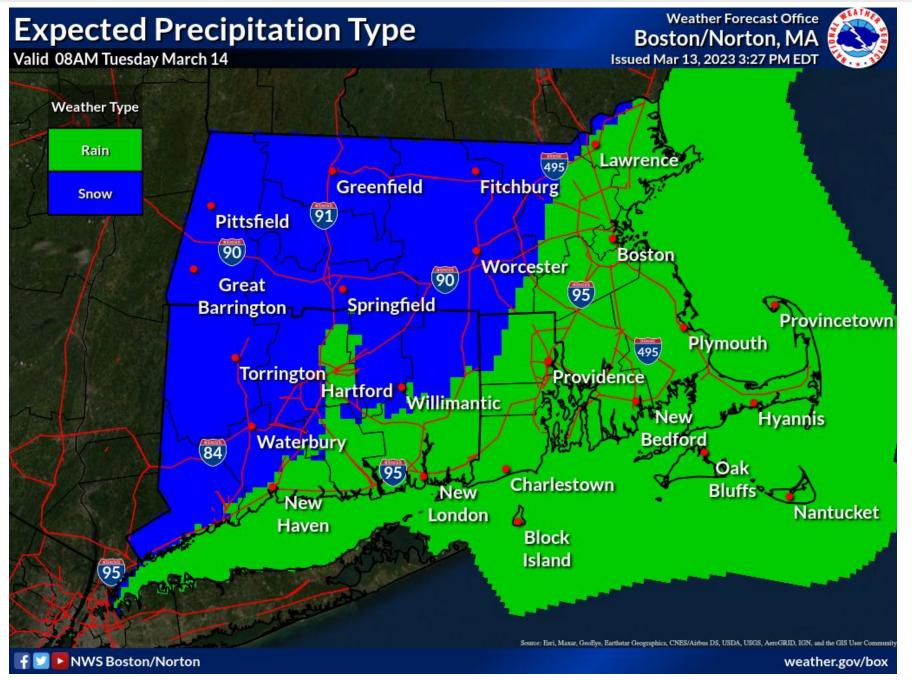
Snow Mainly for High Elevations Overnight





Precipitation Type 8 AM Tuesday

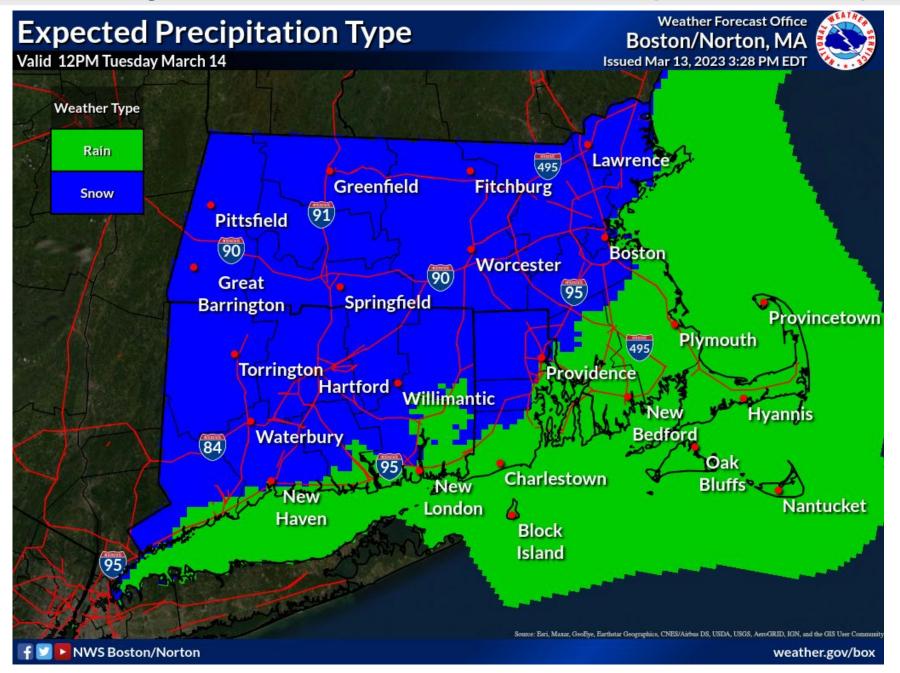
Rain Changes to Snow Across Western MA/northern CT by 8 AM





Precipitation Type Noon Tuesday

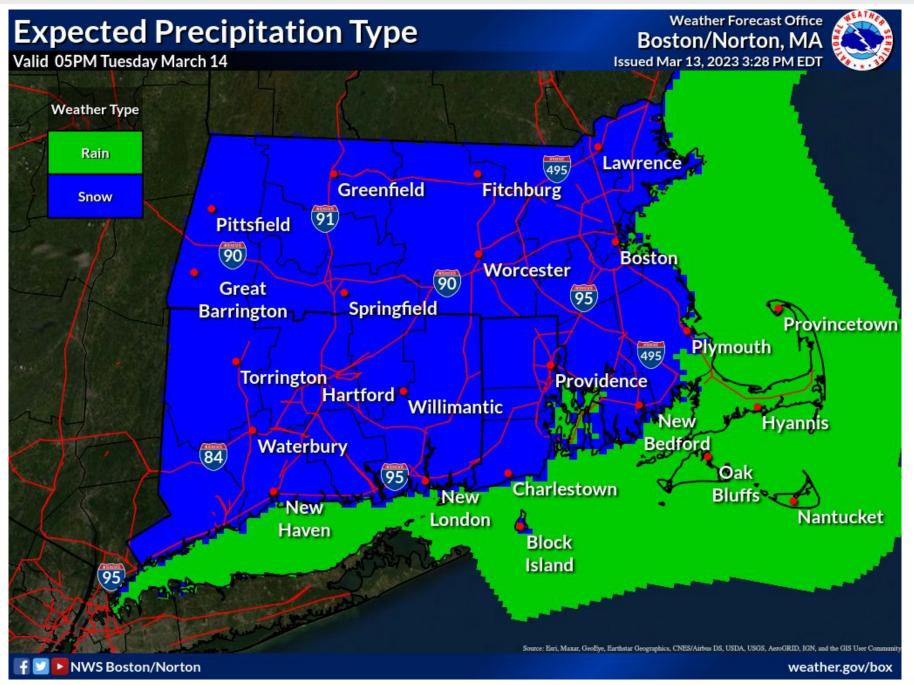
Rain Changes to Snow at Boston/Providence by Noon Tuesday





Precipitation Type 5PM Tuesday

Snow Expected Down to the South Coast by 5PM. Later for Cape Cod/Islands

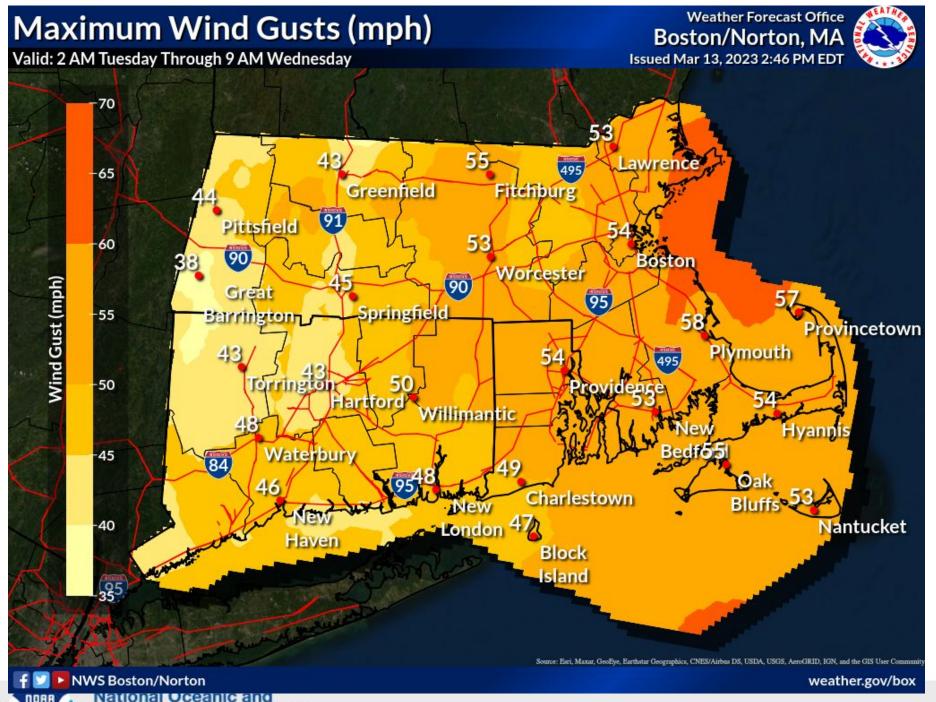




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Forecast Wind Gusts



Timing: Strongest Gusts (east/northeast direction)

- South Shore, Cape and Islands generally Tuesday morning
- Northeast MA/Cape Ann Tuesday afternoon

Another round of strong winds Tuesday night (northerly direction)

Wind Gusts drop below 30-35 mph late Wednesday afternoon

Maximum

43

54

41

3/16



Temperature and Wind Gust Tables

Maximum Temperature Forecast

3	3/13	3/14				3/15				3/16		
	Mon	Tue				Wed				Thu		
	6pm	12am	12am 6am 12pm 6pm			12am 6am 12pm 6pm				12am 6am 12pm		
Boston	40	40	39	37	34	33	37	42	40	35	40	47
Gloucester	40	39	39	37	36	33	38	41	39	34	38	44
Hartford	42	39	37	36	34	33	38	41	39	34	40	48
Hyannis	41	41	42	41	38	37	38	41	40	36	39	44
Lowell	41	39	38	34	32	33	37	40	39	33	39	46
Nantucket	41	42	42	41	39	37	38	41	41	37	39	43
New Bedford	41	41	41	39	35	33	39	43	40	34	41	48
New Haven	42	42	38	36	35	32	37	42	41	34	41	49
Newport	41	41	41	37	34	33	38	41	39	35	41	46
Pittsfield	37	34	33	33	32	30	31	33	33	28	32	38
Providence	42	40	40	36	34	33	38	41	40	34	41	48
Springfield	41	38	37	35	33	33	37	39	38	33	39	46
Worcester	39	36	35	33	32	31	35	37	36	31	36	44

		3/13
		Mon
Maximum		6pm
47	Boston	23
44	Gloucester	26
48	Hartford	20
44	Hyannis	33
46	Lowell	18 ←
43	Nantucket	33
	New Bedford	29
48	New Haven	28
49	Newport	31
46	Pittsfield	20
38	Providence	214
48		
46	Springfield	20
44	Worcester	21
	*Table values in mp	h

	0, . 0	0/11			0/10				07.10			
	Mon	Tue			Wed				Thu			
	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm
Boston	23←	37	41	43	40♣	39♣	35	33	32 [*]	28	22	21
Gloucester	26	38	49	54	49♣	49	45 ¥	36	33	31	26	20
Hartford	20	24	26₺	32	33	31*	39	41	39🏜	28	22	22
Hyannis	33	41	47	44	32	44	44	38	32	32	28	24
Lowell	18 ←	29	38⋭	40	40♣	38♣	30	33	32	25	22	22
Nantucket	33	45	46	38	35→	47	47	39	33	32	30	24

3/14

Maximum Wind Gust Forecast

35 35 35 40 40 38

3/15

	44							4/
	38							40
	47			5 5				47
37	39	37	35	30	28	23	21	41
	46							46
41	41	36	35	32	29	23	21	41
43	44	44	40	36	24	17	16*	44
	38							39
	35							40
41	38	35	36	35	30	23	23	41

3/13

^{*}Table values in °F

^{**}Created: 4 pm EDT Mon 3/13/2023

^{***}Values are maximums over the period beginning at the time shown.

Table values in mph

^{**}Created: 4 pm EDT Mon 3/13/2023

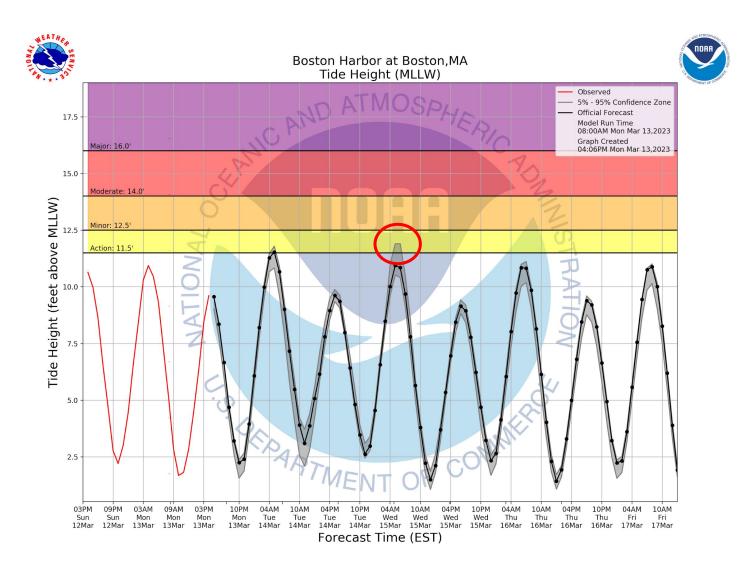
^{***}Values are maximums over the period beginning at the time shown.

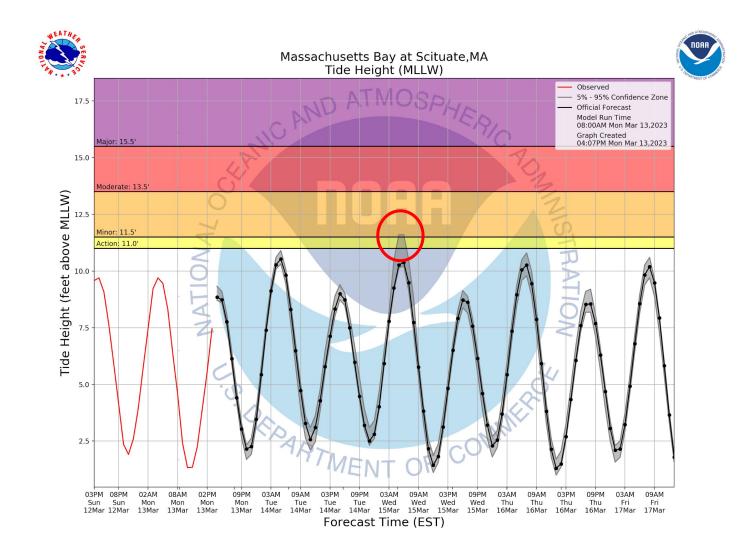


Coastal Flood Forecast

Graphs Showing Possible Forecast Ranges

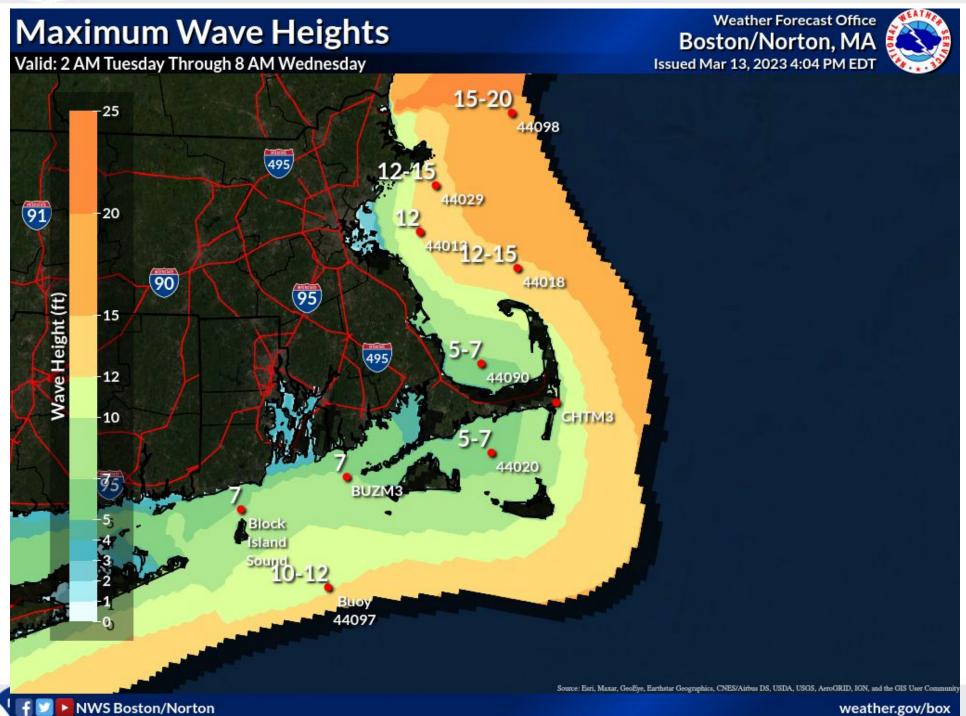
High tide of concern is early Wednesday morning (5-6 AM). Impacts may be higher due to wave action. Expecting a 2 to 3 foot storm surge, yielding 12-13 ft MLLW in Boston Harbor and 11 to 12 ft MLLW Scituate.







Maximum Wave Heights



Highest waves expected during the day Tuesday

Will coincide with the time of strongest winds (40-50 knots closer to land, and in excess of 50 knots offshore)

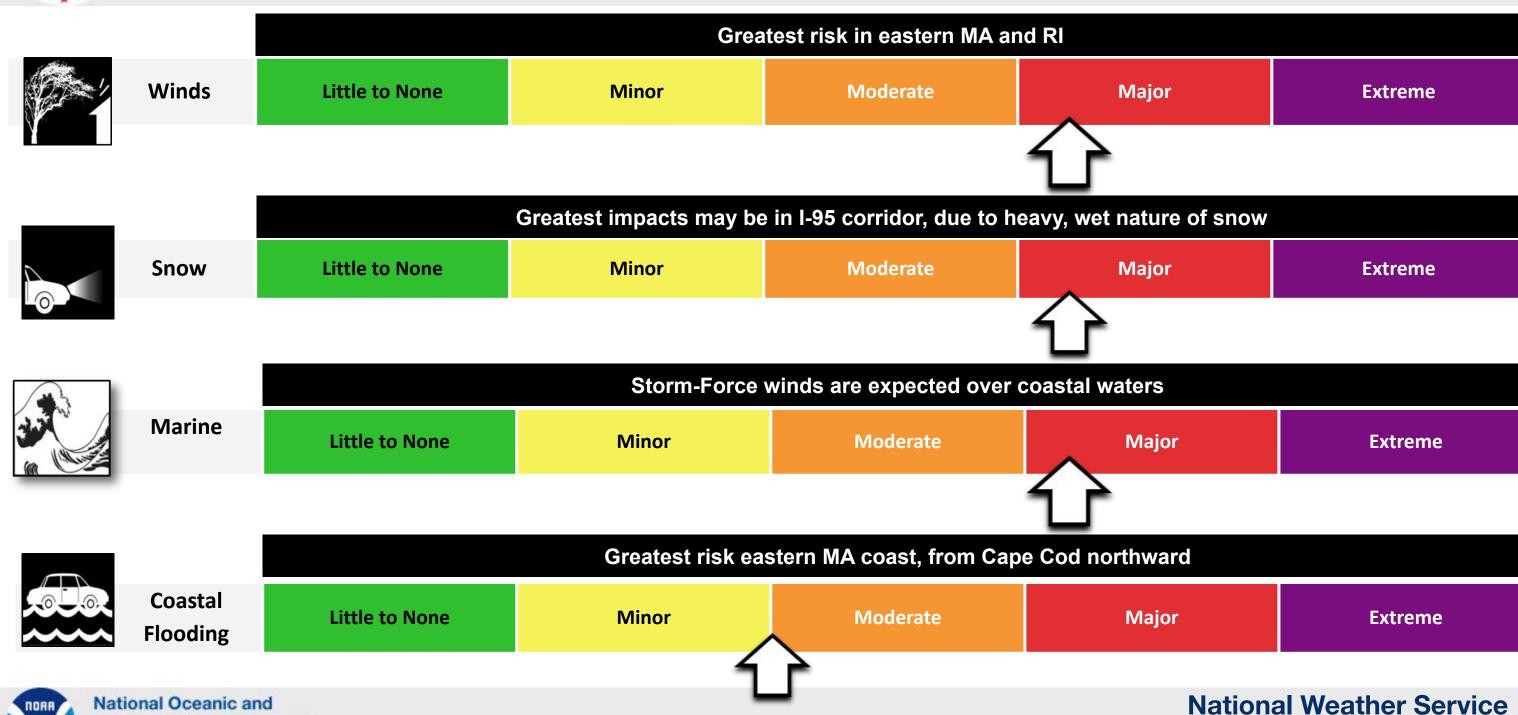
Boston / Norton, MA



Atmospheric Administration

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Summary of Greatest Impacts





Key Points Summarized

Snow

- Snow consistency will be wet. Snow loading and power outages become a big concern with totals >4". Strong winds will exacerbate the issues.
- Outside of higher terrain, temperatures will be in the mid to upper 30s around daybreak Tuesday, then they drop to 32 or lower late Tuesday morning/afternoon. That's when accumulations will really increase.
- Tuesday morning commute may be impacted in Hartford/Springfield/Worcester. The Tuesday evening commute could be difficult across much of the region, including Boston and Providence. Conditions should improve Wednesday morning.

Wind

 High confidence that wind speeds will be strongest along the eastern MA coast. Concern for downed trees/power lines and travel for high profile vehicles.

Coastal Flooding

 Minor coastal flooding is expected along the eastern MA coast from Cape Cod northward. It may last several tidal cycles Tuesday and Wednesday.





Contact and Next Briefing Information

For NWS Boston/North County Warning Area

Next Briefing



By 6:00 AM Tue, 3/14/23 Method: Email

Disclaimer



Information contained in this briefing is time-sensitive Do Not Use After: 6:00 AM Tue, 3/14/23



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