



# **Hazardous Weather Briefing**

### 3:00 PM ET Monday, March 13<sup>th</sup>, 2023

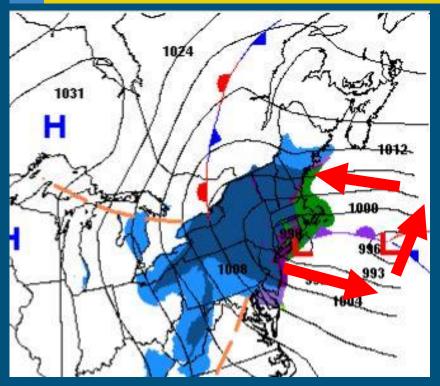
Prepared by: Michael Souza – MEMA Meteorologist & NWS Boston/Norton

### Strong Nor'easter Expected



Massachusetts Emergency Management Agency

#### **Tonight through Early Wednesday Morning**



Surface Map: Valid 8AM Tuesday

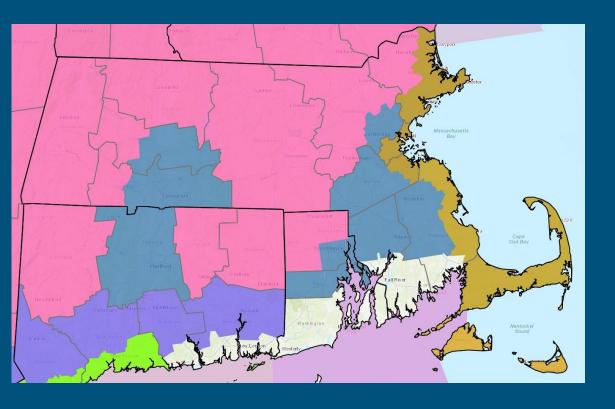
Strong Nor'easter expected late this evening through early Wednesday morning

### Hazards Include

- Heavy/wet snow and strong gusty wind leading to power outages and tree debris
- Widespread hazardous travel on Tuesday, especially for northern/interior/western MA
- Minor coastal flooding/beach erosion possible

### Current NWS Headlines

### For Upcoming Nor'easter





Massachusetts Emergency Management Agency

Winter Storm Warning

8PM Tonight  $\rightarrow$  8AM Wed

Winter Storm Watch This Evening → Wed AM (Likely to become an advisory)

High Wind Warning 8AM Tue  $\rightarrow$  8AM Wed

Coastal Flood Watch Late Tue Night  $\rightarrow$  Wed AM

\*Additional NWS Headlines are likely by late this afternoon/tonight where any watches become warnings or advisories\*

# **Expected Snowfall**

### **Highest Confidence Amounts**



Massachusetts Emergency Management Agency



- Highest snowfall amounts across the Berkshires & Worcester, Middlesex, and Essex county
- Lesser amounts closer to the coastal plain and along the Southcoast/Southshore

Areas of Highest Uncertainty Regarding Snow Totals:

If heavier snow bands DON'T develop in these areas, snow totals will be lower. However, threat is too close to call

### **Precipitation Types and Onset Times**



- **SNÓW**  North Adams • Lowell Greenfield • Leominster Salem 91 • Pittsfield 90 Boston Northampton 90 Worcester Springfield Brockton Provincetown 495 RAIN Precip Spreading New Bedford Edgartown Nantucket  $8PM \rightarrow 2AM$  Tuesday
- Precipitation spreads east-northeastward this evening through late tonight
- Begins as rain for most with temperatures above freezing
- Colder over the Berkshires and Worcester County where it's likely to begin and end as all snow
- Some heavier I"/hr rates begin over the Berkshires closer to midnight

### **Precipitation Types and Onset Times**

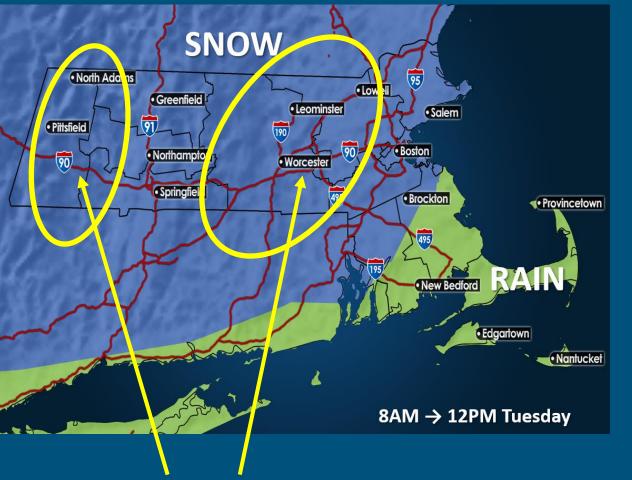


Areas of 1-2"/hr Snowfall Rates



- Cold air begins to push south and east as rain changes over to snow (remains as snow)
- Still mostly rain across eastern MA but will soon change over to all snow by mid AM
- I-2"/hr rates persist over the Berkshires
- Near I"/hr rates begin over Worcester County by 6-8AM

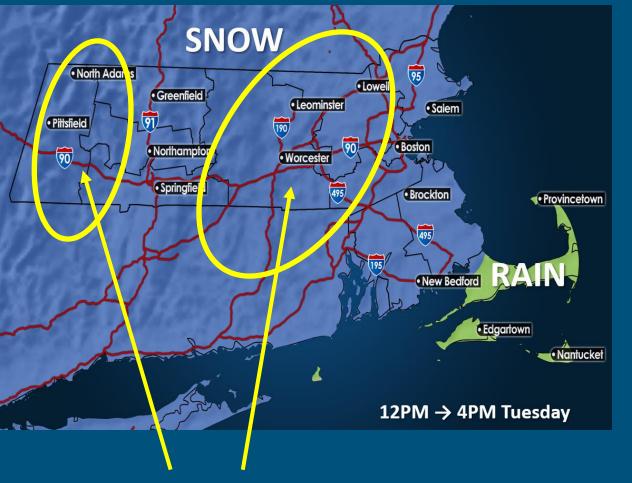
### **Precipitation Types and Onset Times**



- Cold air continues to quickly push south and east as rain changes over to snow
- Any rain more confined to the Southcoast, Cape/Islands
- I-2"/hr rates persist over the Berkshires and north-central MA

Areas of 1-2"/hr Snowfall Rates

### **Precipitation Types and Onset Times**



Areas of 1"/hr Snowfall Rates



- Cold air continues to quickly push south and east as rain changes over to snow (remains as snow)
- Any rain more confined Cape/Islands, expected to change over to snow by 4-6PM
- I"/hr rates persist over the Berkshires and expand into eastern MA

#### **Precipitation Types and Onset Times**



Possible redeveloping period of moderate snowfall



Massachusetts Emergency Management Agency

- Snow continues through Tuesday night
- Some 0.5"/hr rates <u>may</u> redevelop over eastern MA by 8-10 PM, threat lingers through midnight
- Snow begins to taper to snow showers overnight into early Wed AM and end from west to east by 5-9AM

(perhaps closer to 10AMnoon over the Cape)

# High/Low End Snowfall

### **Best/Worst Case Scenarios**



Willimantic

Norwich

New

London

New

Britain

East

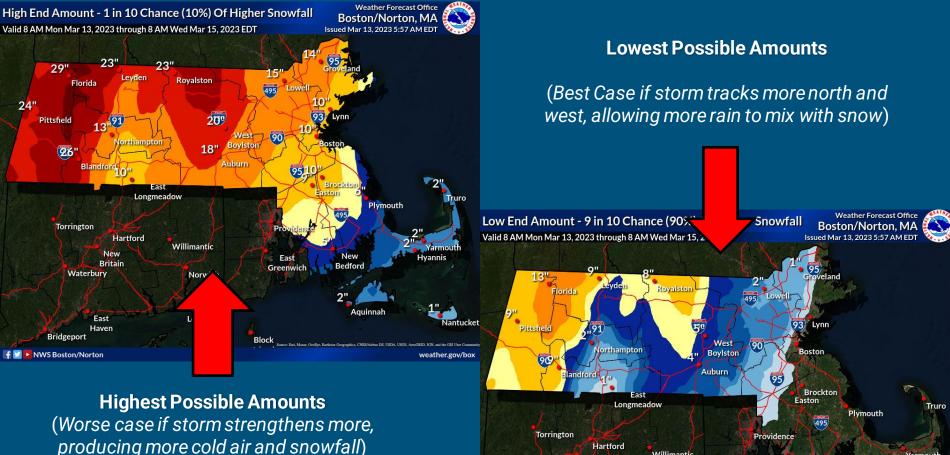
Haven

Waterbury

Bridgeport

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Massachusetts Emergency Management Agency



New

Bedford

Aguinna

East

Greenwich

Block

Yarmouth

weather.gov

Nantucke

Hvannis

### Wind Gust Potential

### **Tuesday Morning Through Late Tuesday Night**



### Widespread Power Outage Potential Exists

Combination of heavy/wet snow along with strong gusty wind will lead to more widespread power outage potential



- Strongest wind gusts across the eastern coastline, Cape and the Islands
- Lesser wind gusts further inland
- Strongest wind gusts likely to occur between 8AM through 10PM Tue
- Wind gusts slightly decrease but remain elevated into Wed (30-40 mph gusts) which may prevent power restoration efforts

### Coastal Flooding Potential

### Late Tue Night into Wed AM High Tide





- Low astronomical tides help with <u>limiting</u> coastal flood potential
- However strong and persistent onshore flow will allow water to pile up along the coastline
- This leads to the possibility of minor coastal flooding across the eastern shoreline during the high tide which may cause flooding across low lying vulnerable roadways
- Low chance at seeing any isolated pockets of moderate flooding (*Scituate, Morrissey Blvd Boston, Hull, etc*)
- Large waves may cause beach erosion

### Recap

#### **Tonight through Early Wednesday Morning**

- Strong and long lasting Nor'easter to impact the region late tonight through Wednesday morning
- Widespread hazardous travel on Tuesday, especially for interior/western MA and areas north of the MA Pike
- Widespread heavy/wet/plowable snow
- Strong gusty winds, *especially along coastal MA*
- Widespread power outage potential
- Minor coastal flooding/beach erosion possible

Latest Forecast Updates: Weather.gov/box/winter

**Questions? Contact:** 

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