



## Decision Support Briefing #5

→ Sunday December 17th 2023, 4PM

### Headlines in Effect

- High Wind Warning for RI and areas south and east of I-95
- Wind Advisory elsewhere
- Storm Warning for the waters
- Flood Watch remains in effect
- Coastal Flood Warning RI, Coastal Flood Advisory for the MA South Coast and Coastal Essex County

**Timing: Overnight Sunday through Monday**

## Hazards



### Current Watches, Warnings, and Advisories

- High Wind Warning
- Storm Warning
- Coastal Flood Warning
- Coastal Flood Advisory
- Wind Advisory
- Flood Watch



Graphic Created  
December 17th, 2023  
2:30 PM CST





# Active Headlines

December 17, 2023  
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## Hazards

- High Wind Warning
- Storm Warning
- Coastal Flood Warning
- Coastal Flood Advisory
- Wind Advisory
- Flood Watch



Graphic Created  
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## Marine / Coastal Hazards

- Storm Warning
- Coastal Flood Warning
- Coastal Flood Advisory



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## Wind Related Hazards

- High Wind Warning
- Wind Advisory



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## Flooding Hazards

- Flood Watch



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# Key Points

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Hazard		Impacts	Location	Timing
<b>Damaging Wind</b>		Downed trees/power lines and power outages possible	RI/MA I-95 south and east, including Cape/Islands	Overnight Sunday through Monday Evening
<b>Coastal Flooding</b>		Minor to moderate flooding coastal roads	Narragansett Bay, and RI/MA south coast, Essex County	Monday midday high tide
<b>Flooding Rain</b>		Street flooding & Minor/moderate river/stream flooding	West of I-95 corridor, especially CT into adjacent MA and RI	Overnight Sunday into Monday
<b>Hazardous Winds/Seas</b>		Dangerous sea conditions for vessels	MA and RI waters	Sunday evening through Monday night





# Summary of Greatest Impacts

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<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	



<u>Marine Travel:</u>	MA and RI waters				
None	Limited	Elevated	Significant	Extreme	

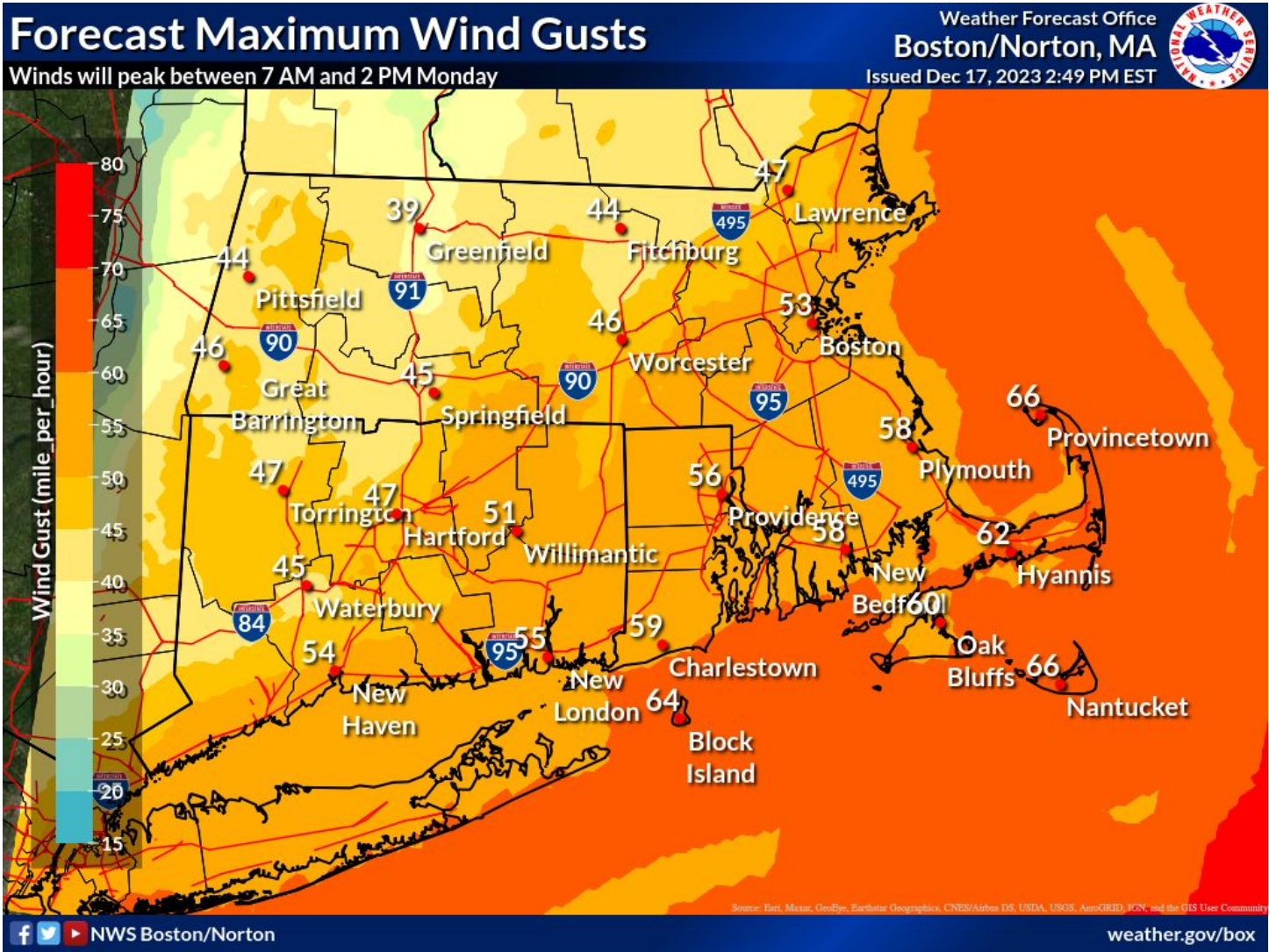






# Max Wind Gusts

Wind Gusts will peak Monday Morning



**Maximum Wind Gust Forecast (mph)**

12/18  
Mon

	4am	5am	6am	7am	8am	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	Maximum
Block Island	48↖	53↖	58↖	62↖	63↖	64↖	60↖	56↖	54↖	51↖	48↖	47↖	45↖	44↖	41↖	40↖	32↖	30↖	64
Boston	31↖	36↖	40↖	45↖	48↖	52↖	49↖	47↖	46↖	44↖	43↖	41↖	40↖	38↖	36↖	33↖	26↖	26↖	52
Cambridge	31↖	36↖	40↖	45↖	48↖	52↖	49↖	47↖	46↖	44↖	41↖	41↖	40↖	38↖	36↖	33↖	26↖	26↖	52
Gloucester	38↖	43↖	49↖	54↖	58↖	59↖	56↖	54↖	53↖	51↖	49↖	49↖	48↖	45↖	40↖	37↖	28↖	30↖	59
Hartford	37↖	40↖	45↖	48↖	46↖	44↖	40↖	38↖	35↖	32↖	31↖	29↖	26↖	24↖	22↖	21↖	17↖	18↖	48
Hyannis	41↖	46↖	54↖	58↖	60↖	62↖	59↖	56↖	54↖	52↖	52↖	52↖	51↖	47↖	44↖	40↖	35↖	32↖	62
Lowell	30↖	33↖	38↖	43↖	46↖	44↖	41↖	41↖	40↖	40↖	38↖	37↖	36↖	33↖	31↖	29↖	23↖	25↖	46
Nantucket	46↖	49↖	56↖	59↖	60↖	66↖	64↖	61↖	56↖	53↖	53↖	52↖	52↖	49↖	46↖	44↖	33↖	31↖	66
New Bedford	43↖	47↖	52↖	55↖	58↖	58↖	54↖	52↖	49↖	47↖	46↖	45↖	44↖	40↖	38↖	35↖	28↖	30↖	58
Plymouth	40↖	45↖	51↖	54↖	55↖	58↖	53↖	52↖	49↖	48↖	47↖	47↖	47↖	45↖	41↖	39↖	30↖	31↖	58
Providence	39↖	44↖	49↖	54↖	55↖	56↖	49↖	47↖	46↖	44↖	43↖	41↖	40↖	37↖	33↖	30↖	22↖	22↖	56
Springfield	35↖	39↖	43↖	46↖	43↖	44↖	40↖	39↖	37↖	36↖	32↖	28↖	24↖	23↖	22↖	22↖	17↖	20↖	46
Vineyard Haven	44↖	47↖	54↖	58↖	58↖	59↖	59↖	56↖	53↖	51↖	49↖	48↖	47↖	45↖	41↖	39↖	31↖	30↖	59
Westerly	44↖	48↖	54↖	58↖	58↖	58↖	51↖	48↖	47↖	45↖	41↖	39↖	37↖	36↖	35↖	33↖	26↖	25↖	58
Worcester	33↖	36↖	40↖	46↖	46↖	44↖	43↖	43↖	41↖	41↖	37↖	35↖	32↖	32↖	32↖	33↖	26↖	26↖	46

Maximum Wind Gust Forecast (mph)

Created: 2 pm EST Sun 12/17/2023 | Values are maximums over the period beginning at the time shown.

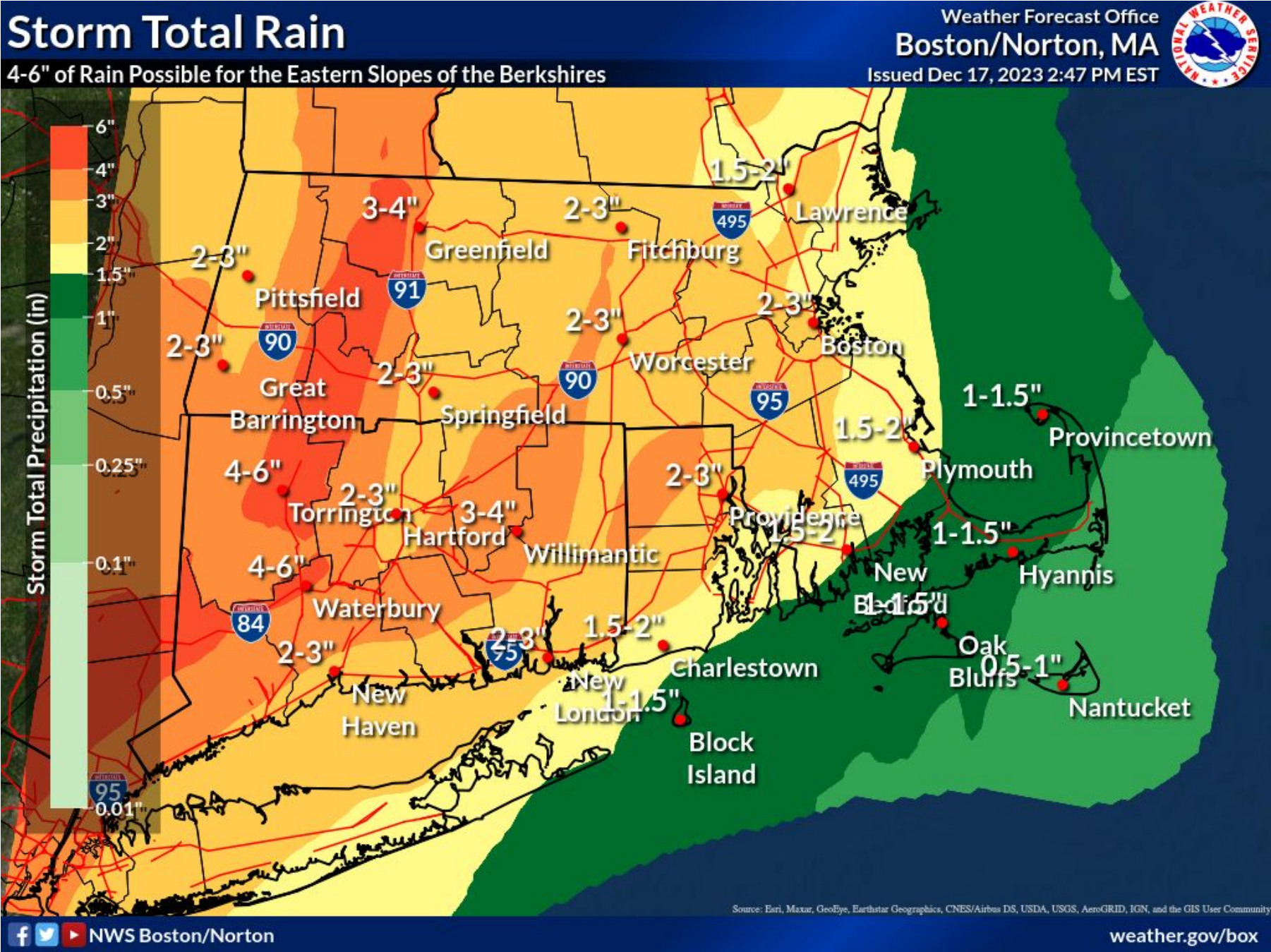
- Arrow designates the direction the wind is blowing towards. Ex. An arrow pointing to northwest is a “southeast” wind, blowing from SE to NW.





# Forecast Rain Totals

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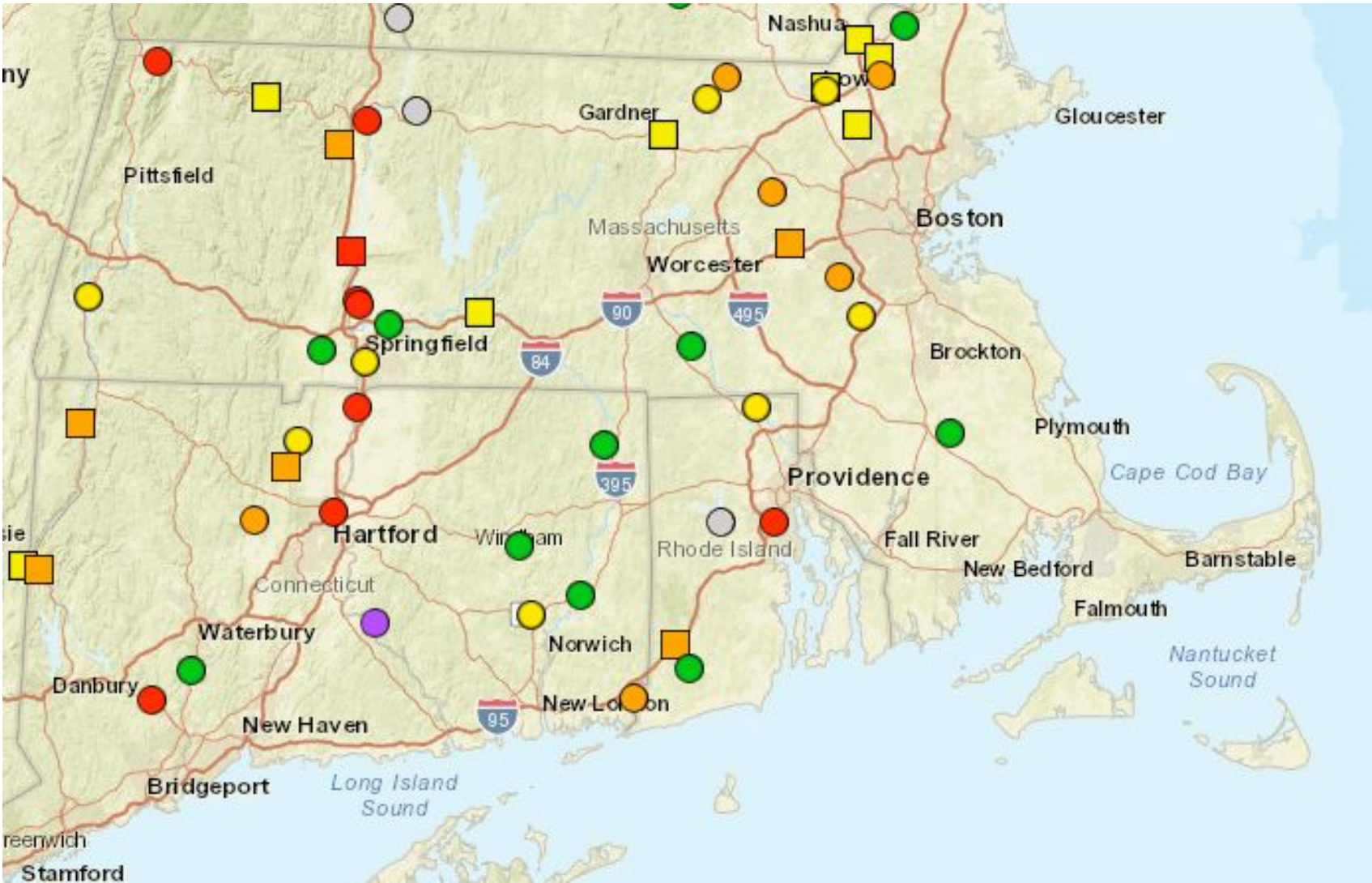
National Weather Service  
Boston / Norton, MA





# River Flood Outlook

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- Minor to Moderate river flooding is possible
- Greatest Risk for Moderate River Flooding is in the CT River Valley
- Moderate Flooding possible for the Pawtuxet River in Cranston

*Extent and level of flooding is dependent upon rainfall amounts*

Map Legend Below

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		



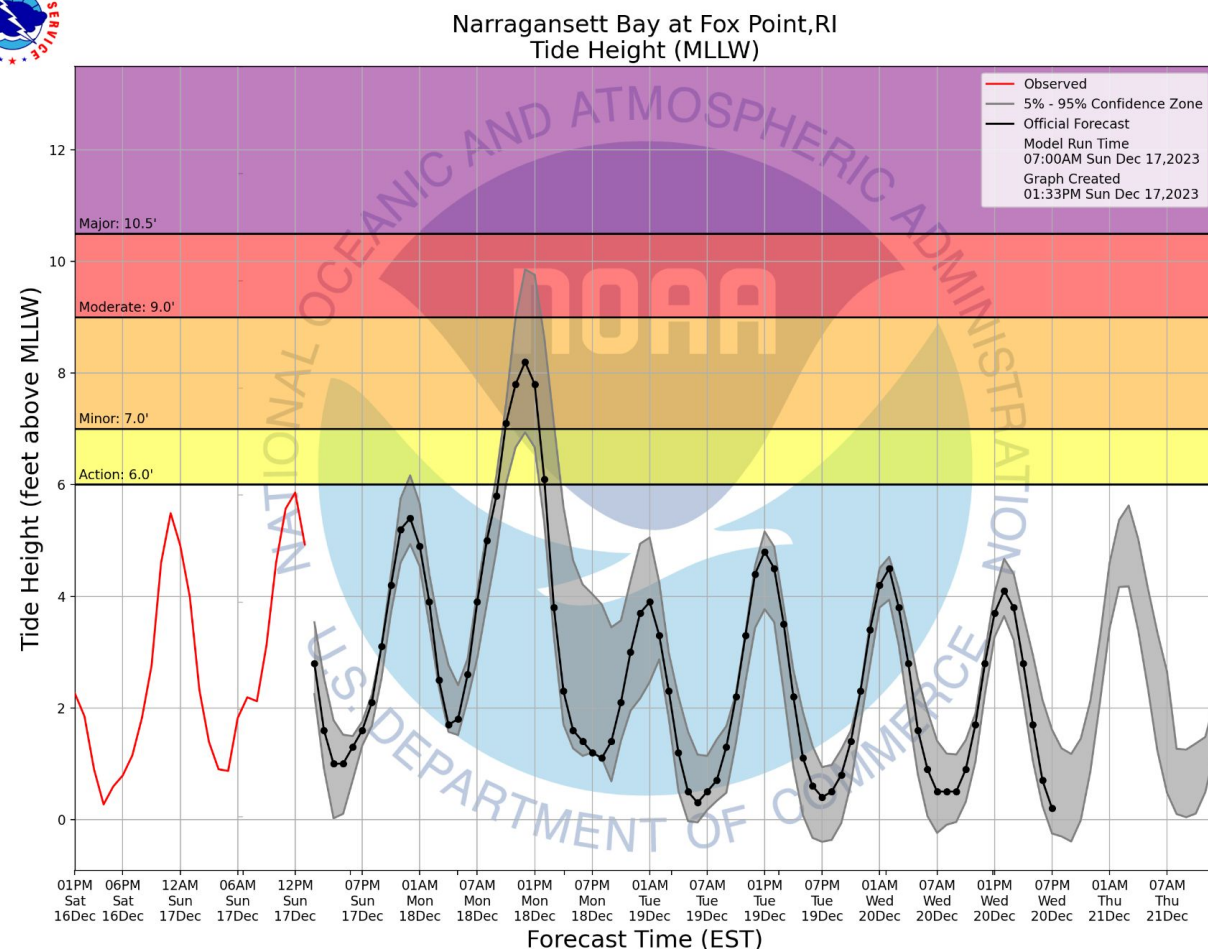
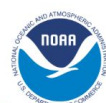




# Coastal Flooding

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## Total Water Level Forecast: Providence



- High confidence for at least Minor Coastal Flooding surrounding the Monday mid-day high tide, with the potential for Moderate Coastal Flooding in Narragansett Bay  
Lower risk of minor flooding/splash over along the rest of RI/MA south coast and Essex County



Minor

Moderate

**Minor:** flooding less than one foot deep

**Moderate:** flooding 1 to 2 feet deep



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National Weather Service  
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# Coastal Flood Forecast

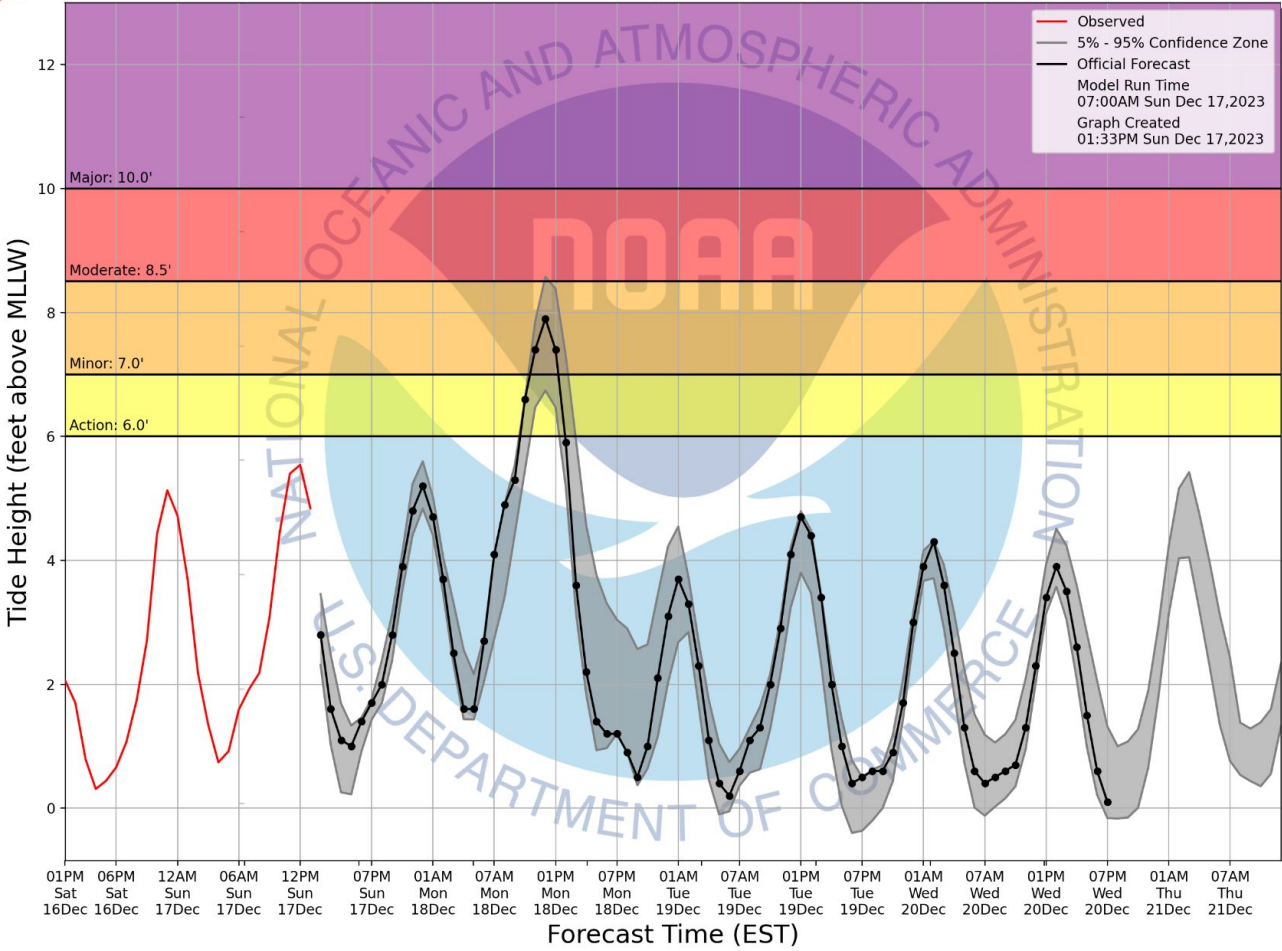
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High Confidence in impacts from Minor Coastal Flooding with potential Moderate Coastal Flooding in Narragansett Bay

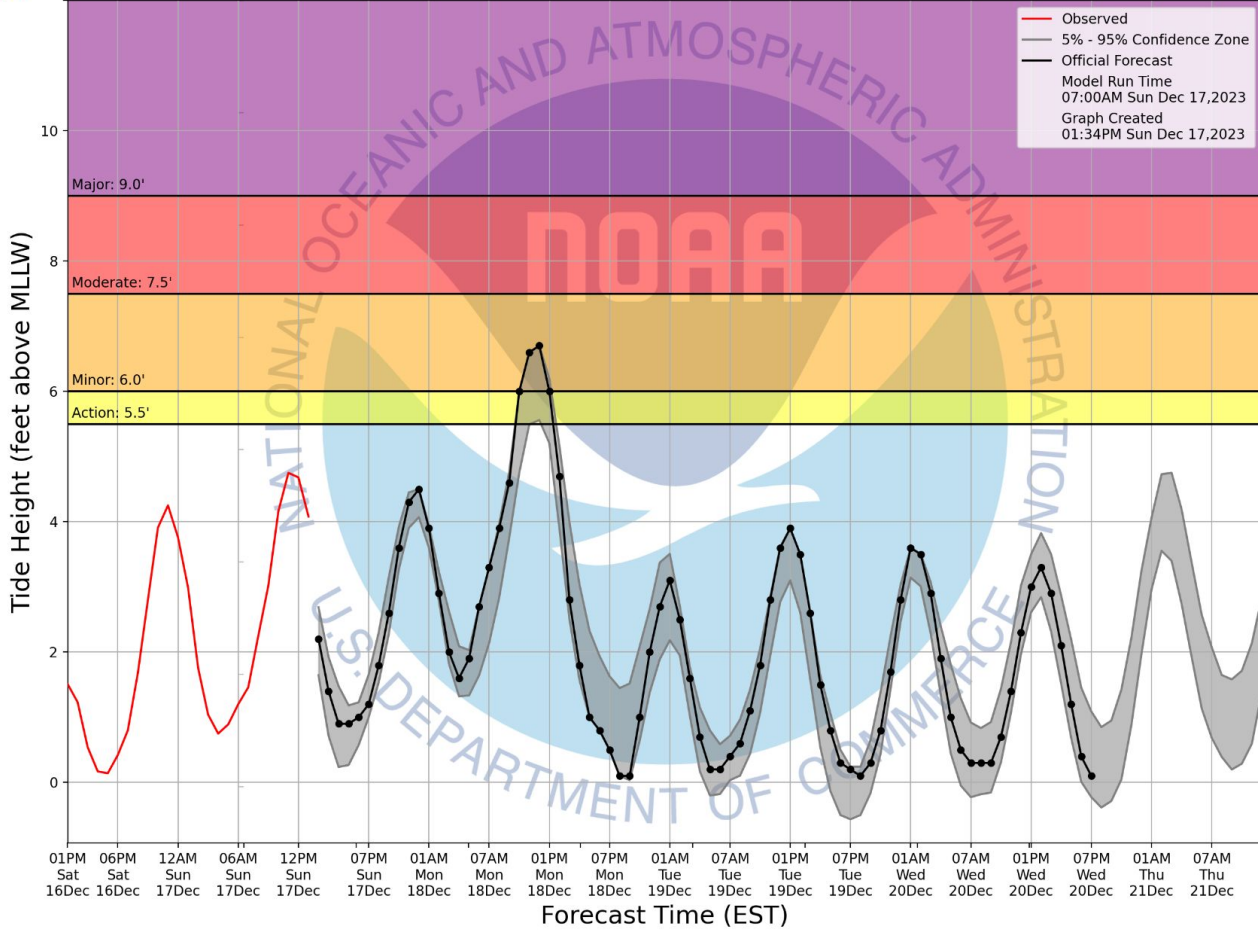
**\*\*Flood threat is contingent on the Monday lunchtime high tide coinciding with the timing of highest southeast winds.\*\***



Narragansett Bay at Conimicut Light, RI  
Tide Height (MLLW)



Narragansett Bay at Newport Harbor, RI  
Tide Height (MLLW)







# Threat Event Summary

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➤ **Confidence:** High (80%) on a high impact storm

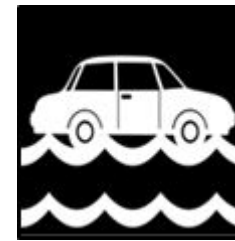
➤ **What:**



Downed trees/power lines from 40-65 mph winds, strongest coast



Minor to moderate coastal flooding, especially along Narragansett Bay



Minor to moderate river/stream flooding. Significant street flooding likely



Dangerous conditions for marine vessels Sun evening through Monday

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

➤ **When:** Overnight Sunday into Monday







# Contact and Next Briefing Information

December 17, 2023  
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## Next Briefing:

If necessary, 6 AM Monday

**Disclaimer:** The information contained within this briefing is time-sensitive, do not use after 6 AM, Monday, December 18.



[www.weather.gov/boston](http://www.weather.gov/boston)



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