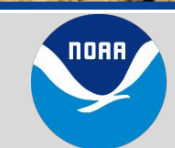


NWS Boston / Norton

Emergency Management Briefing

Impactful Storm Friday into Saturday



**National Oceanic and
Atmospheric Administration**
U.S. Department of Commerce



NWS Boston Monday EM Briefing

December 21, 2022
3:18 PM

For Southern New England

Decision Support Briefing #2

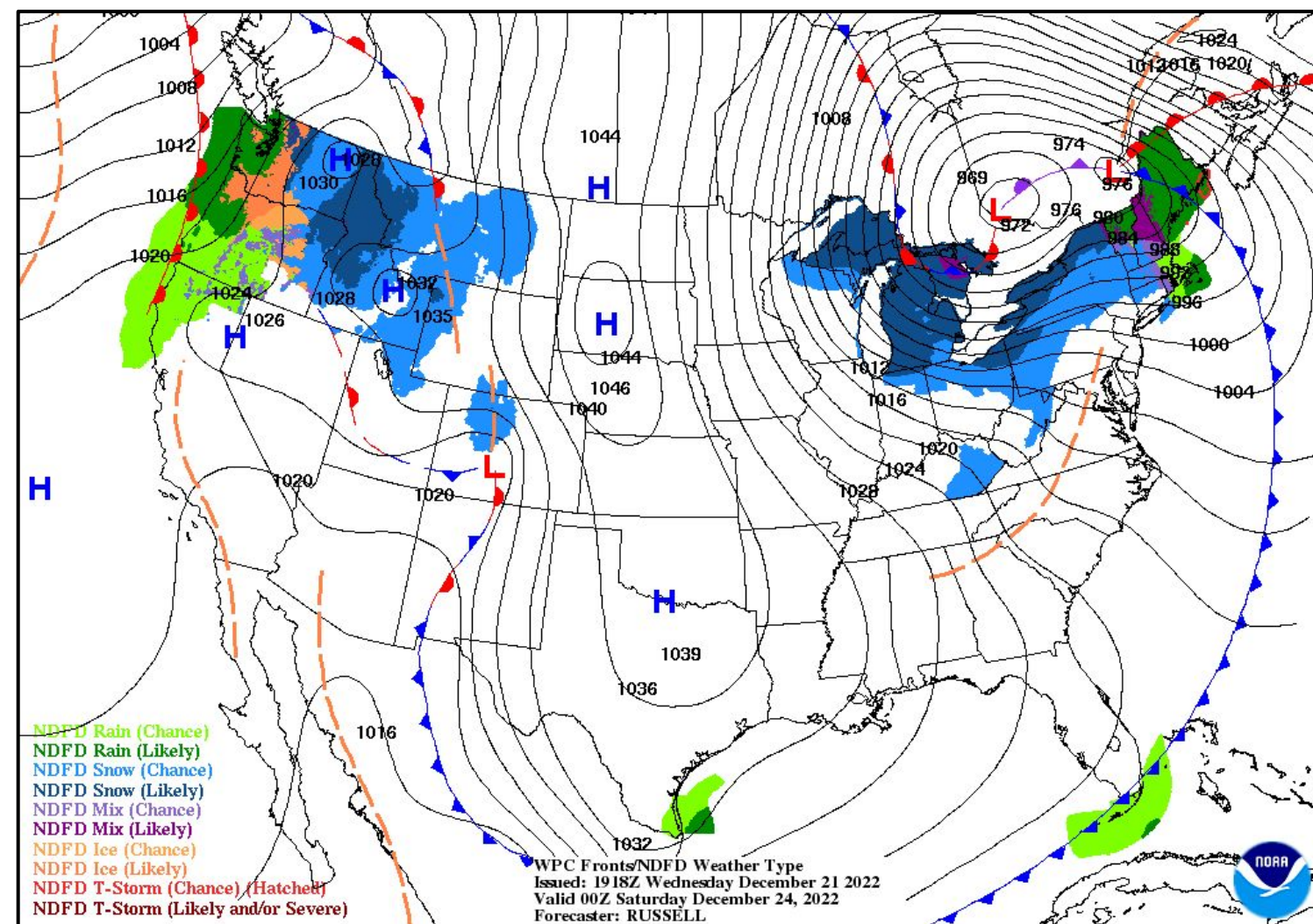
→ As of 3:30 PM Wednesday, 12/21/2022

NEW

Important Updates

- Wind/Coastal Flood/Marine headlines now in effect
- Max wind gust forecast has increased
- River flooding threat has decreased
- Friday evening high tide coastal flood threat has decreased

7 PM Friday Weather Map



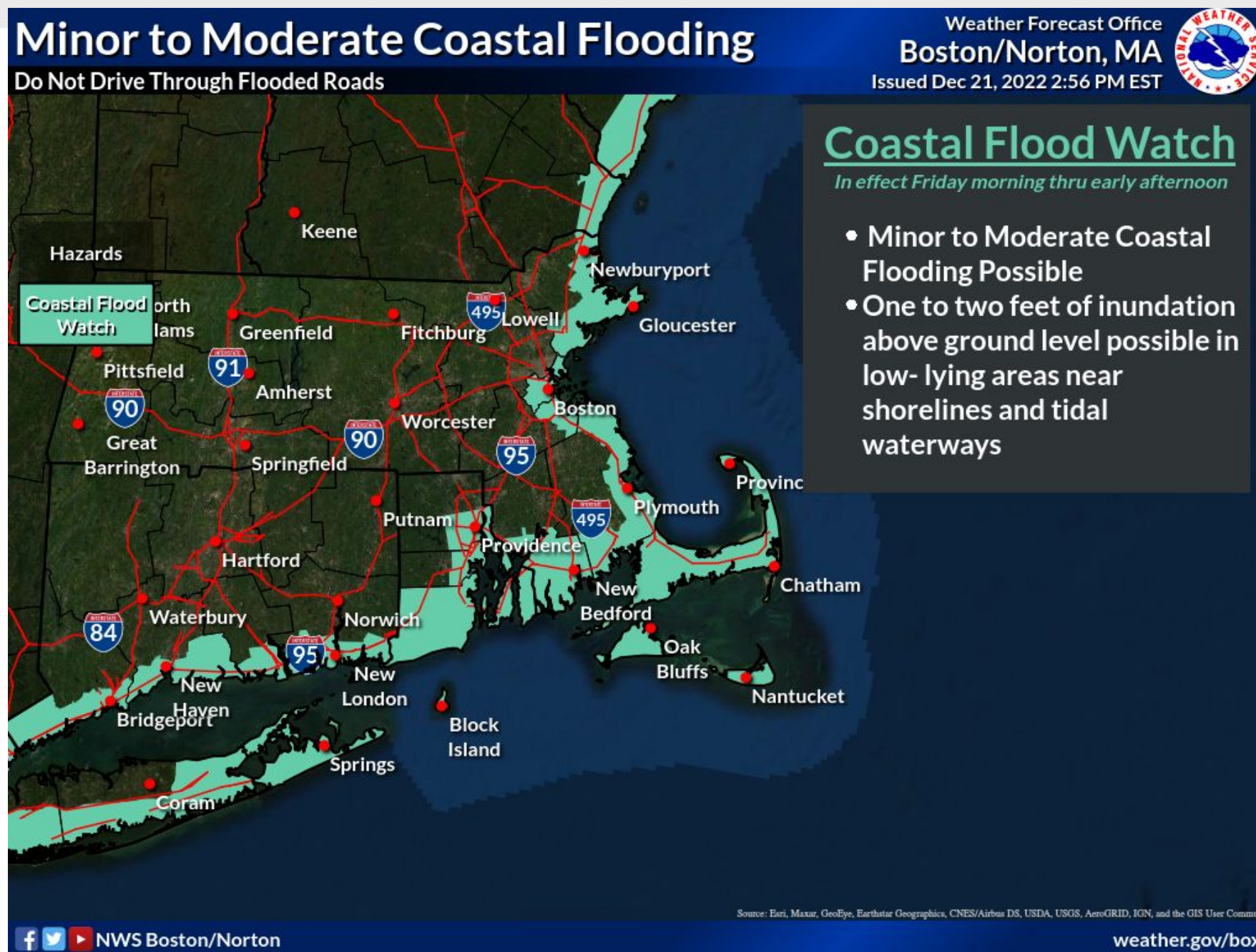
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Coastal Flood Watch

December 21, 2022
3:18 PM



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High Wind Watch

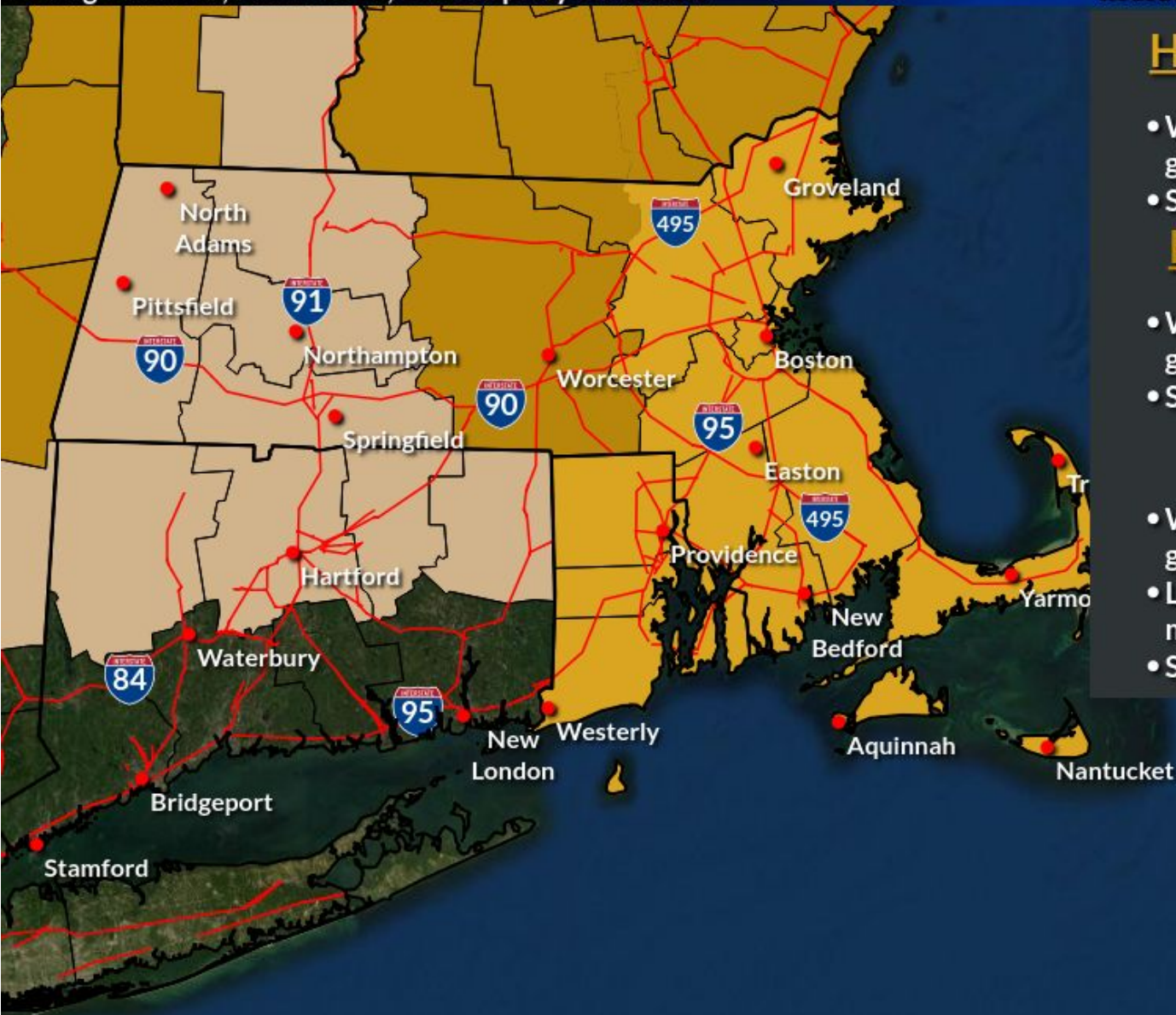
December 21, 2022
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Strong, Potentially Damaging Winds Friday

Damage To Trees, Power Lines, And Property Is Possible

Weather Forecast Office
Boston/Norton, MA

Issued Dec 21, 2022 3:27 PM EST



High Wind Warning

In effect Thu night- Fri night

- West winds 25 to 35 mph with gusts 45 to 60 mph
- Some power outages possible

High Wind Watch

In effect Thu night- Fri night

- West winds 25 to 35 mph with gusts 45 to 60 mph possible
- Some power outages possible

Wind Advisory

In effect Thu night- Fri night

- West winds 20 to 30 mph with gusts up to 55 mph
- Low risk for a few gusts to 60 mph
- Some power outages possible

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Hazardous Marine Conditions

December 21, 2022
3:18 PM

Hazardous Marine Conditions

Very strong winds will cause hazardous seas which could capsize or damage vessels

Weather Forecast Office
Boston/Norton, MA

Issued Dec 21, 2022 2:58 PM EST



Gale Watch

In effect late Thursday night through Saturday morning

- Sustained winds or frequent gusts 34-47 knots
- Rough seas

Storm Watch

In effect late Thursday night through Saturday morning

- Sustained winds or frequent gusts 48-63 knots
- Rough seas

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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Main Points

December 21, 2022
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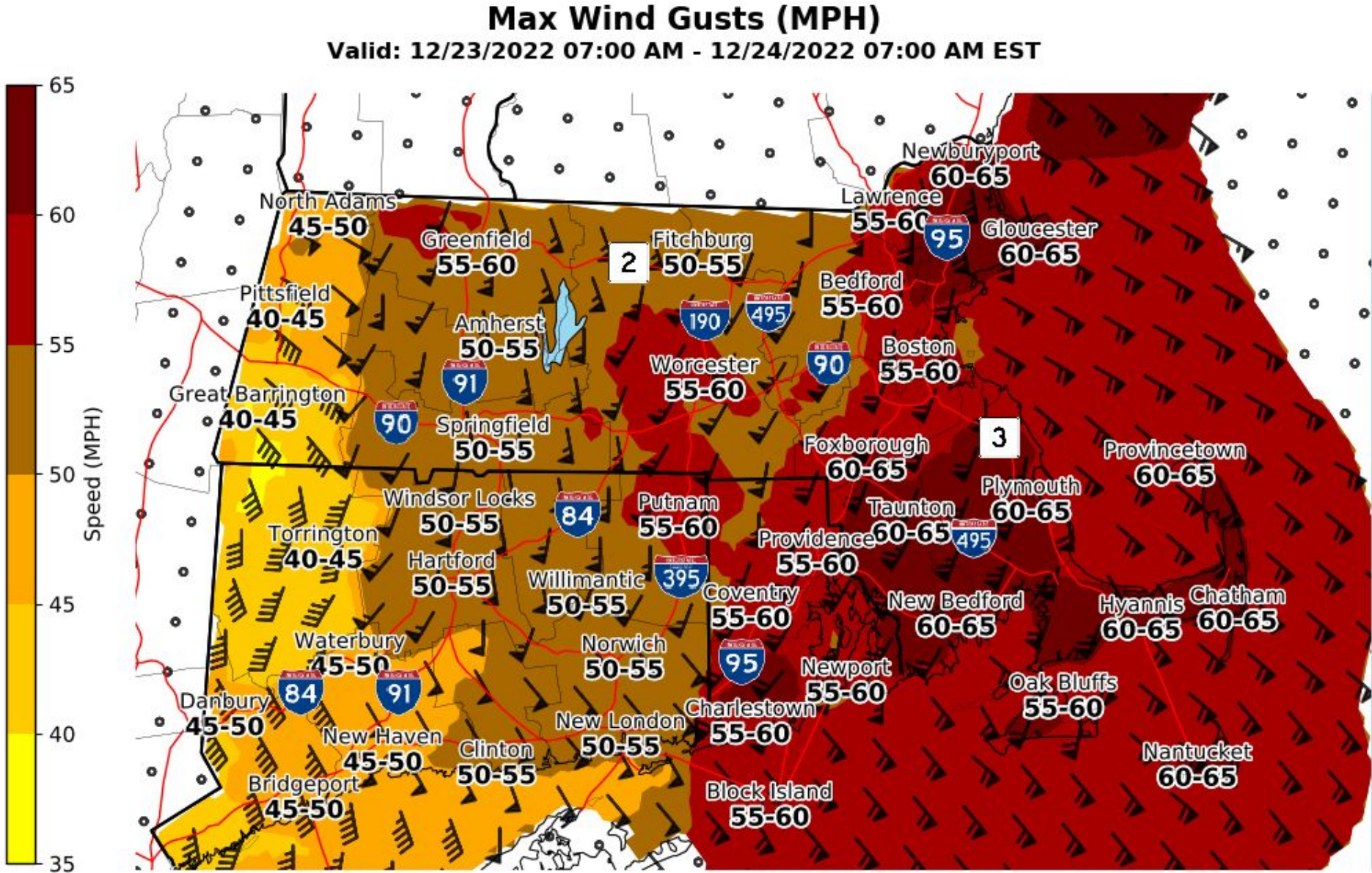
Hazard	Impacts	Location	Timing
Damaging Wind 	Damaging wind gusts up to 65 mph Power outages possible	50 to 60 mph gusts possible across all of southern New England 60-65 mph gusts more likely along the coastal areas	50 to 60 mph gusts Friday morning through Friday evening 40+ mph gusts may carry into early Saturday, especially over The Cape/Islands
Coastal Flooding 	Minor to moderate coastal flooding	South and East Coasts	Friday morning: South and East Coasts Friday evening: South Coast
River Flooding 	2-2.5 inches of rainfall and snowmelt may support minor river flooding	Along the Connecticut River Other small stream flooding possible	Small stream flooding possible Friday Larger rivers cresting Saturday and Sunday
Marine 	Gale to Storm Force Winds High Seas	All of southern New England Coastal Waters	Thursday Night through Saturday





Maximum Wind Gust Forecast

December 21, 2022
3:18 PM



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Peak Wind Gusts Friday Afternoon

December 21, 2022
3:18 PM

- Winds ramp up to 30 to 40 mph late Thursday into early Friday
- Winds peaking Friday afternoon and evening
- Strong gusts carry into early Saturday morning
- 65 MPH gusts are possible

Maximum Wind Gust Forecast																			
	12/22		12/23								12/24								
	Thu		Fri								Sat								
	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	Maximum	
Boston	20↙	26↙	36↙	47↙	54↘	55↘	56↗	59↗	54↗	44↗	35↗	30↗	29↗	26↗	25↗	24↗	22↗	59	
Hartford	22↙	31↙	40↙	47↙	48↘	49↘	51↗	52↗	48↗	35↗	29↗	25↗	24↗	23↗	23↗	22↗	20↗	52	
Hyannis	24↙	30↙	38↙	48↙	55↘	59↘	60↗	62↗	54↗	51↗	44↗	40↗	38↗	35↗	33↗	32↗	30↗	62	
Lowell	12↙	18↙	31↙	43↙	51↘	52↘	55↗	55↗	53↗	39↗	30↗	25↗	23↗	23↗	23↗	21↗	17↗	55	
Nantucket	26↙	32↙	39↙	47↙	53↘	58↘	59↗	63↗	56↗	54↗	47↗	44↗	41↗	37↗	36↗	36↗	35↗	63	
New Bedford	23↙	29↙	38↙	47↙	54↘	56↘	59↗	62↗	58↗	44↗	38↗	36↗	33↗	32↗	30↗	29↗	26↗	62	
Providence	21↙	25↙	33↙	46↙	54↘	53↘	60↗	60↗	56↗	39↗	31↗	26↗	25↗	24↗	24↗	22↗	18↗	60	
Provincetown	31↙	38↙	45↙	52↙	58↘	56↘	55↗	56↗	52↗	45↗	43↗	40↗	36↗	33↗	32↗	32↗	31↗	58	
Springfield	20↙	28↙	39↙	47↙	47↘	48↘	52↗	51↗	49↗	33↗	28↗	26↗	25↗	23↗	23↗	22↗	20↗	52	
Worcester	16↙	23↙	32↙	41↙	48↘	47↘	53↗	53↗	56↗	39↗	31↗	28↗	25↗	24↗	24↗	22↗	20↗	56	

*Table values in mph
**Created: 2 pm EST Wed 12/21/2022
***Values are maximums over the period beginning at the time shown.



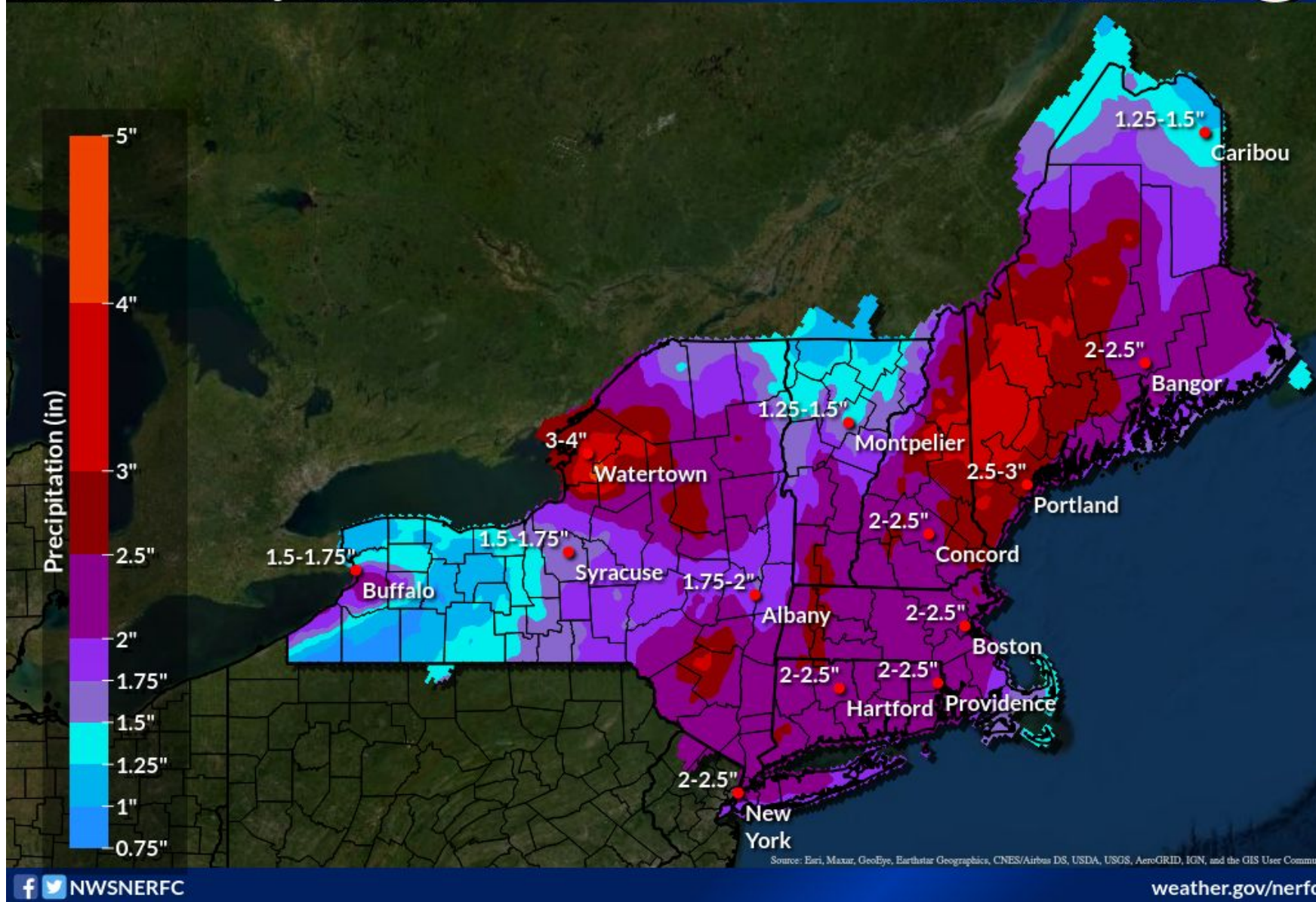
5 Day Precipitation Forecast

December 21, 2022
3:18 PM

5 Day WPC Precipitation Forecast

Valid Wed 7:00AM through Mon 7:00AM EST

River Forecast Center
Northeast RFC
Issued Dec 21, 2022 7:05 AM EST



- Precipitation expected to occur between late Thursday and early Saturday
- Primarily as rain for most of southern New England
- Perhaps ending as snow in the highest terrain (Berkshires)
- Widespread 2 to 2.5 inches with locally higher amounts



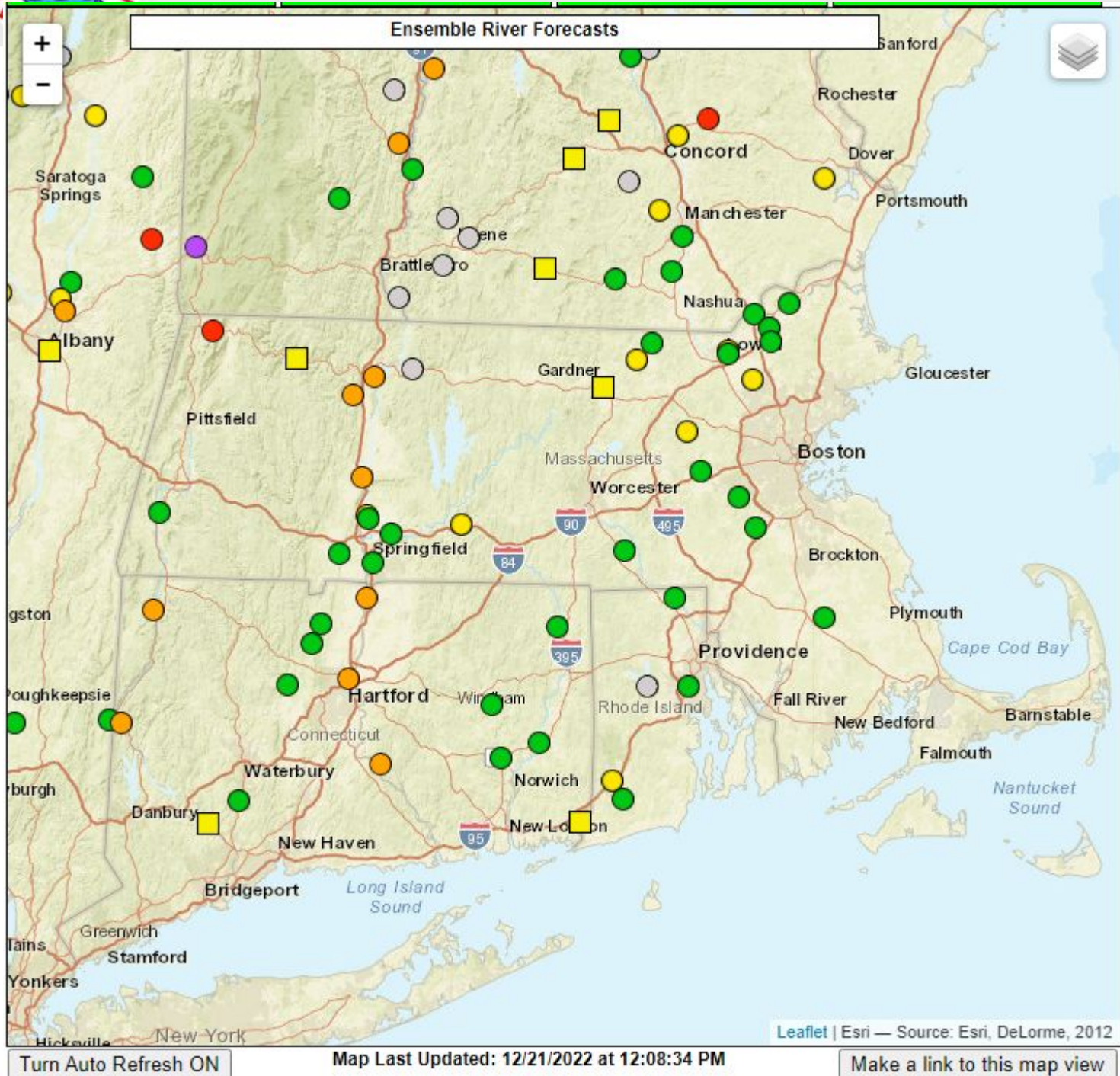
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River Levels Outlook

December 21, 2022
3:18 PM



- Rain/Snowmelt across northern New England resulting in a potential for minor flooding along the Connecticut River (late Saturday through Monday)

30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		

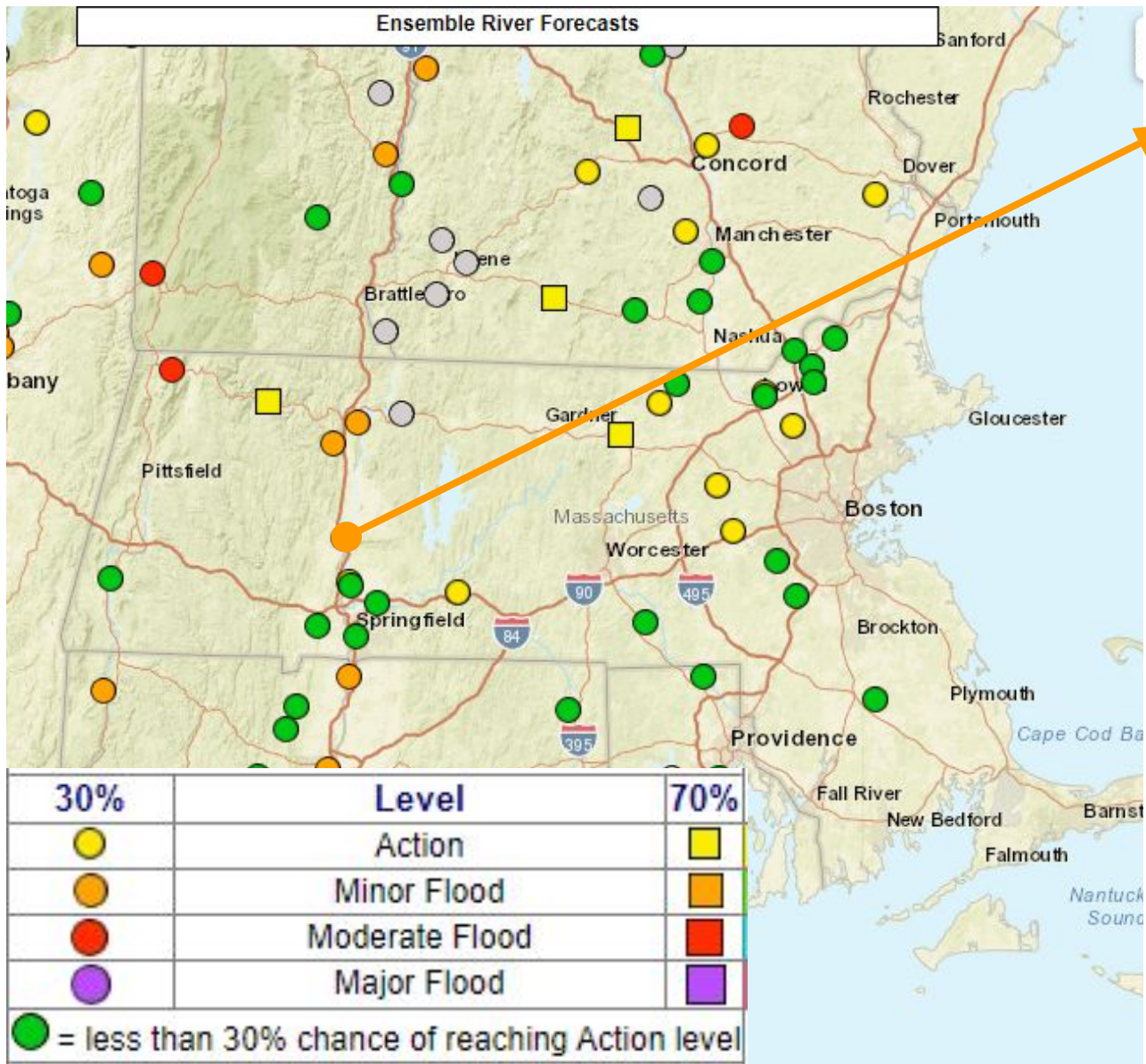




River Levels Outlook

December 21, 2022
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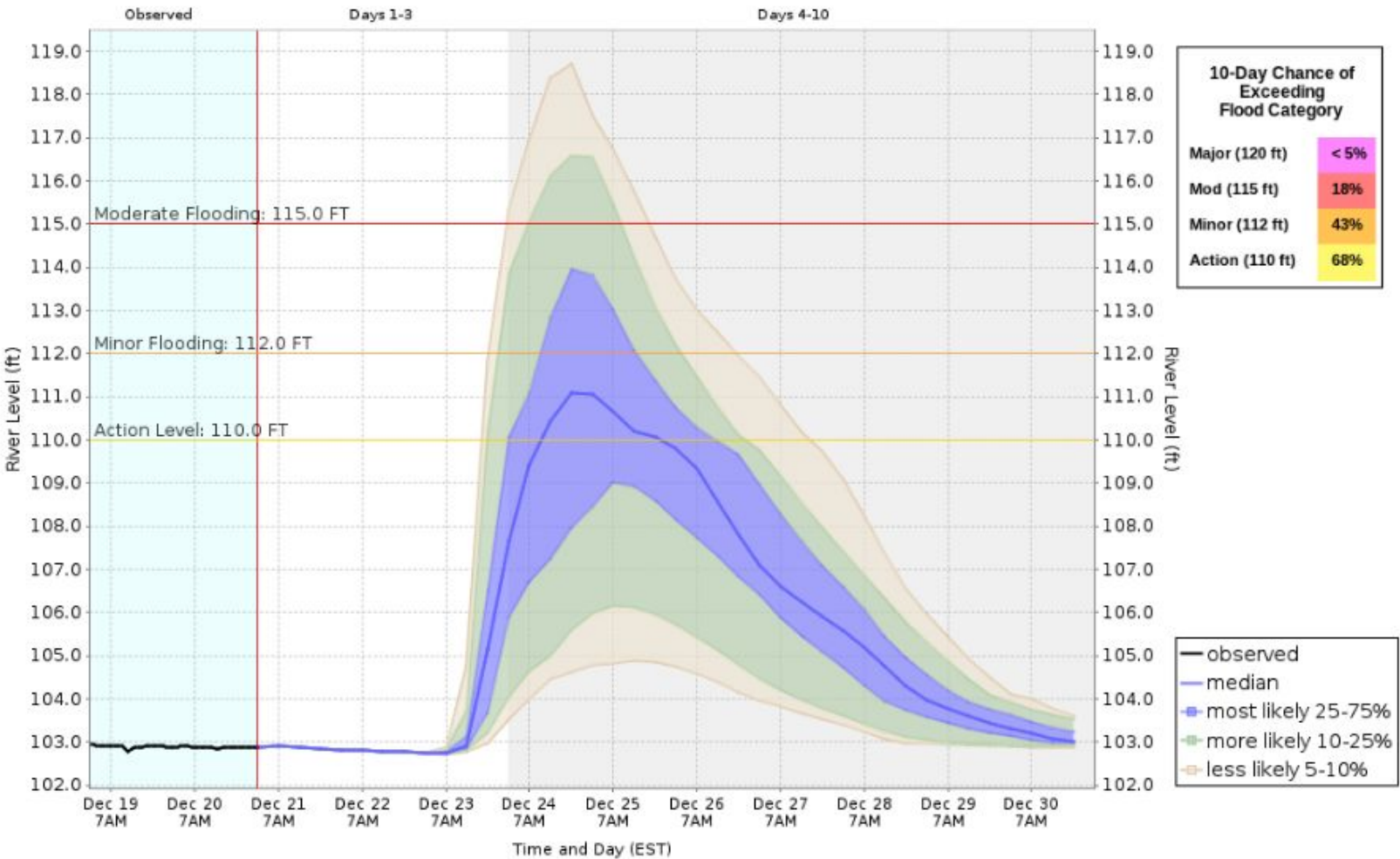
Connecticut River at Northampton



Latest forecast crest is Saturday night

Dec 21 - Dec 31, 2022

Connecticut River at Northampton, MA (NHMM3)

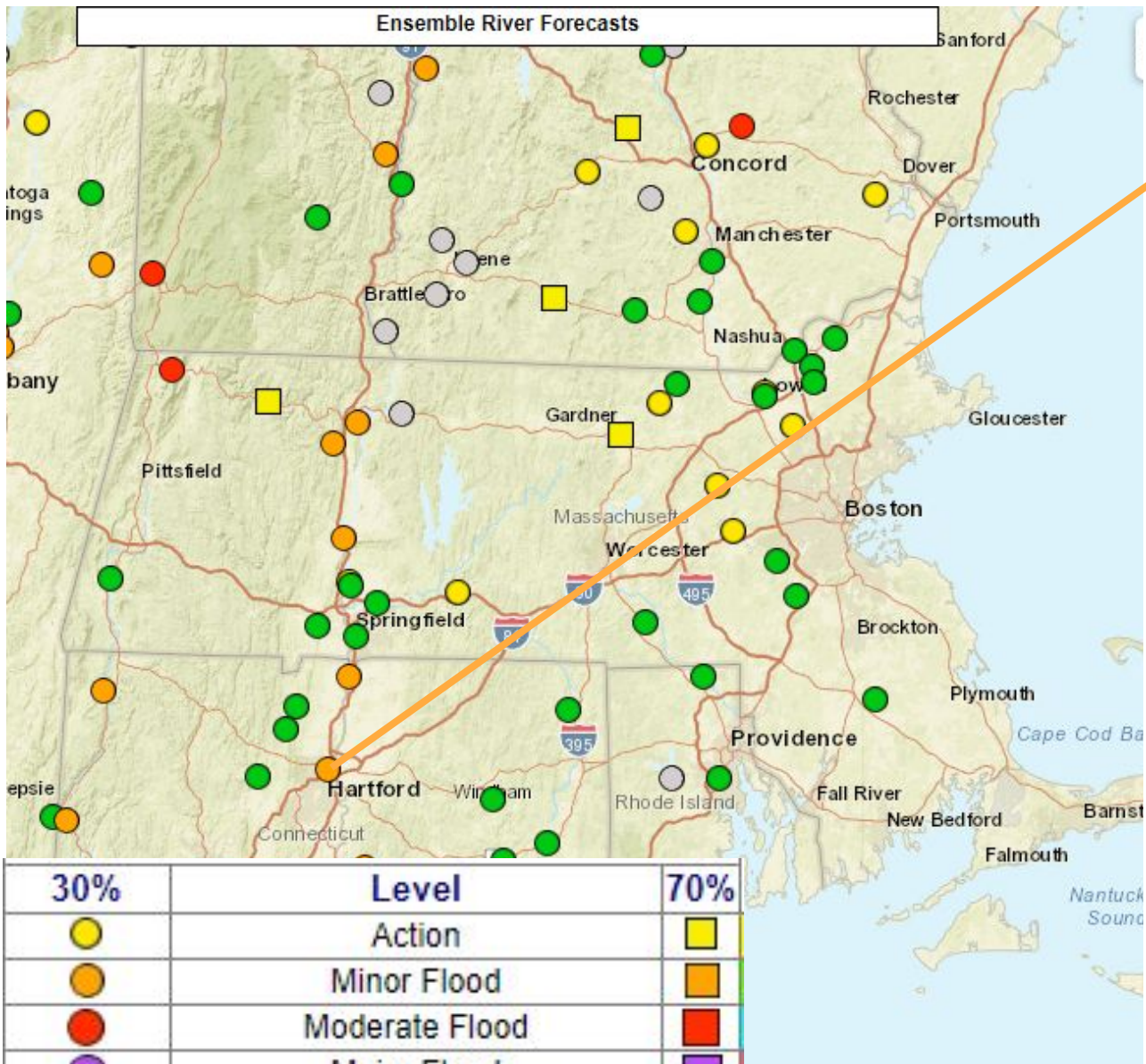




River Levels Outlook

December 21, 2022
3:18 PM

Connecticut River at Hartford

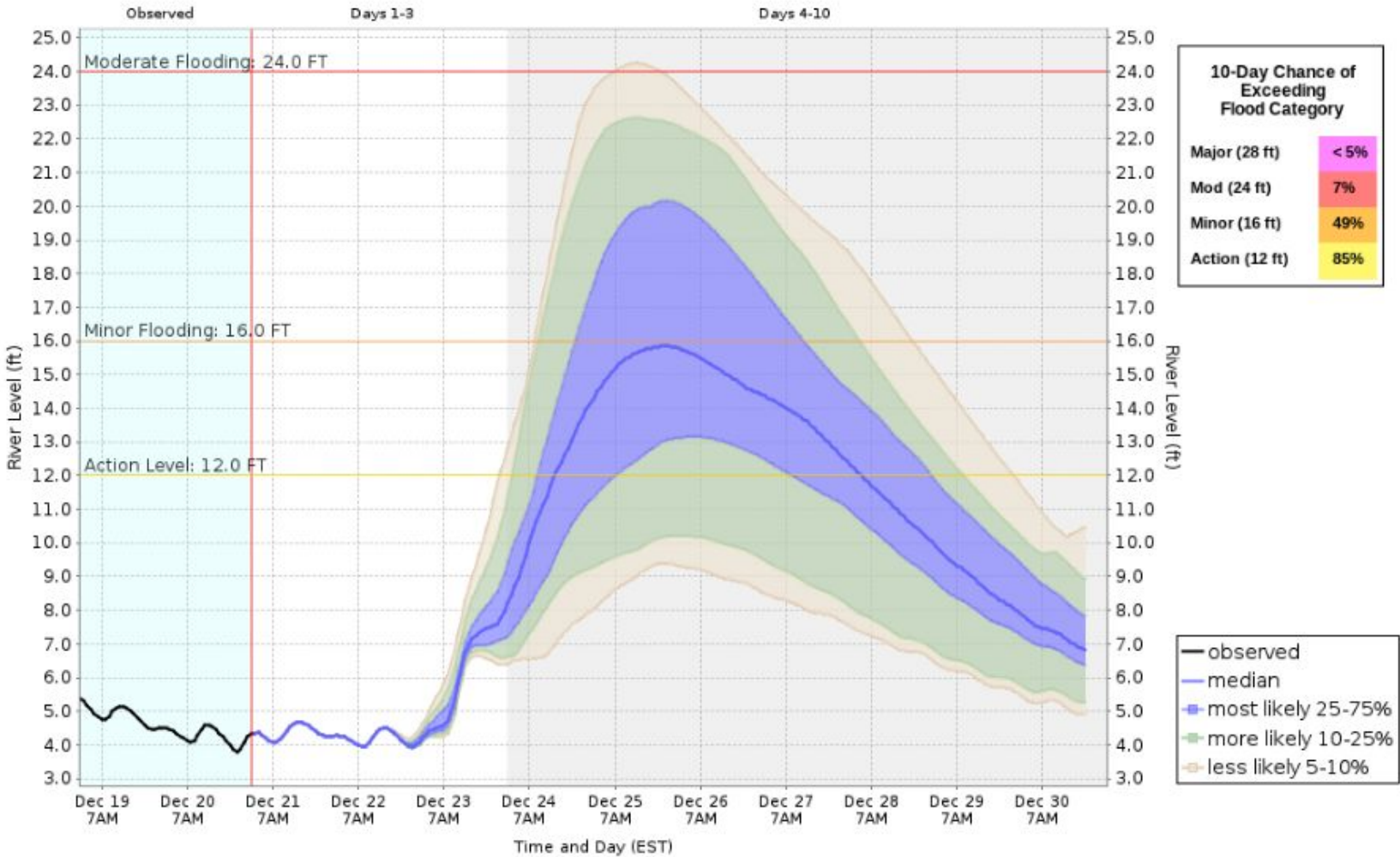


30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	

= less than 30% chance of reaching Action level

Latest forecast crest is Sunday night

Dec 21 - Dec 31, 2022
Connecticut River at Hartford, CT (HFDC3)



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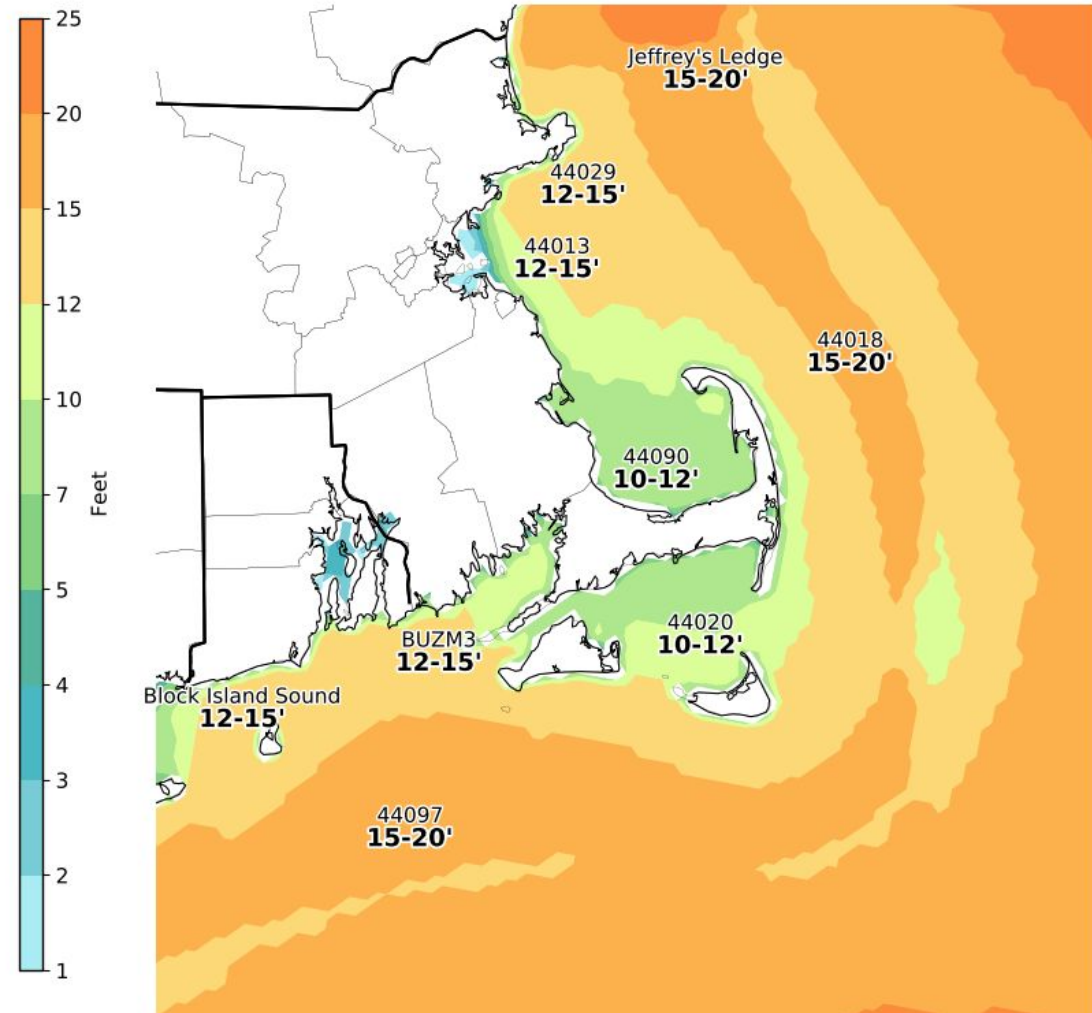


Marine Impact Timeline

December 21, 2022
3:18 PM

Maximum Wave Height

Valid: 12/23/2022 07:00 AM - 12/24/2022 07:00 AM EST



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Boston/Norton, MA
12/21/2022 02:43 PM EST

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Arrival of Strongest Winds:

- Gale force (34 kt) SE winds begin 9 PM Thu - 12 AM Fri
- Storm force (48 kt) SE winds begin 4 AM - 7 AM Fri

Peak Gusts:

- Friday morning and early afternoon (S/SE 50-60 kt)

Departure of Strongest Winds:

- Storm force (S/SW) subsides 7 PM - 11 PM Fri
- Gale force (W) subsides 4 PM - 10 PM Sat
- Gradually subside below 25 kt Sunday

Seas:

- Rapidly build early Friday morning
- Peak during the day Friday
- Subside below 10 ft nearshore Saturday afternoon/night and offshore later Sunday
- Subside below 5 ft nearshore Sunday afternoon/evening and offshore later Monday

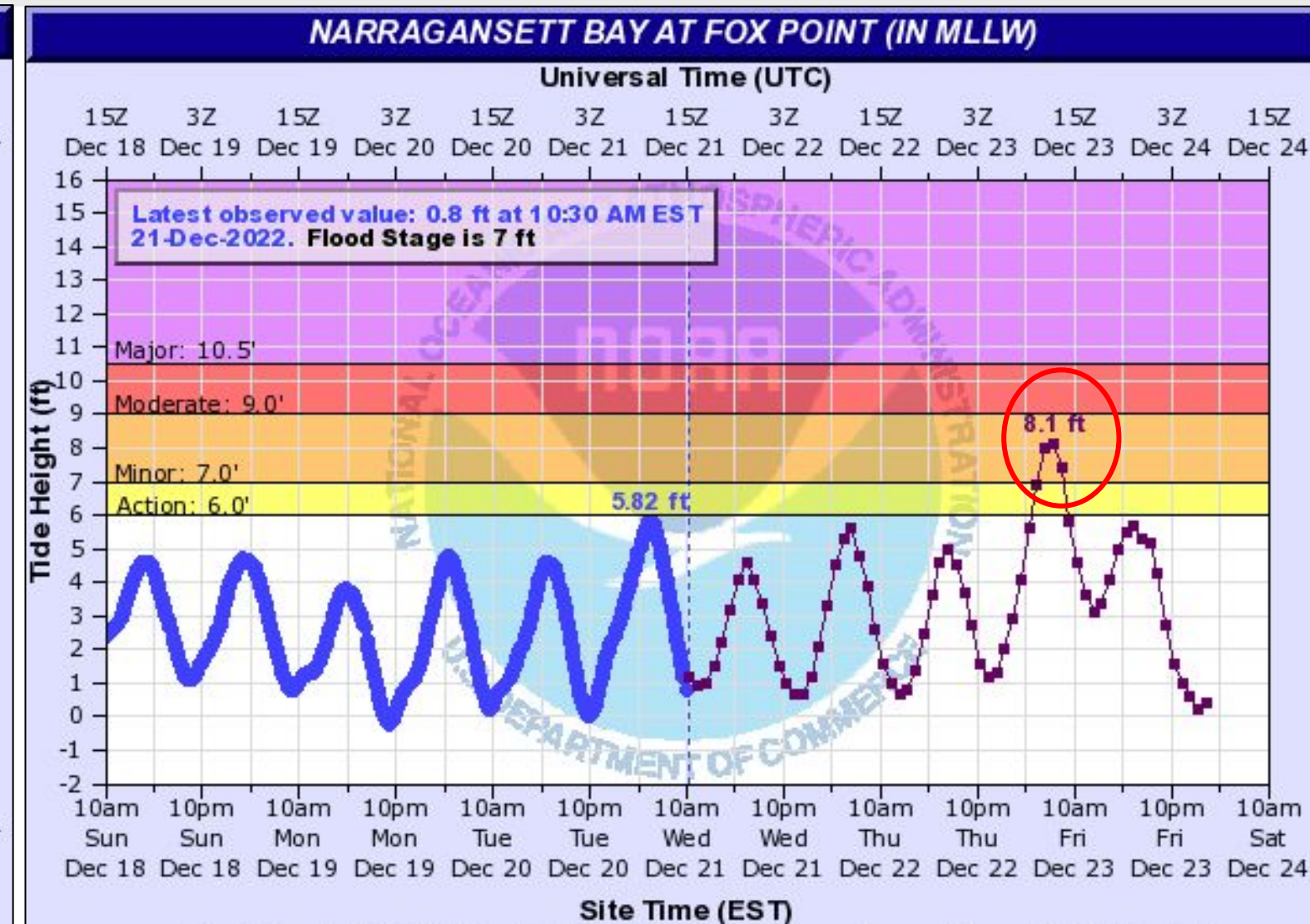
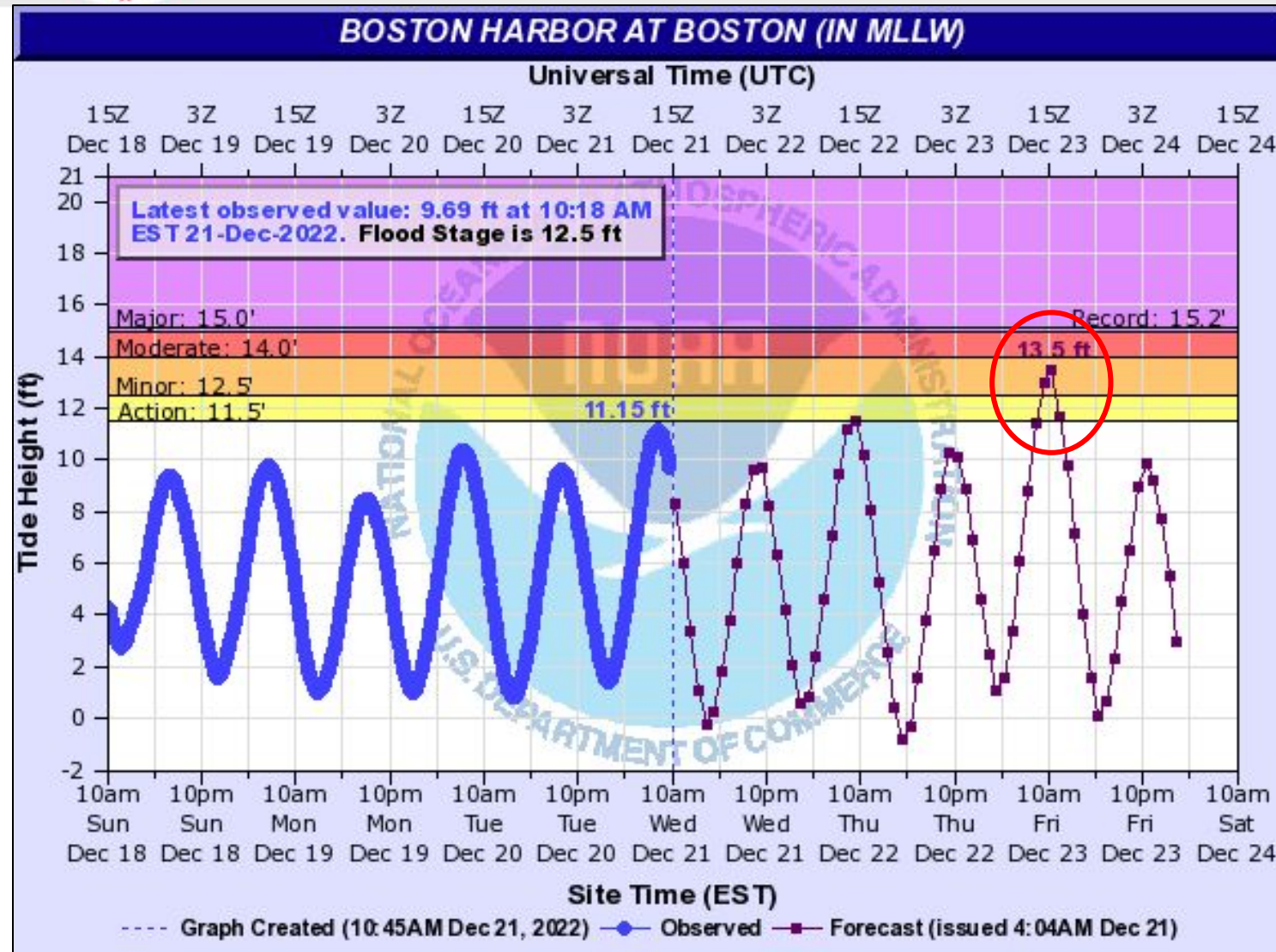


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3:18 PM



- Pockets of moderate flooding Friday morning - north of Boston, Edgartown, and RI south coast (due to waves)
- Minor flooding Friday evening along South Coast - threat for moderate flooding decreased
- Significant beach erosion along S/SE facing shores (southeast winds around high tide)



Coastal Flooding Definitions

December 21, 2022
3:18 PM

Minor Coastal Flooding

- Flooding up to 1 foot deep, nuisance-type flooding
- Affects the most vulnerable shore roads
- Majority of roads remain passable with only limited closures
- No significant threat to life and any impact on property is minimal.



Moderate Coastal Flooding

- Flooding 1 to 3 feet deep.
- Widespread flooding of vulnerable shore roads and basements of shore homes.
- Debris may wash onto coastal roads from breaking waves.
- Numerous road closures are typically needed.
- Some damage of vulnerable structures such as docks or house decks/porches near the high tide line due to waves.
- Risk to life for those who place themselves in unnecessary danger (driving around barricades, viewing surf from piers or jetties).

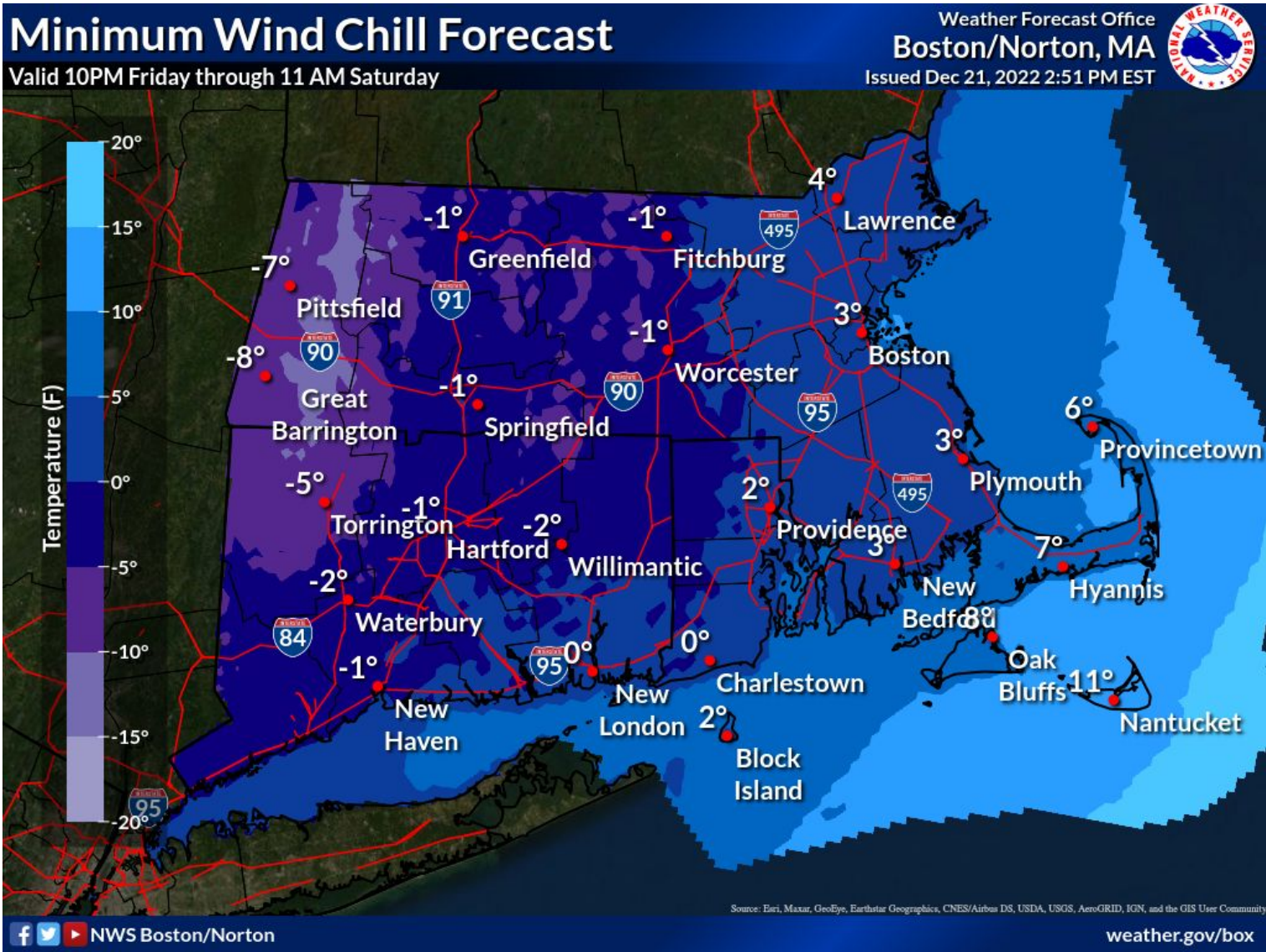




Post Event Outlook

December 21, 2022
3:18 PM

Cold and Windy on Saturday



Minimum Wind Chill Forecast

	12/23 Fri				12/24 Sat							Minimum
	12pm	3pm	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	
Boston	56	41	18	9	7	4	5	8	11	12	9	4
Hartford	52	32	7	2	2	0	0	4	8	11	7	0
Hyannis	55	40	21	12	8	6	6	11	14	13	10	6
Lowell	55	41	17	9	6	3	2	6	12	10	8	2
Nantucket	55	41	24	16	12	11	11	15	17	15	13	11
New Bedford	56	40	15	6	5	2	3	8	14	12	9	2
Providence	56	40	13	5	4	2	0	5	11	10	7	0
Provincetown	53	40	22	14	11	9	9	9	11	11	10	9
Springfield	52	32	8	3	2	-1	0	2	7	9	5	-1
Worcester	52	34	8	1	0	-3	-3	0	5	6	4	-3

*Table values in °F

**Created: 2 pm EST Wed 12/21/2022

***Values are minimums over the period beginning at the time shown.



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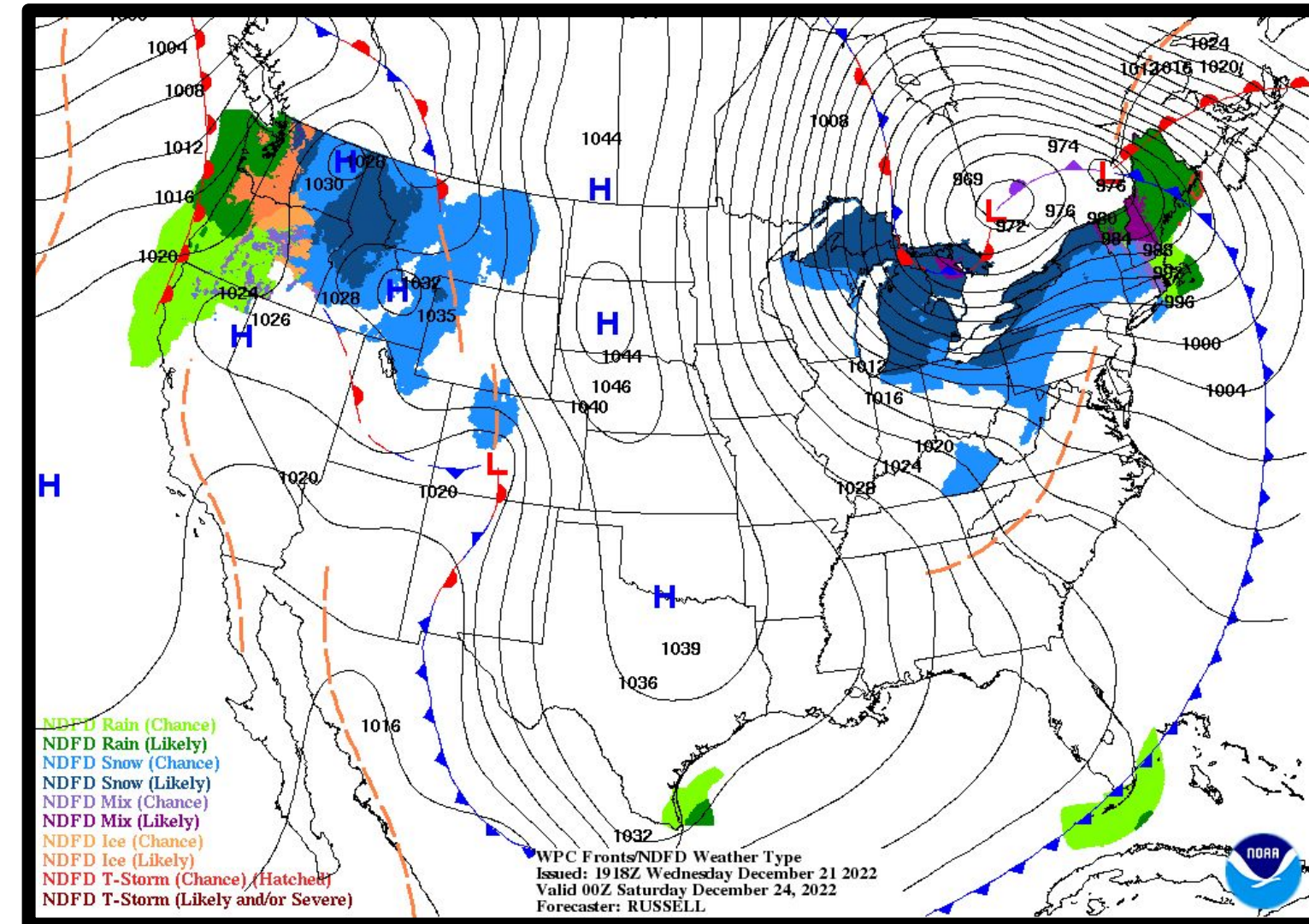
Recap

December 21, 2022
3:18 PM

Key Messages

- Powerful Storm late Thursday night into early Saturday
 - Damaging winds up to 65 mph. Power outages possible.
 - Heavy rainfall 2-2.5 inches
 - Minor to moderate coastal flooding Friday morning
 - Minor river flooding possible
- Christmas Eve - Cold and windy
- Christmas Day - Cold, less windy
- Coastal Flood Watch issued for all coasts
- High Wind Watch issued for eastern Massachusetts
- Hazardous marine conditions

7 PM Friday Weather Map





Contact and Next Briefing Information

December 21, 2022
3:18 PM

For Southern New England



Briefing Webpage

→ <https://www.weather.gov/erh/ghwo?wfo=box>



Next Briefing

→ By Thursday at 6 AM



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→ Do Not Use After: 06:00 AM Thursday, 12/22/2022



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