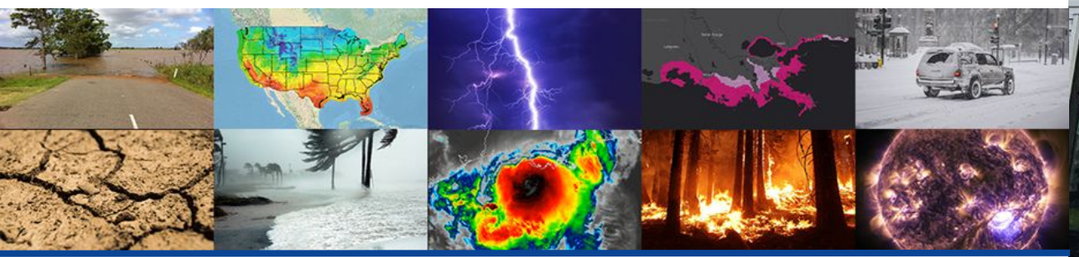
NWS Boston / Norton

Emergency Management Briefing

Impactful Storm Friday into Saturday



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

NWS Boston Monday EM Briefing

December 22, 2022
4:30 AM

For Southern New England

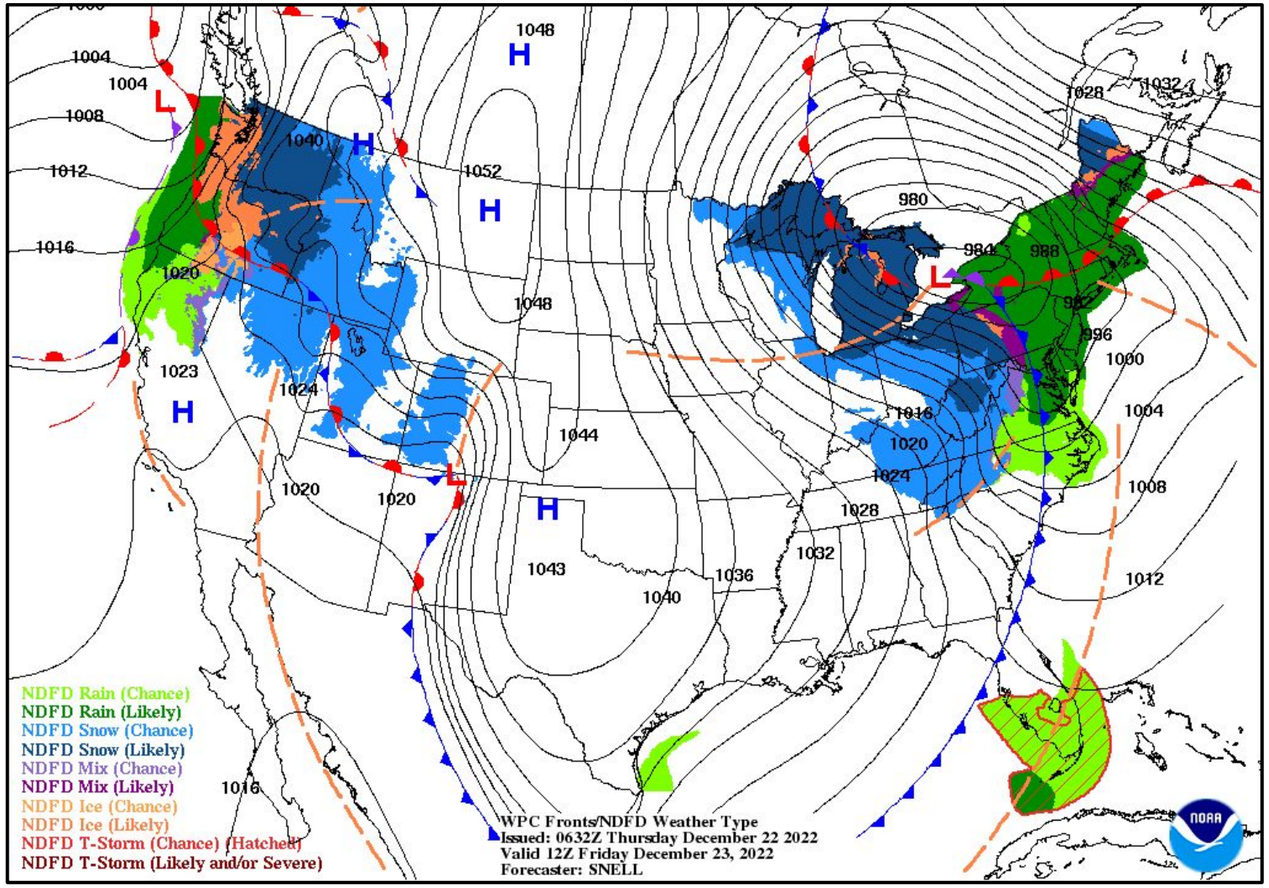
Decision Support Briefing #3

➔ As of 4:30 AM Thursday, 12/22/2022

NEW Important Updates

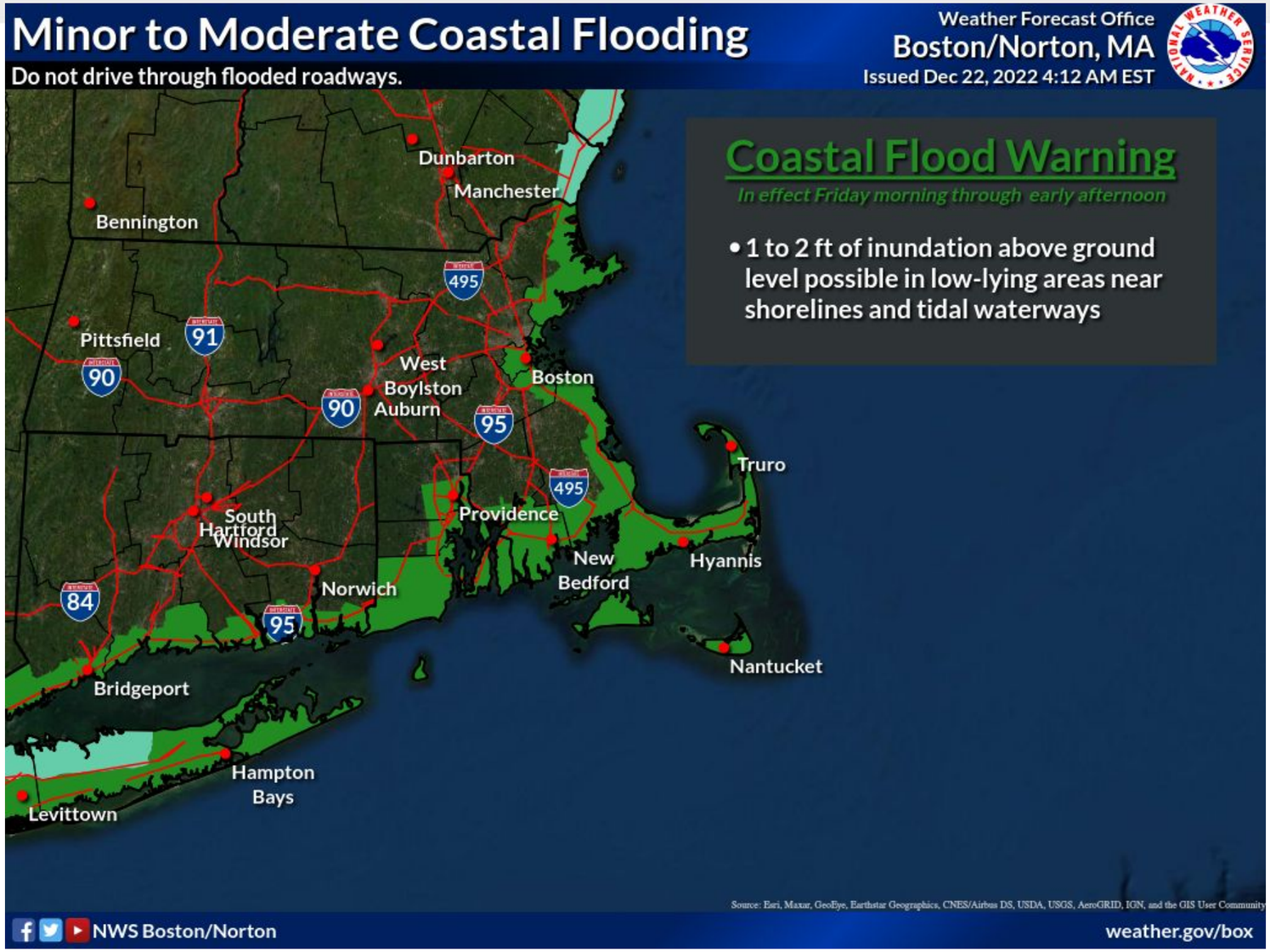
- ➔ Coastal Flood Warnings issued for all coasts, primary concern around Friday morning high tide
- ➔ High Wind Warning issued for eastern Massachusetts and Rhode Island. Wind Advisory for central and western Massachusetts and Connecticut
- ➔ Hazardous marine conditions for all waters
- ➔ Winter Weather Advisory issued for east slopes of the Berkshires

7 AM Friday Weather Map



Coastal Flood Warning

December 22, 2022
4:30 AM



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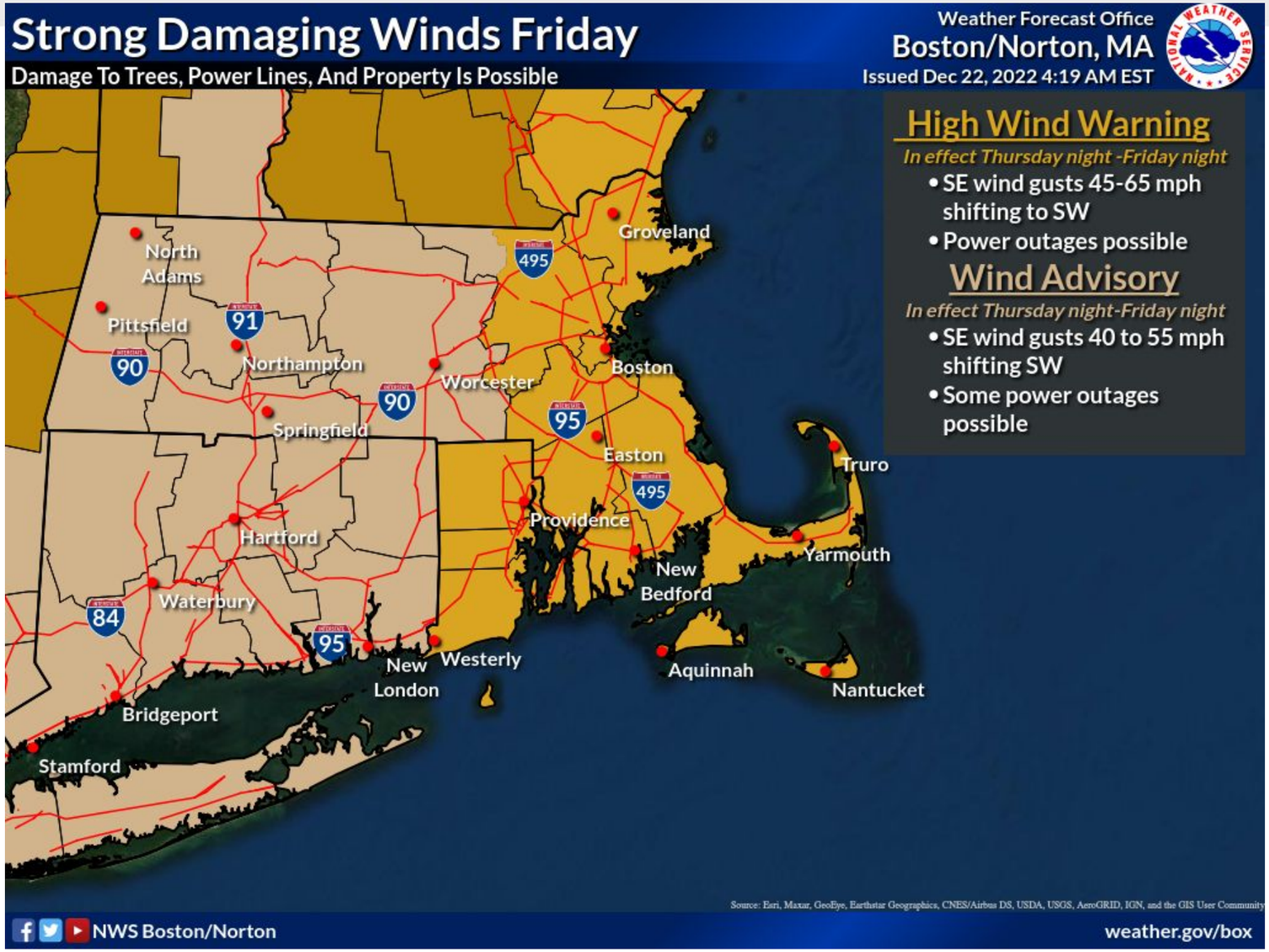
High Wind Warning/Wind Advisory

December 22, 2022
4:30 AM



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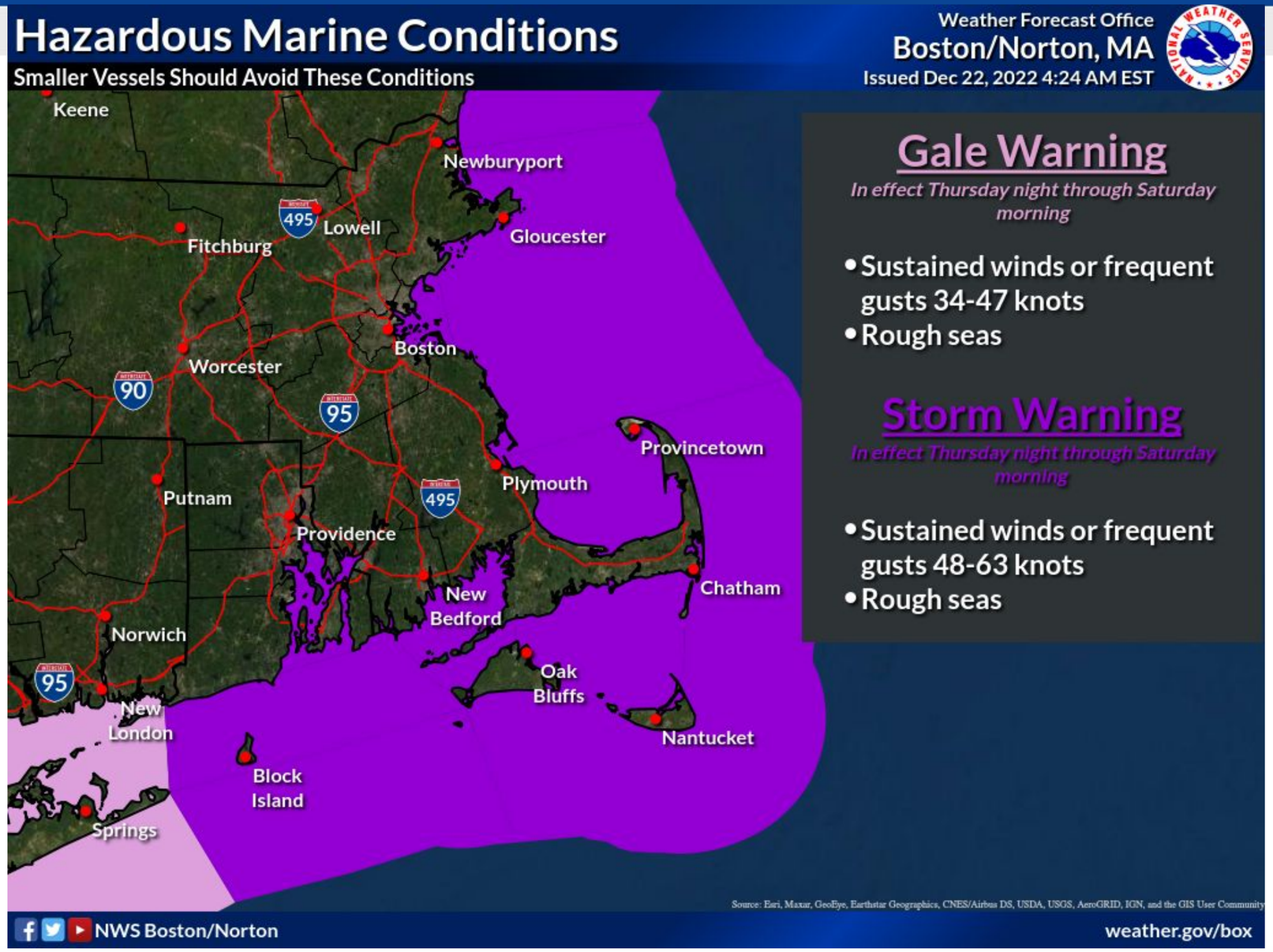
Hazardous Marine Conditions

December 22, 2022
4:30 AM



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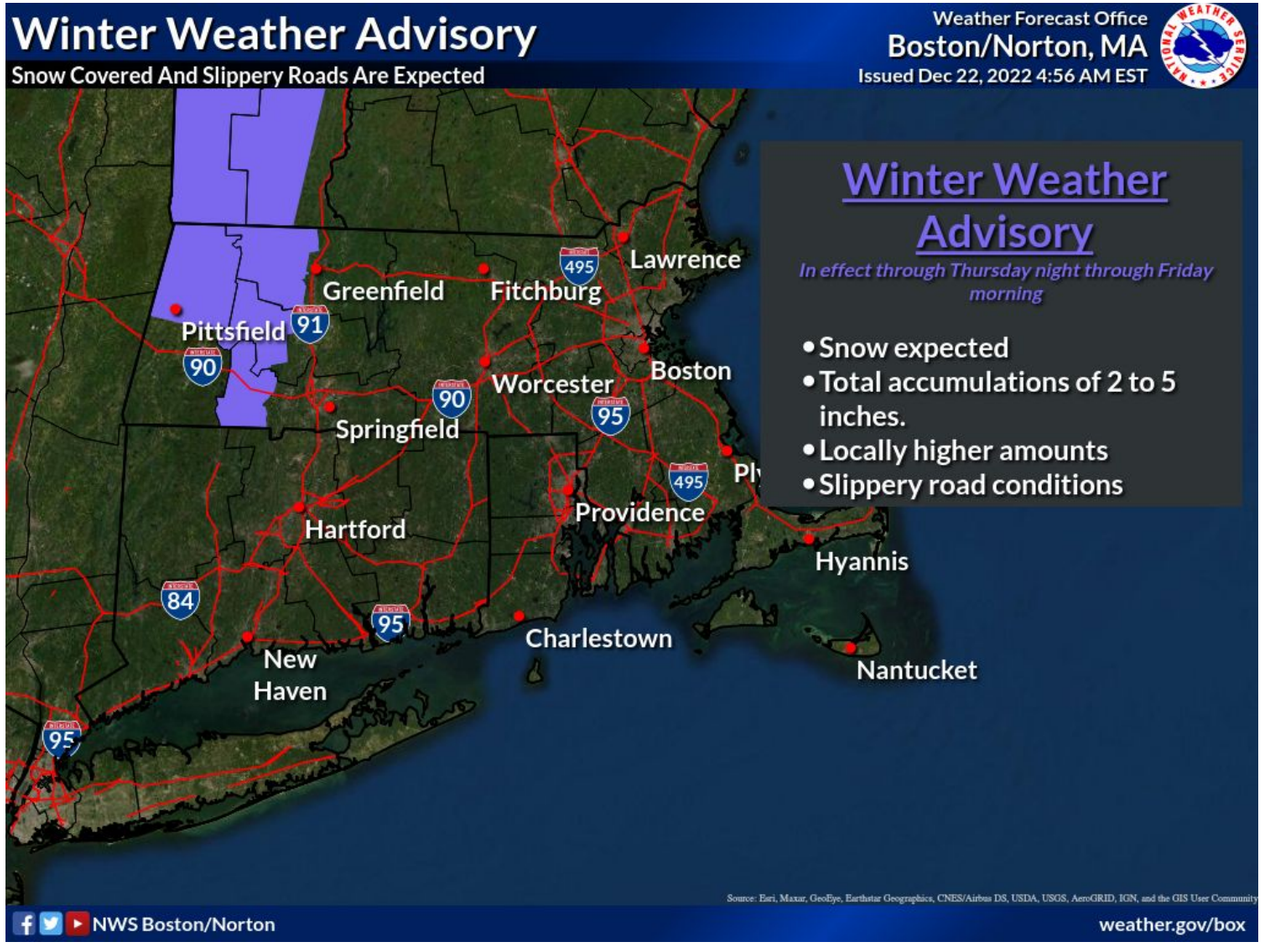
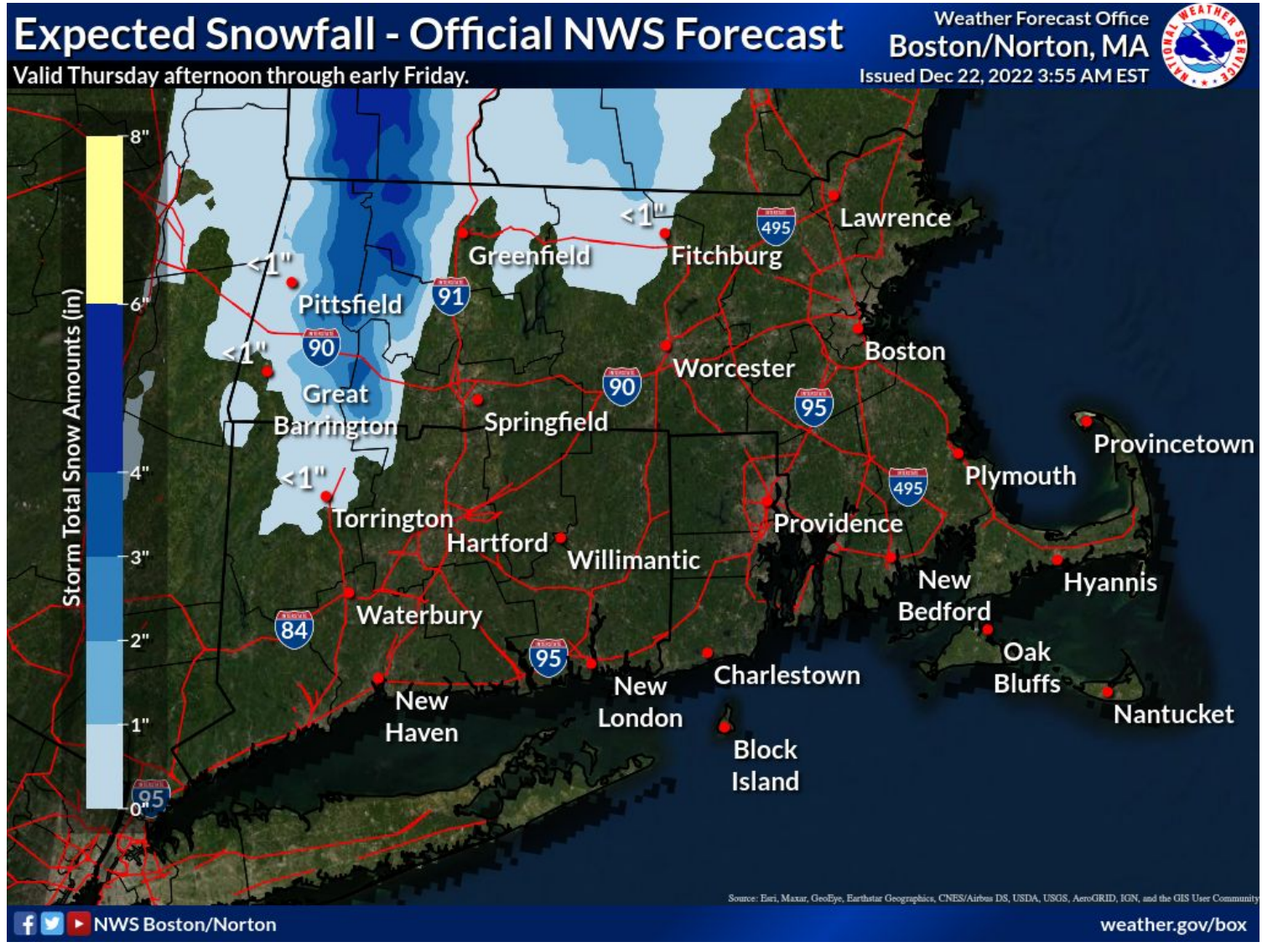
Winter Weather Advisory

December 22, 2022
4:30 AM





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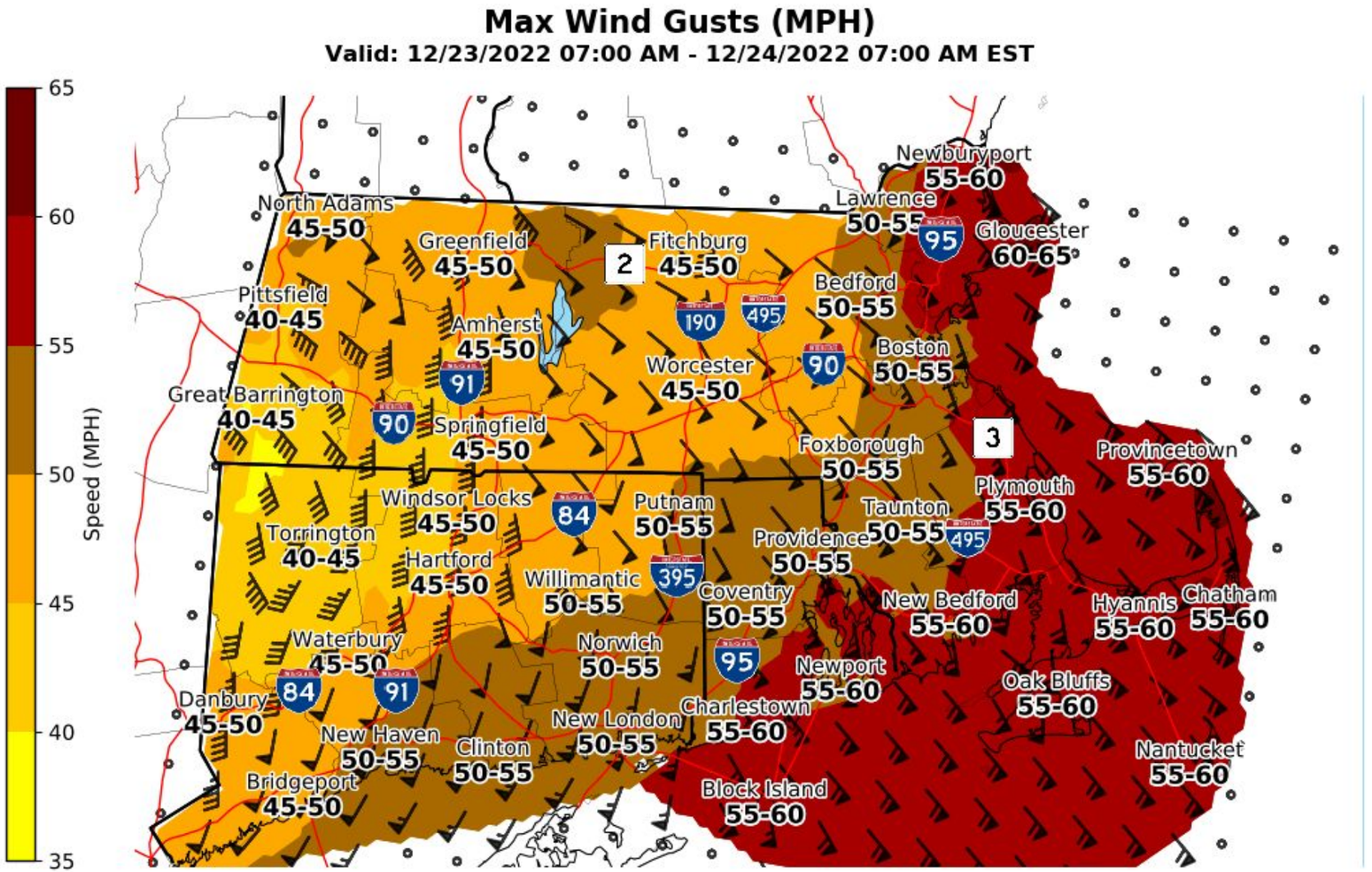
Main Points

December 22, 2022
4:30 AM

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
Winter	Snow accumulations of 2-5 inches	Highest terrain of western Massachusetts	Thursday Night through Friday morning

Maximum Wind Gust Forecast

December 22, 2022
4:30 AM



National Weather Service
Boston/Norton, MA
12/22/2022 01:36 AM EST

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Peak Wind Gusts Friday Afternoon

December 22, 2022
4:30 AM

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

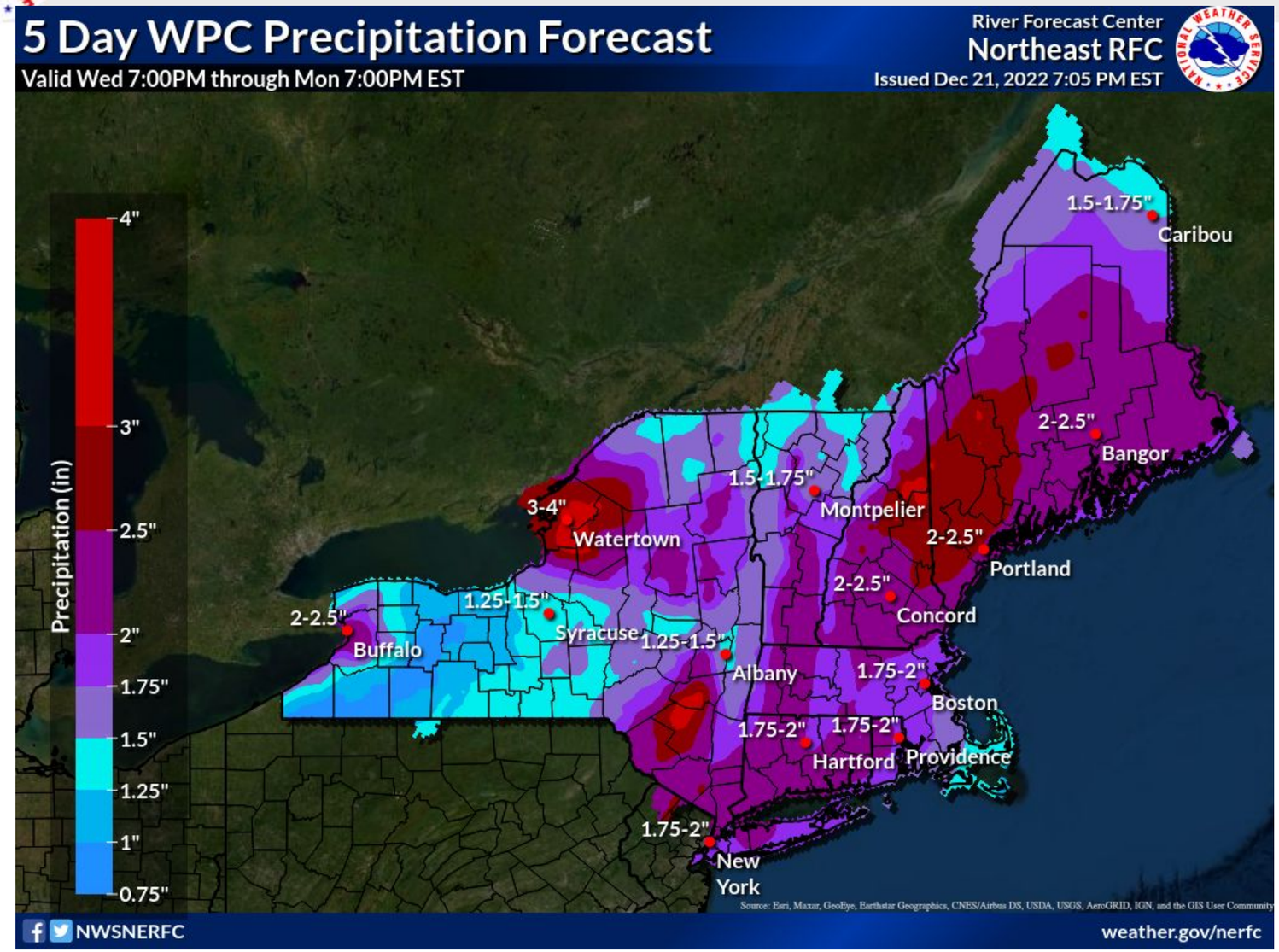
Maximum Wind Gust Forecast

	12/22 Thu				12/23 Fri				12/24 Sat				12/25 Sun				12/26 Mon	
	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	Maximum
Boston	7	9	14	26	47	55	59	53	35	29	25	22	23	24	24	20	17	59
Hartford	5	9	16	31	47	49	52	44	29	24	23	20	20	22	22	16	15	52
Hyannis	6	15	21	30	48	59	62	56	44	38	33	30	28	28	28	24	23	62
Lowell	3	7	10	18	43	52	55	49	30	23	23	17	20	24	23	16	14	55
Nantucket	7	16	23	32	47	58	63	59	47	41	36	35	33	31	32	30	28	63
New Bedford	6	15	18	29	47	56	62	54	38	33	30	26	25	25	25	21	20	62
Providence	5	10	16	25	46	54	60	52	31	25	24	18	20	22	23	16	15	60
Provincetown	10	15	24	38	52	58	56	51	43	36	32	31	31	29	28	26	25	58
Springfield	5	8	16	28	47	48	52	43	28	25	23	20	20	20	21	17	15	52
Worcester	6	9	13	23	41	48	53	47	31	25	24	21	22	23	24	17	16	53

*Table values in mph
**Created: 1 am EST Thu 12/22/2022
***Values are maximums over the period beginning at the time shown.

5 Day Precipitation Forecast

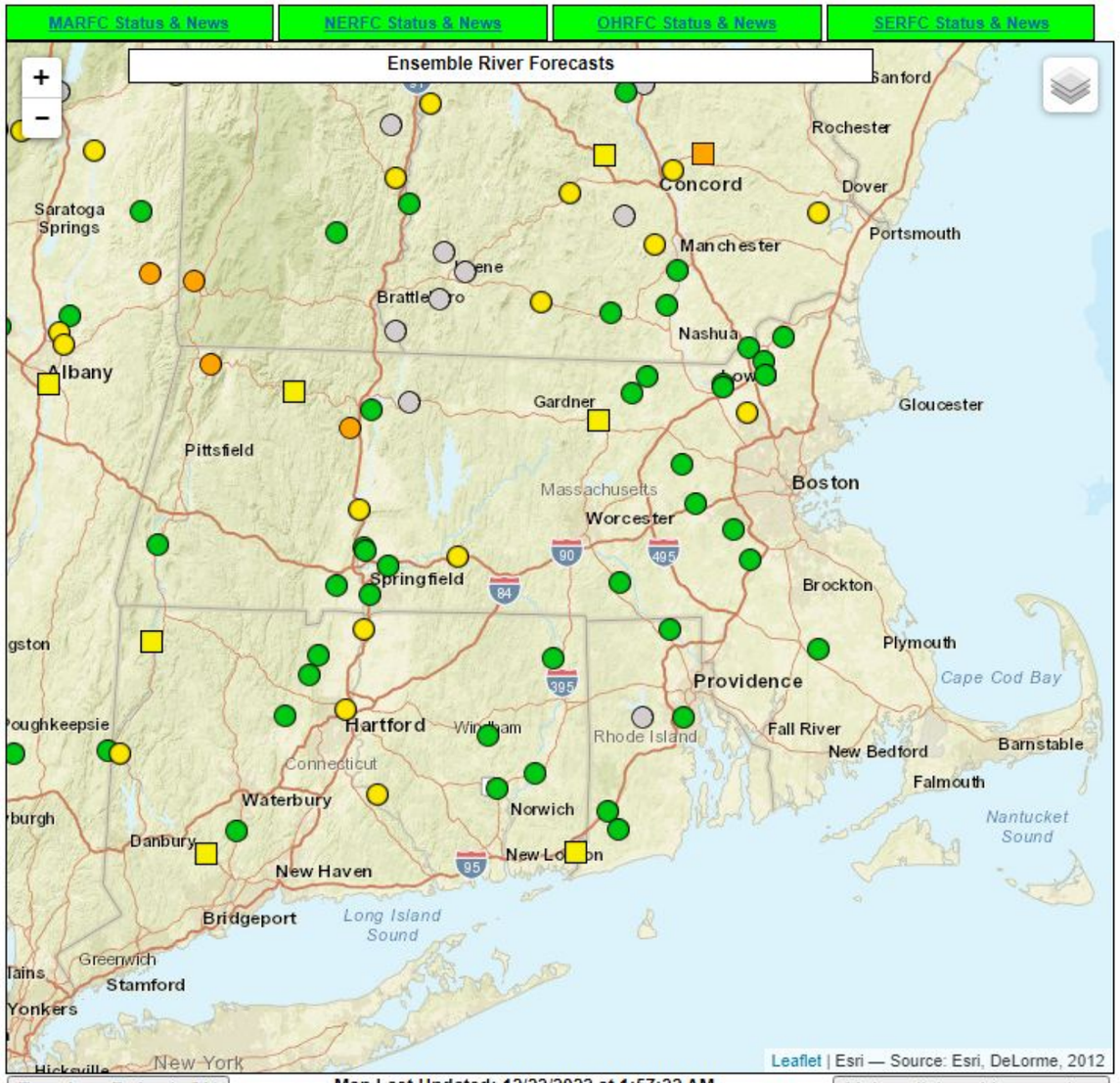
December 22, 2022
4:30 AM



- 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

River Levels Outlook

December 22, 2022
4:30 AM



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

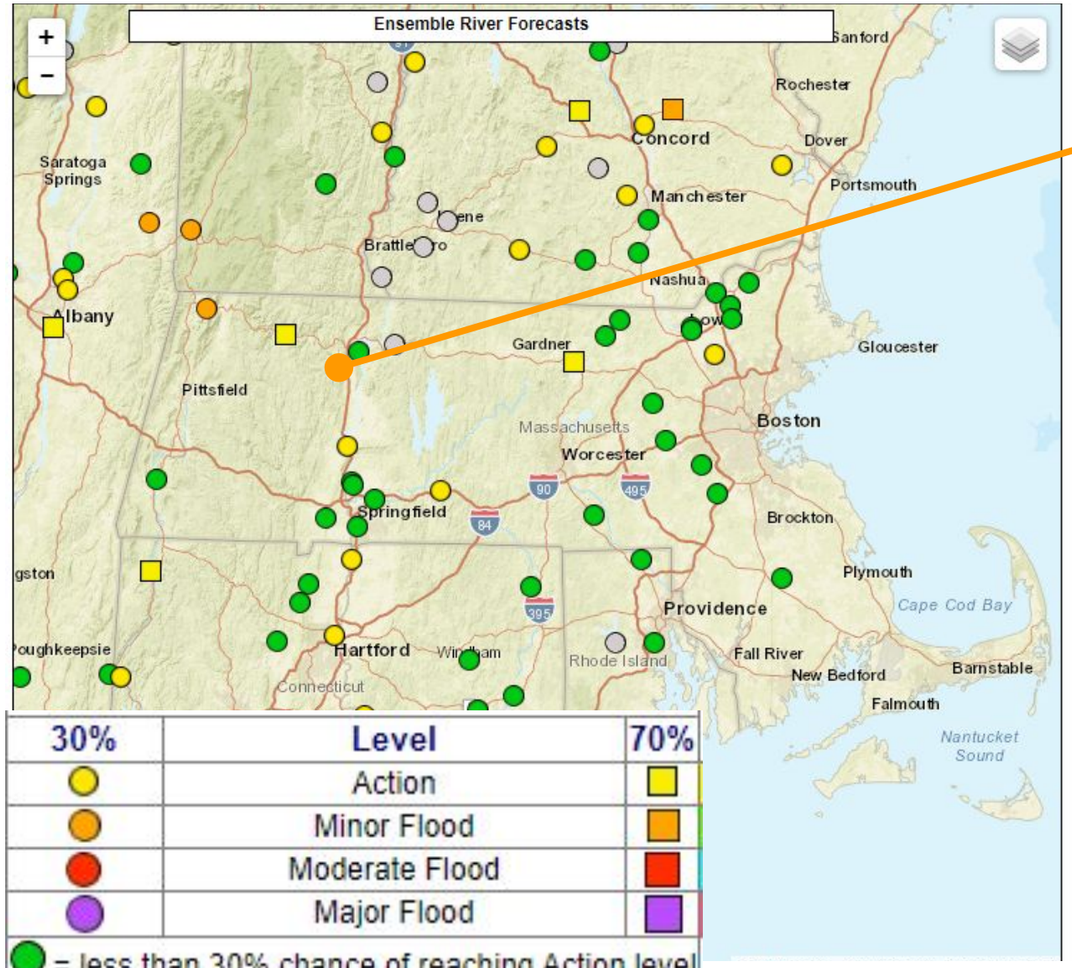
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	

= less than 30% chance of reaching Action level

River Levels Outlook

Connecticut River at West Deerfield, MA

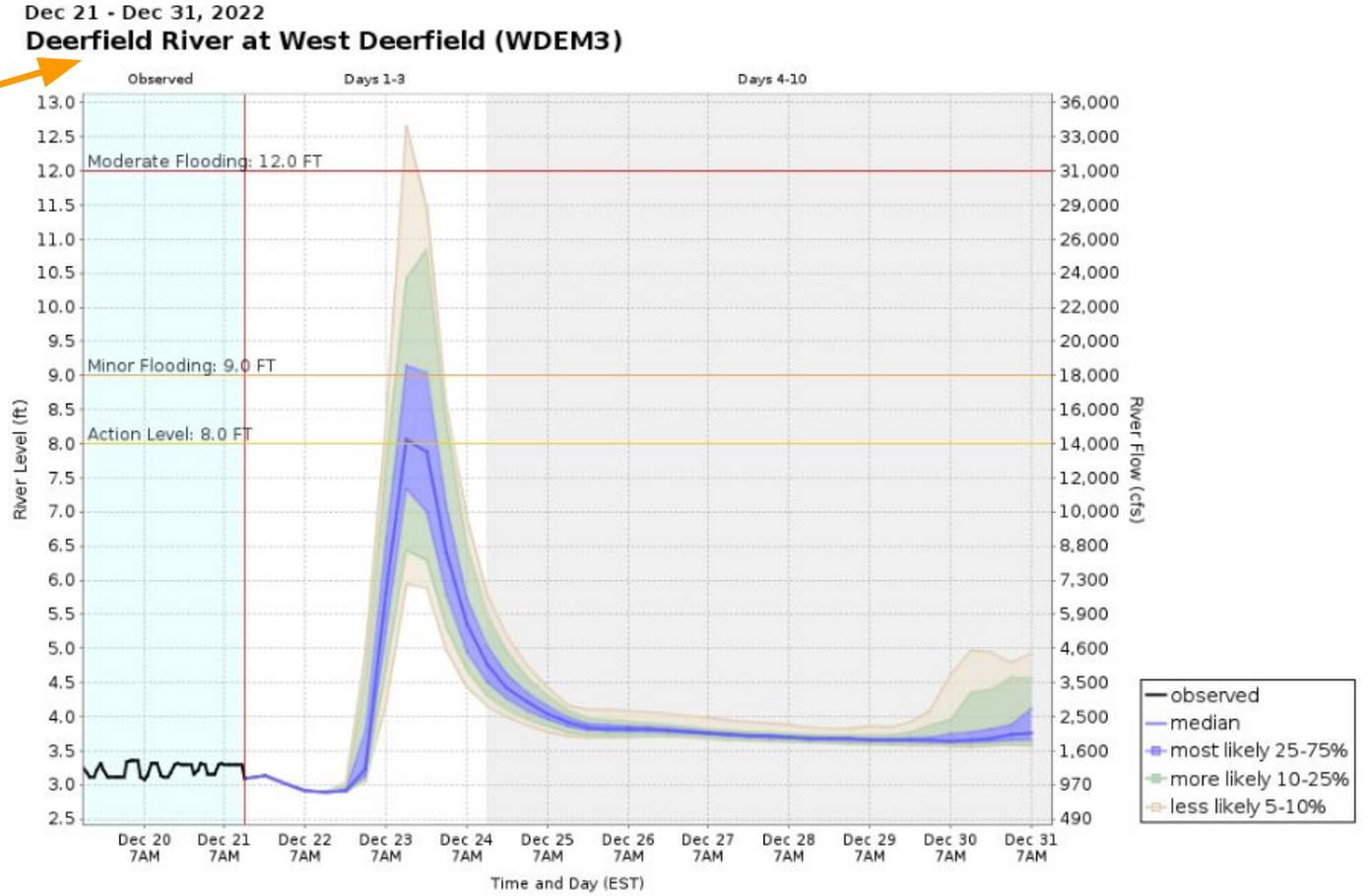
December 22, 2022
4:30 AM



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

= less than 30% chance of reaching Action level

Latest forecast crest is Saturday night

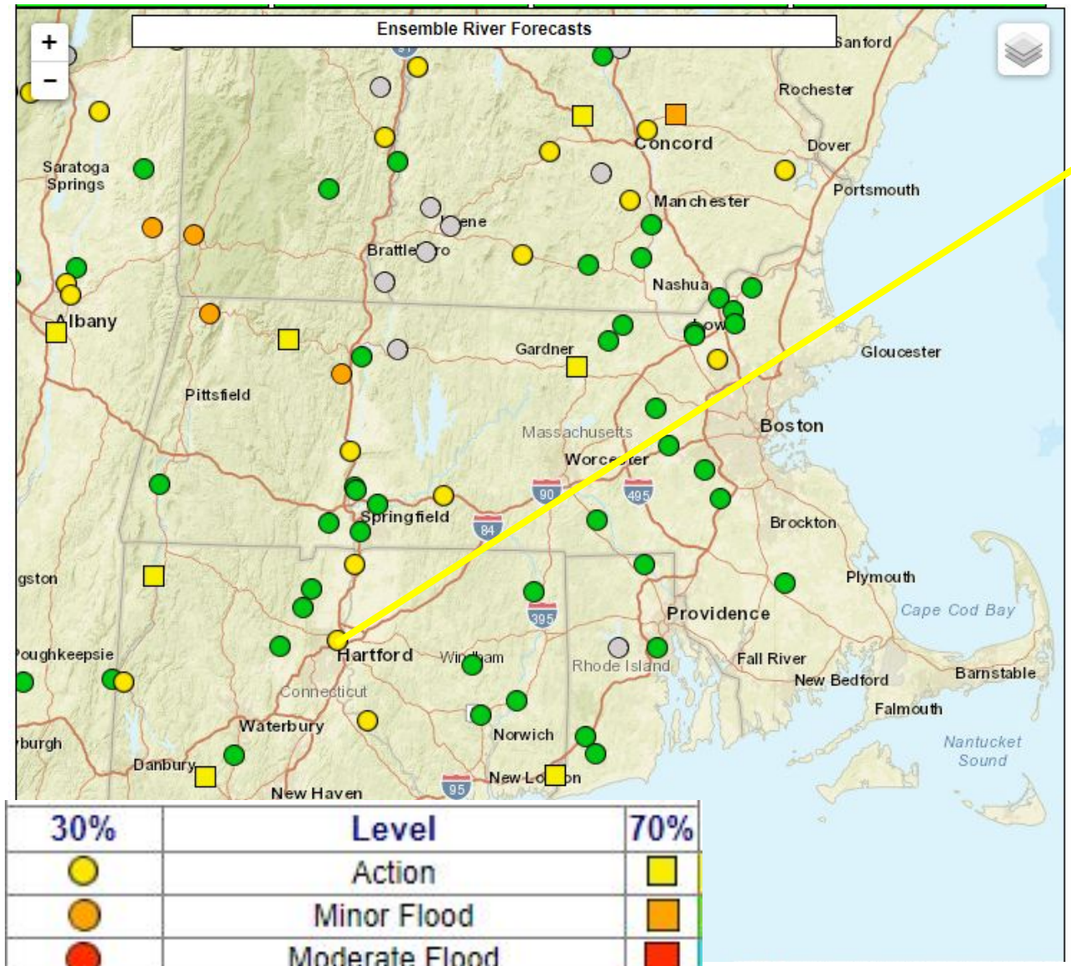


Model runtime: 01:00 PM EST Dec 21 2022
Northeast River Forecast Center

River Levels Outlook

December 22, 2022
4:30 AM

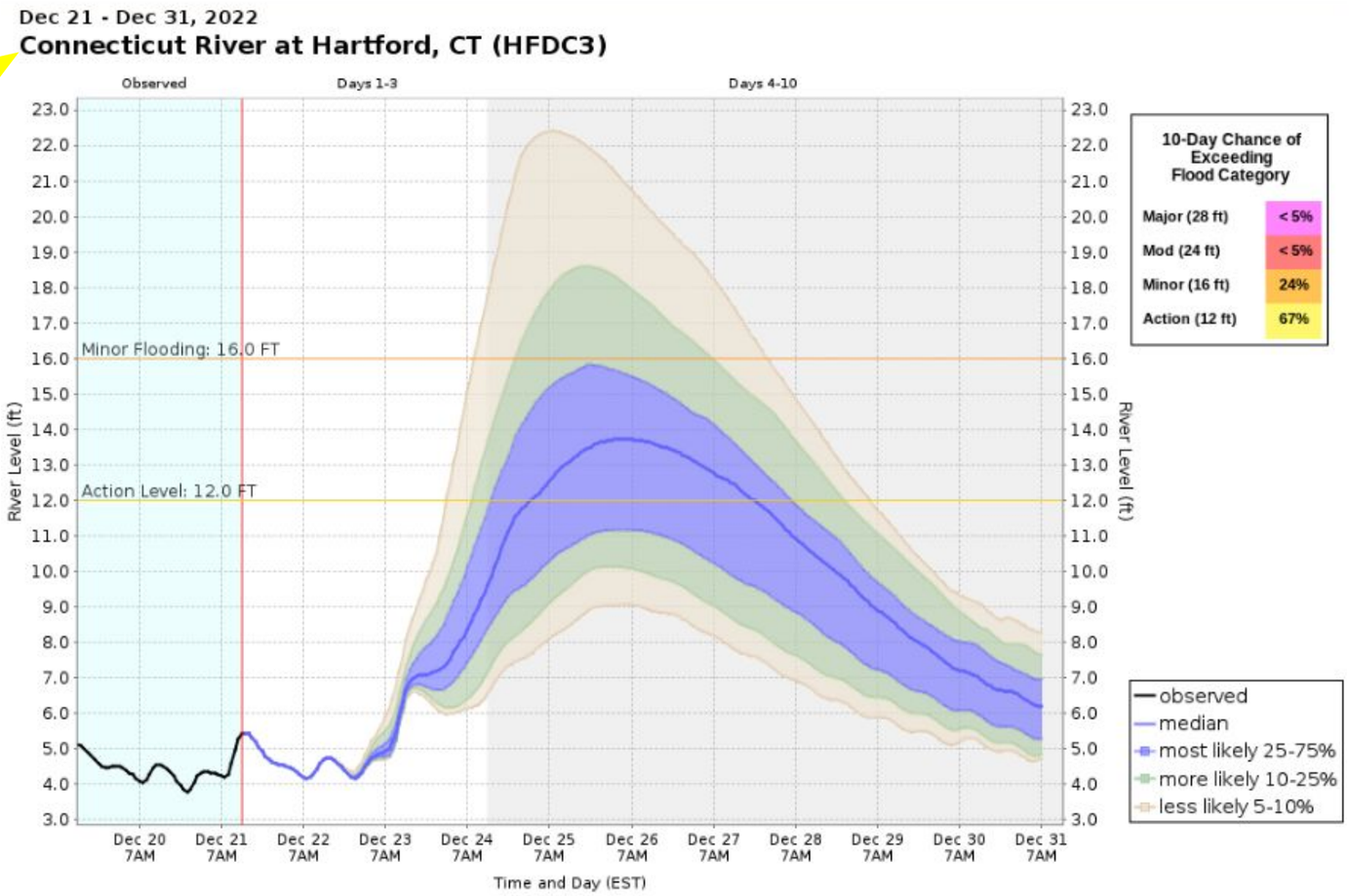
Connecticut River at Hartford



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

= less than 30% chance of reaching Action level

Latest forecast crest is Sunday night



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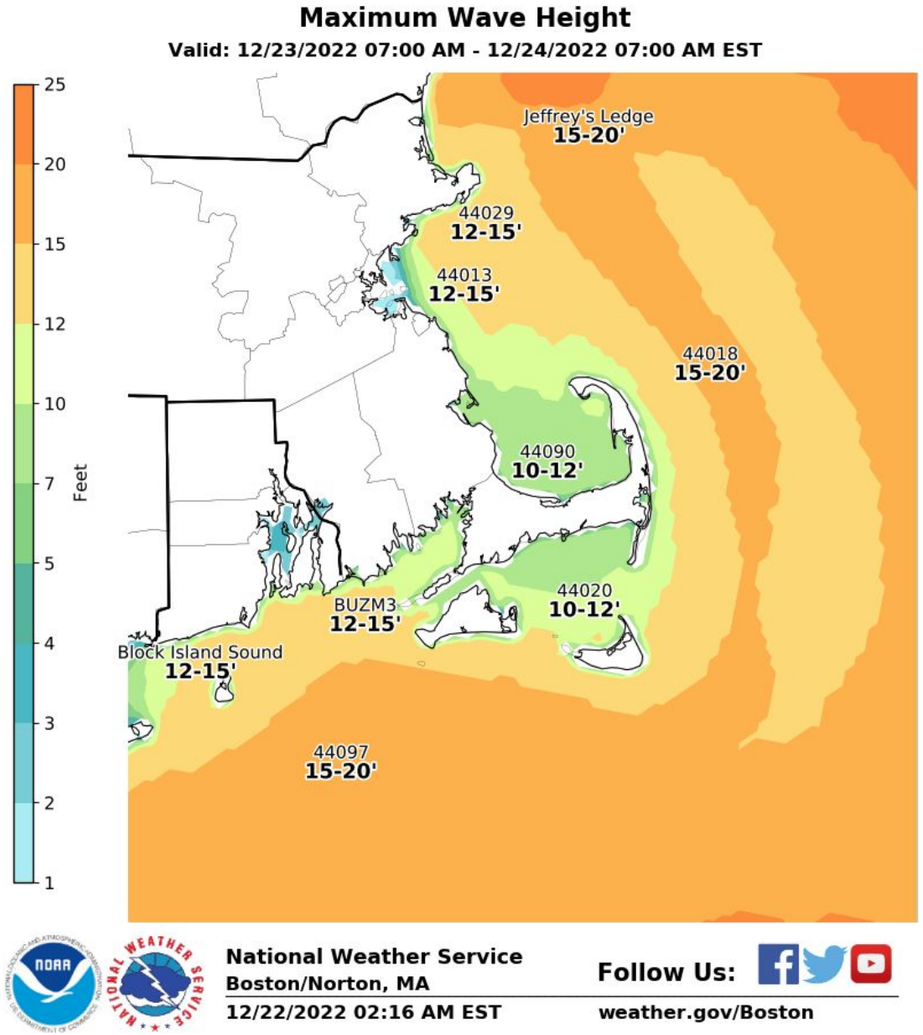
Marine Impact Timeline

December 22, 2022
4:30 AM



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:

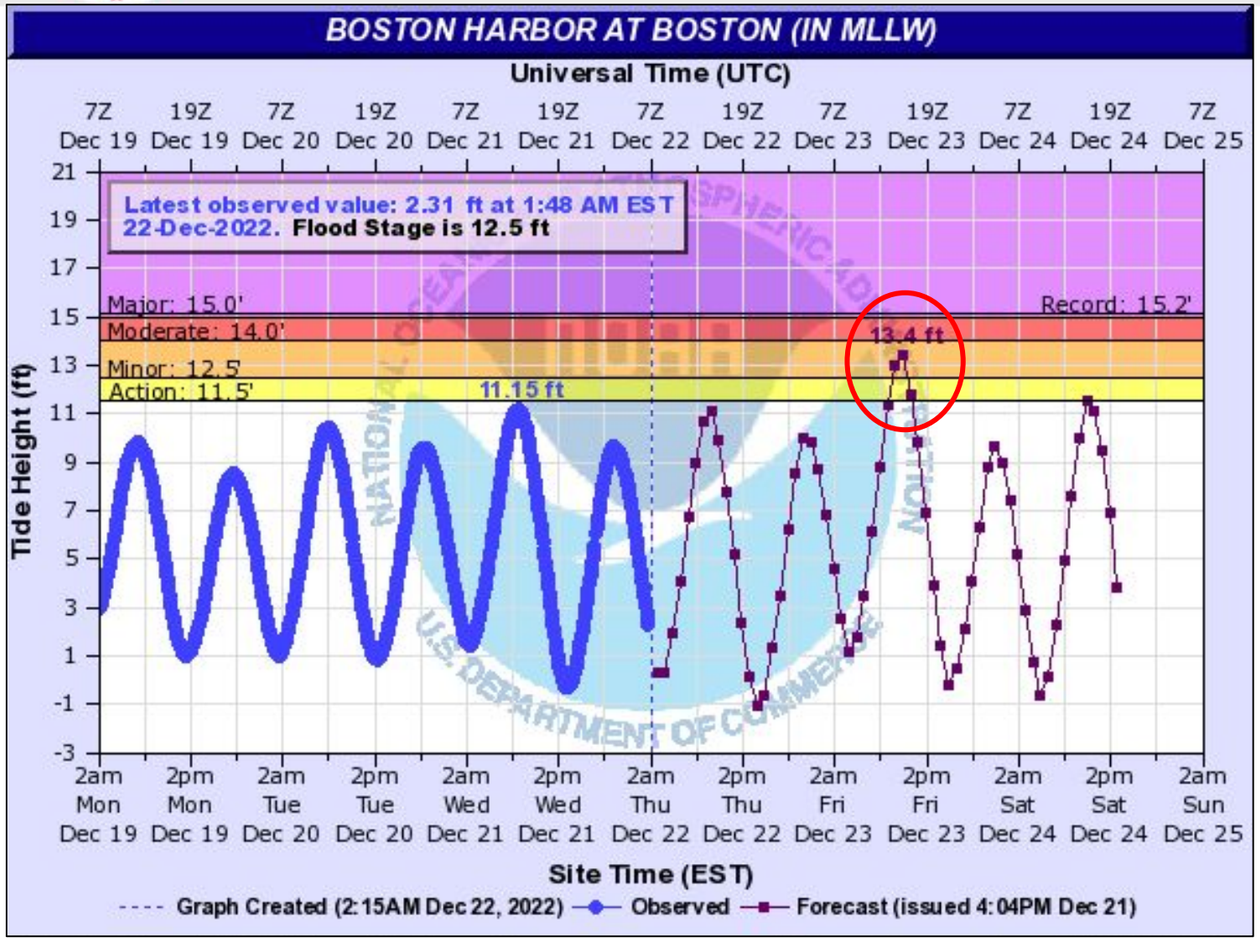
- Storm force (S/SW) subsides 7 PM - 11 PM Fri
- Gale force (W) subsides 4 PM - 10 PM Sat
- Gradually subside below 25 kt Sunday

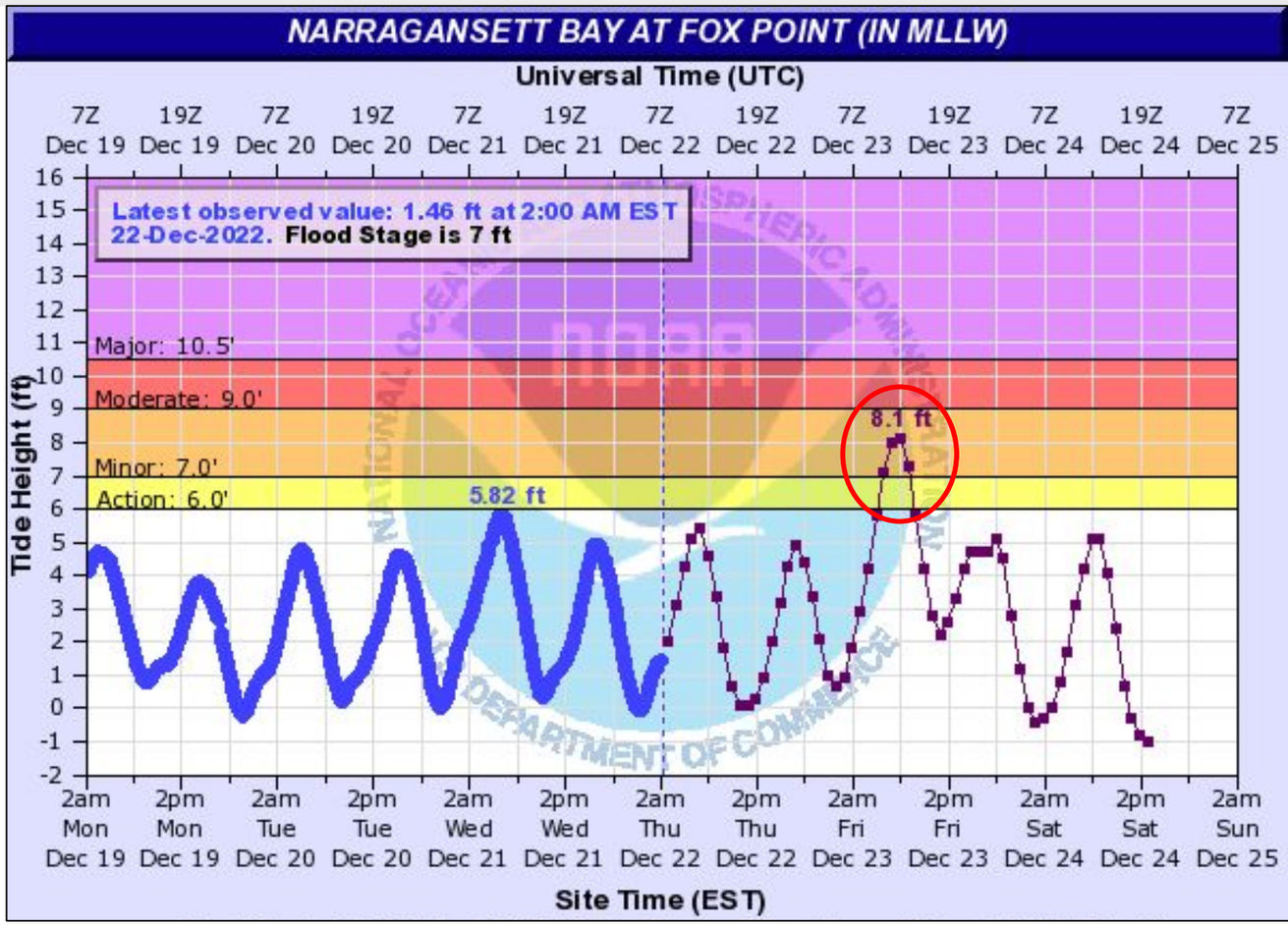
Seas:

- 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

Coastal Flooding Potential

December 22, 2022
4:30 AM





- 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)

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Coastal Flooding Definitions

December 22, 2022
4:30 AM

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.

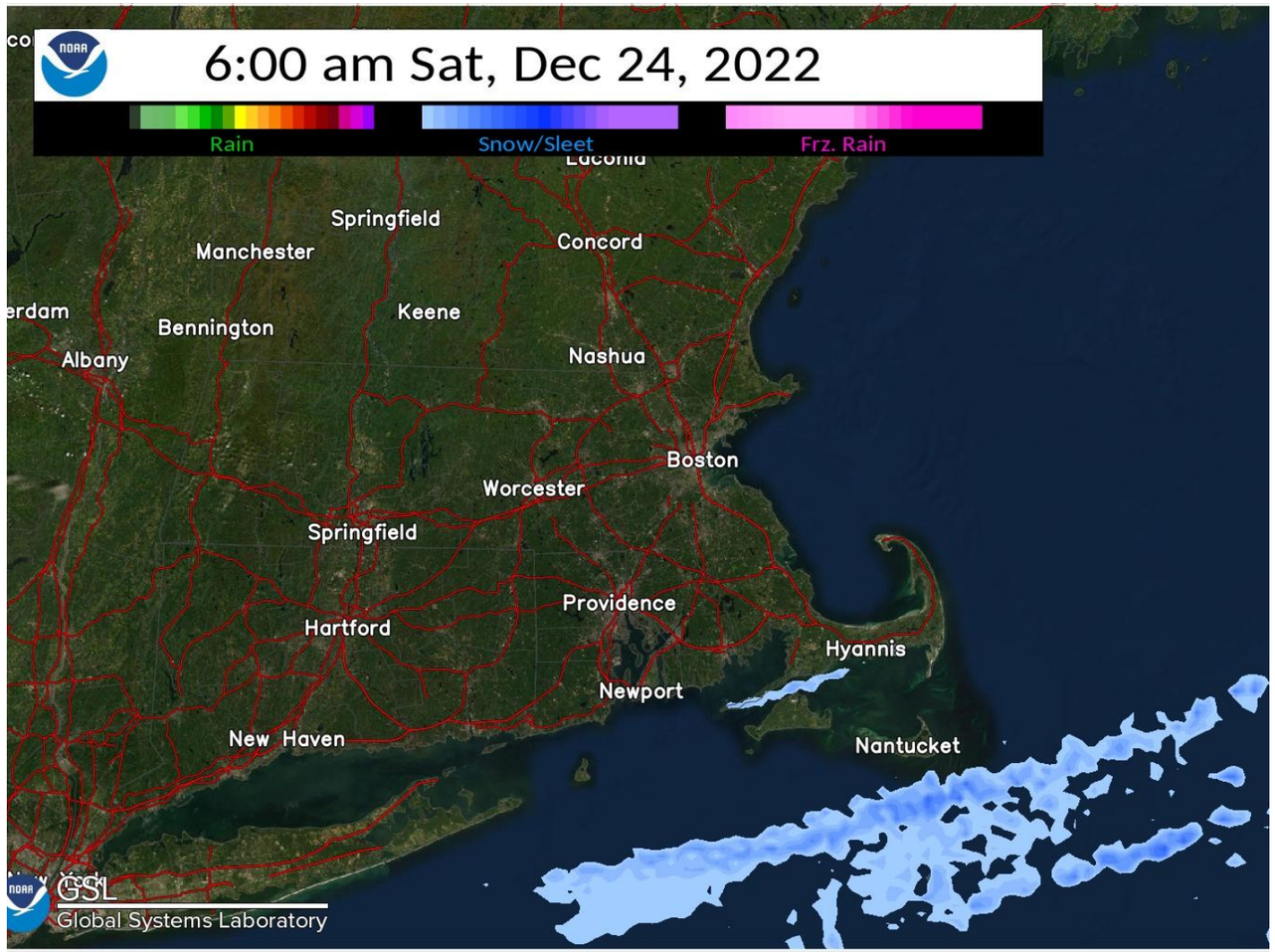
Moderate Coastal Flooding

- 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 22, 2022
4:30 AM

Cold and Windy on Saturday and Ocean Effect Snow



Minimum Wind Chill Forecast

	12/23 Fri		12/24 Sat				12/25 Sun				Minimum
	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm	
Boston	39	9	4	5	11	7	4	4	14	11	4
Hartford	28	2	0	0	8	4	3	3	14	10	0
Hyannis	39	12	6	6	13	7	6	6	15	11	6
Lowell	38	9	3	2	10	7	3	4	14	11	2
Nantucket	38	16	11	11	15	12	10	10	17	15	10
New Bedford	37	6	2	3	12	6	3	3	16	9	2
Providence	36	5	2	0	10	7	4	4	15	13	0
Provincetown	37	14	9	9	11	10	8	8	14	14	8
Springfield	29	3	-1	0	7	3	1	1	12	9	-1
Worcester	31	1	-3	-3	5	2	0	0	10	7	-3

*Table values in °F
**Created: 2 am EST Thu 12/22/2022

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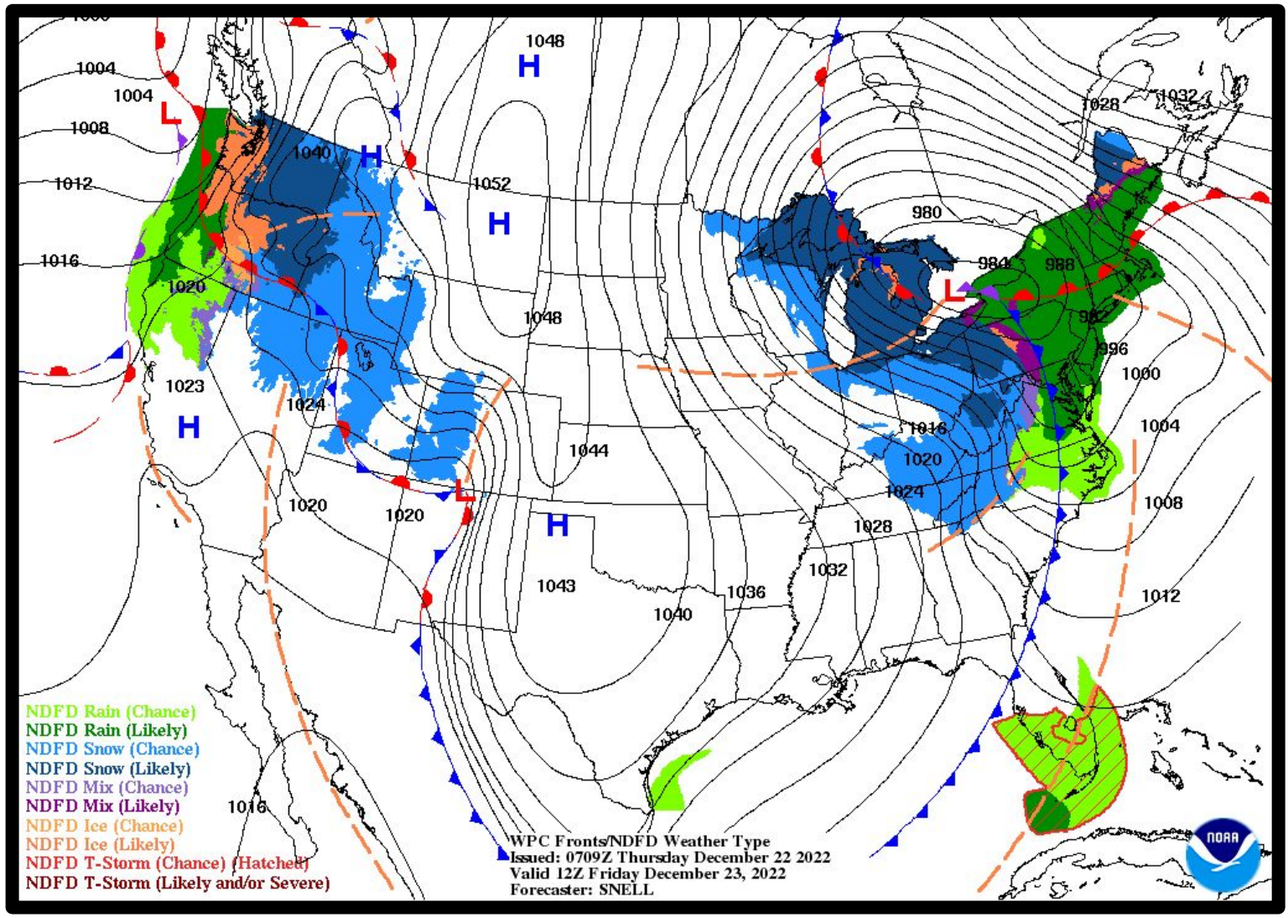
Recap

December 22, 2022
4:30 AM

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
- Coastal Flood Warnings issued for all coasts
- High Wind Warning issued for eastern Massachusetts and Rhode Island. Wind Advisory for central and western Massachusetts and Connecticut
- Hazardous marine conditions for all waters
- Winter Weather Advisory issued for east slopes of the Berkshires

7 AM Friday Weather Map



Contact and Next Briefing Information

December 22, 2022
4:30 AM

For Southern New England

Briefing Webpage

➔ https://www.weather.gov/erh/ghwo?wfo=box

Next Briefing

➔ By Thursday at 6 PM, but could be sooner if there are any significant changes to the forecast.

Disclaimer

➔ Information contained in this briefing is time-sensitive
➔ Do Not Use After: 06:00 PM Thursday, 12/22/2022

Contact Information

Web

➔ weather.gov/box

Phone

➔ (508) 622-3250

Email

➔ box.operations@noaa.gov

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