



Heavy Rain/Storm Briefing

January 9, 2024
9:00 AM

Prepared by National Weather Service Wakefield, VA

Decision Support Briefing #3

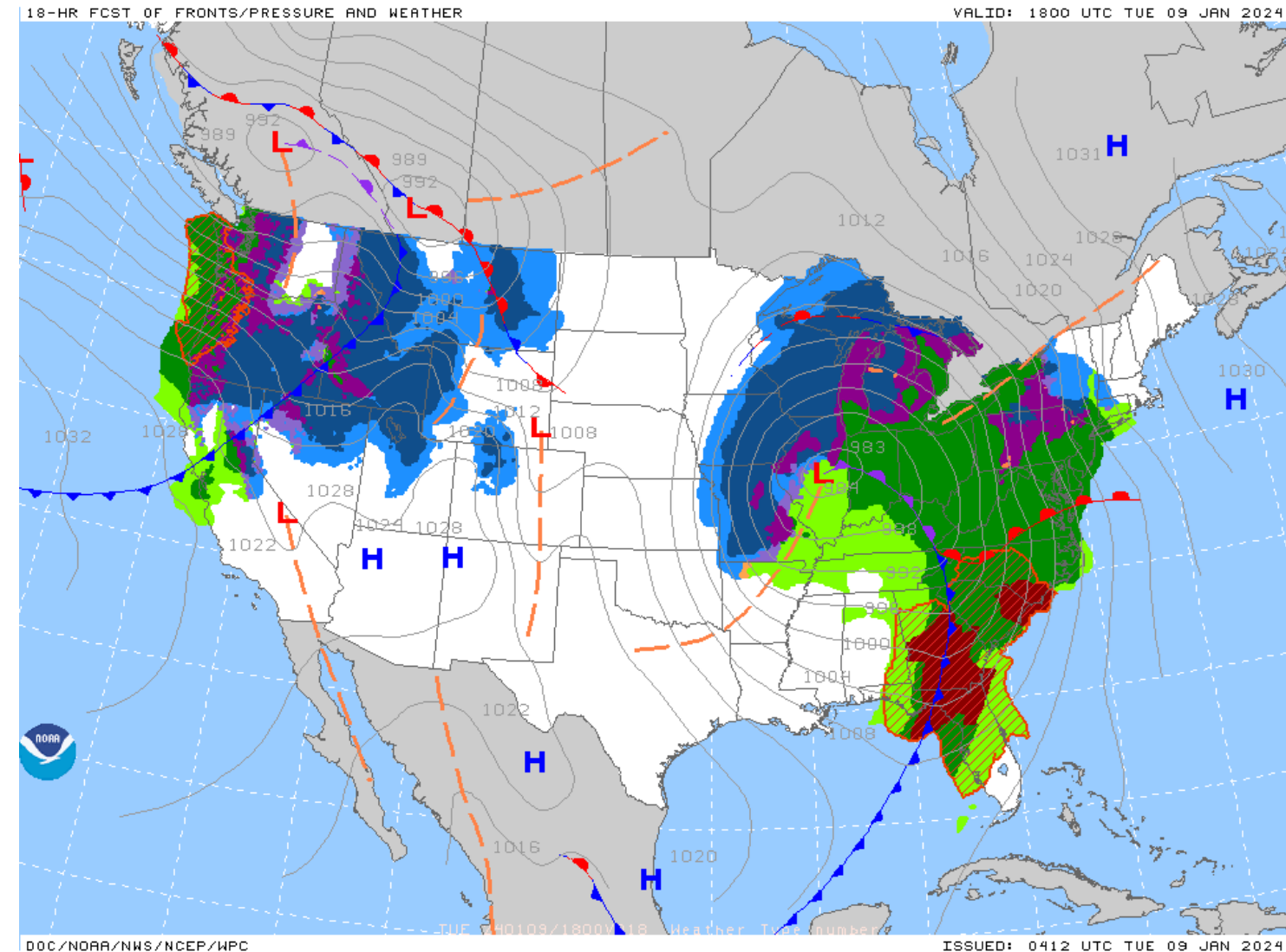
→ As of 9:00 AM EST
Tuesday, January 9, 2024

NEW

Important Updates

- Storm Warnings remain in effect for the ocean, Chesapeake Bay, lower James River, and Currituck Sound. Gale Warnings in effect for the upper tidal rivers.
- Coastal Flood Warnings remain in effect for the bay-side of the MD Eastern Shore, the southern shore of the tidal Potomac, and for the northern shore and adjacent waterways of the Albemarle Sound
- High Wind Warnings are in effect for most of the Eastern Shore, the western shore of the Chesapeake Bay, and the coasts of Southeast VA and Northeast NC. Wind Advisories in effect elsewhere except far western counties.
- A Flood Watch is in effect for all local VA and MD counties

Disclaimer: Information may become outdated after briefing time. Consult weather.gov/wakefield for the latest information.



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

National Weather Service
Wakefield, VA



Key Messages

January 9, 2024
9:00 AM






- Strong low pressure and a cold front will track from the Appalachian Mountains today and move off the Mid-Atlantic coast tonight.
- Moderate to heavy rain and strong winds are expected across the area this morning through Wednesday morning.
- Rain will begin from southwest to northeast this morning, exiting the region late tonight. The heaviest rain will occur between 5 pm and midnight.
- Winds increase through the day today and are expected to peak this evening into tonight.
- There is a risk for strong to severe storms across northeast North Carolina and Southeast Virginia this evening. Strong, damaging wind gusts are the main threat, but there is also a potential for tornadoes.
- There will be the potential for localized power outages from wind and flooding from rainfall in addition to tidal flooding.





Summary of Greatest Impacts

January 9, 2024
9:00 AM

Hazard	Impacts	Location	Timing
 High Wind	Localized power outages/difficult travel for high profile vehicles/localized damaging wind gusts from storms	Primarily from the I-95 corridor to the coast, and strongest toward the coast	Tuesday afternoon into Tuesday night
 Tornadoes	A few brief tornadoes are possible	Southeast VA and Northeast NC	Tuesday evening into the early overnight hours
 Heavy Rain/ Flash Flooding	Localized flash flooding is possible due to wet soil conditions/Minor to moderate river flooding is likely	The entire area for flash flooding/All primary basins for river flooding	Tuesday evening into the early overnight hours for flash flooding/Wednesday through late week for river flooding
 Coastal Flooding	Water level rises of 2 to 3 feet above normal will bring the likelihood for moderate to major tidal flooding. Large breaking waves may cause beach erosion.	Middle Chesapeake Bay/Southern Shore of the Tidal Potomac/Northern Shore of the Albemarle Sound and adjacent Waterways	Tuesday night for the Albemarle Sound/Tuesday night and Wednesday morning elsewhere
 Marine	Very dangerous to extreme conditions are expected	All waters coastal and nearshore waters	Tuesday afternoon through Wednesday morning



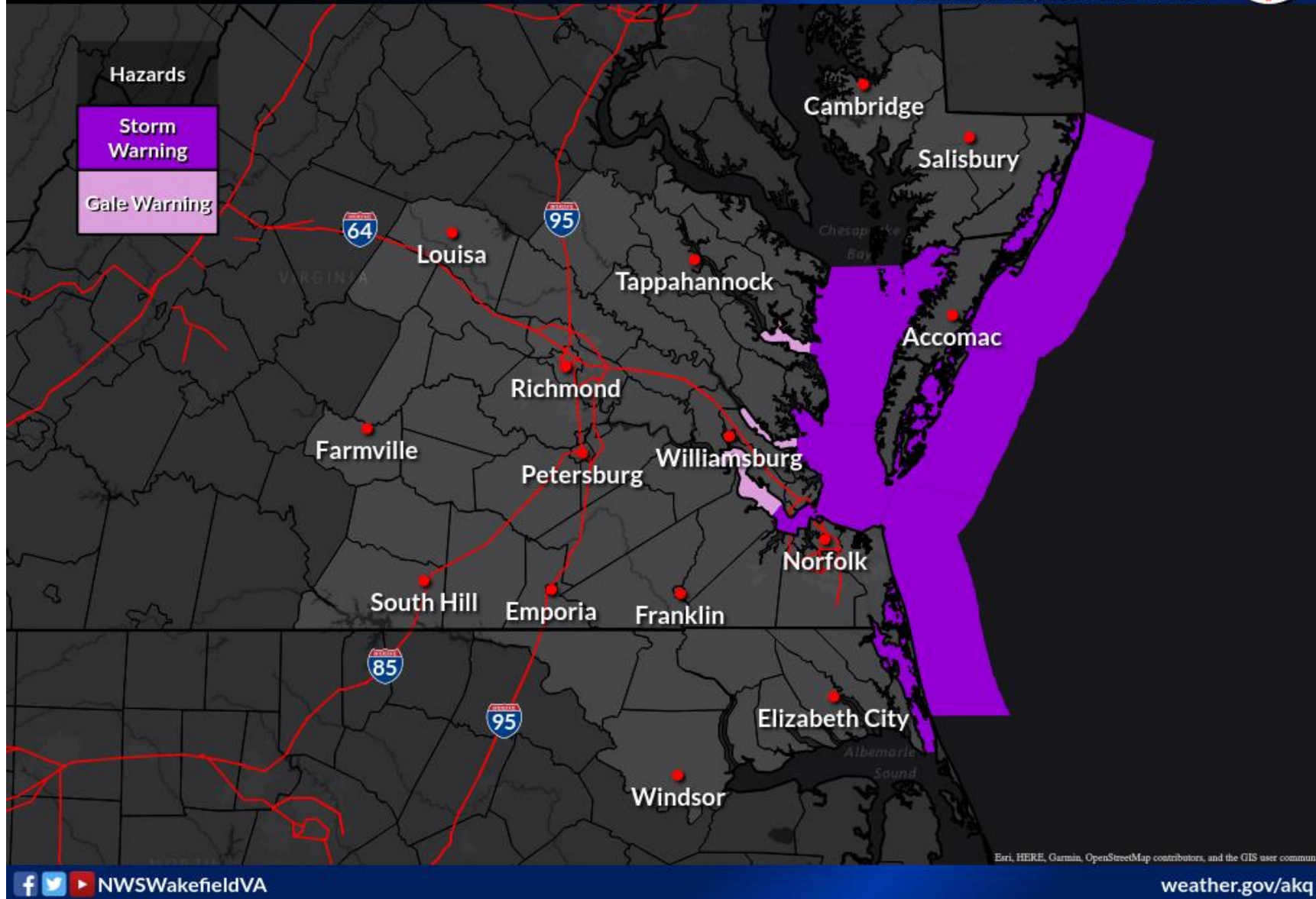
Hazard Overview

January 9, 2024
9:00 AM

Marine Headlines

Weather Forecast Office
Wakefield, VA

Issued Jan 08, 2024 3:26 PM EST



- A Storm Warning is in effect for the Chesapeake Bay, Atlantic Ocean, Currituck Sound, and lower James River this morning into tonight
- A Gale Warning is in effect for the Rappahannock, York, and upper James River this afternoon into tonight
- Hazardous marine conditions will continue into Wednesday
- See www.weather.gov/akq for the latest information



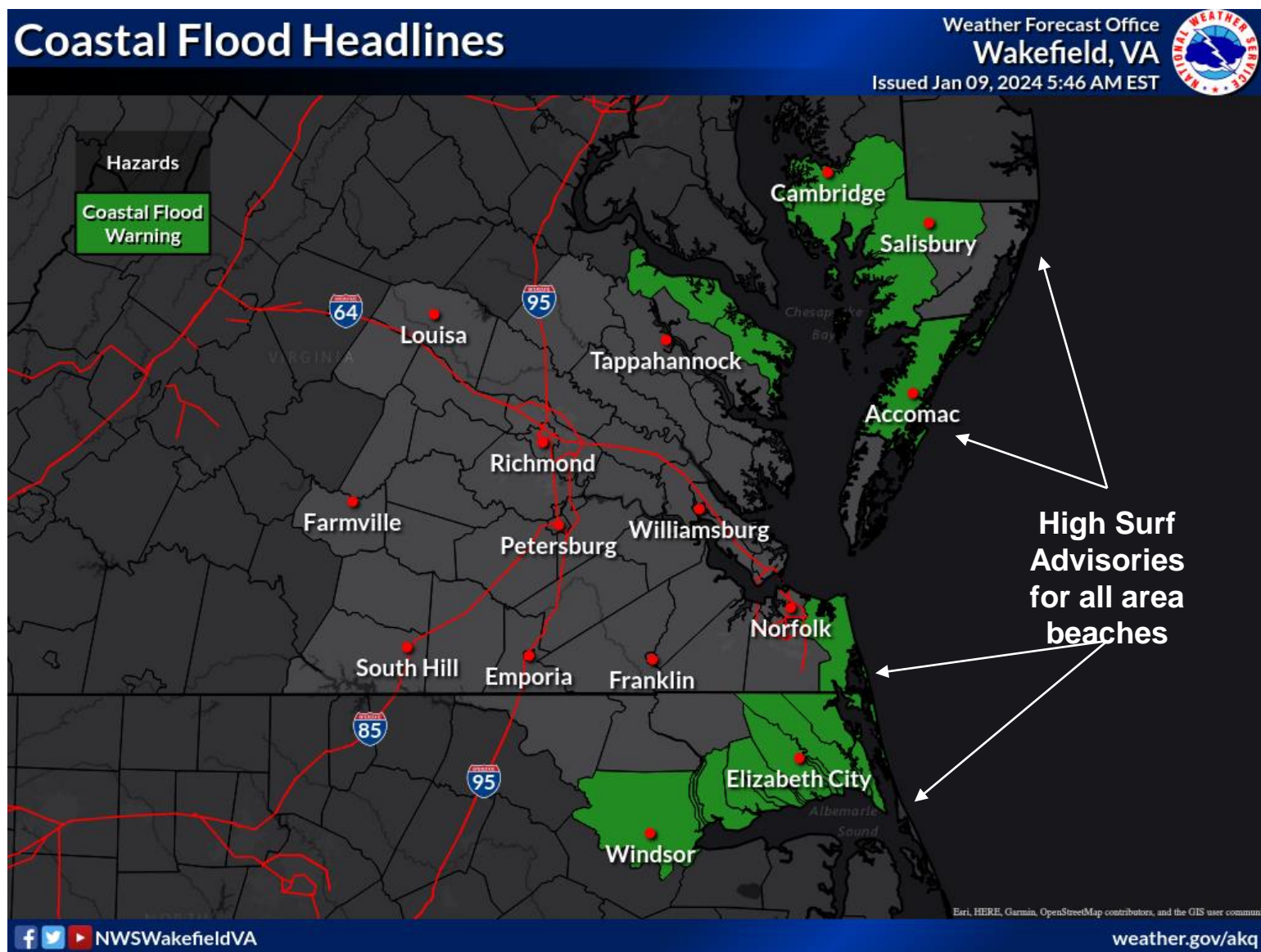
National Oceanic and
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National Weather Service
Wakefield, VA



Hazard Overview

January 9, 2024
9:00 AM



- Coastal Flood Warnings are in effect for the bay-side of the MD Eastern Shore, the southern shore of the tidal Potomac, and the northern shore of the Albemarle Sound and adjacent waterways
- High Surf Advisories are in effect for all area beaches
- Moderate to Major tidal flooding is possible tonight into Wednesday morning
- Large breaking waves will result in dangerous surf conditions and possible beach erosion
- See www.weather.gov/akq for the latest information





Hazard Overview

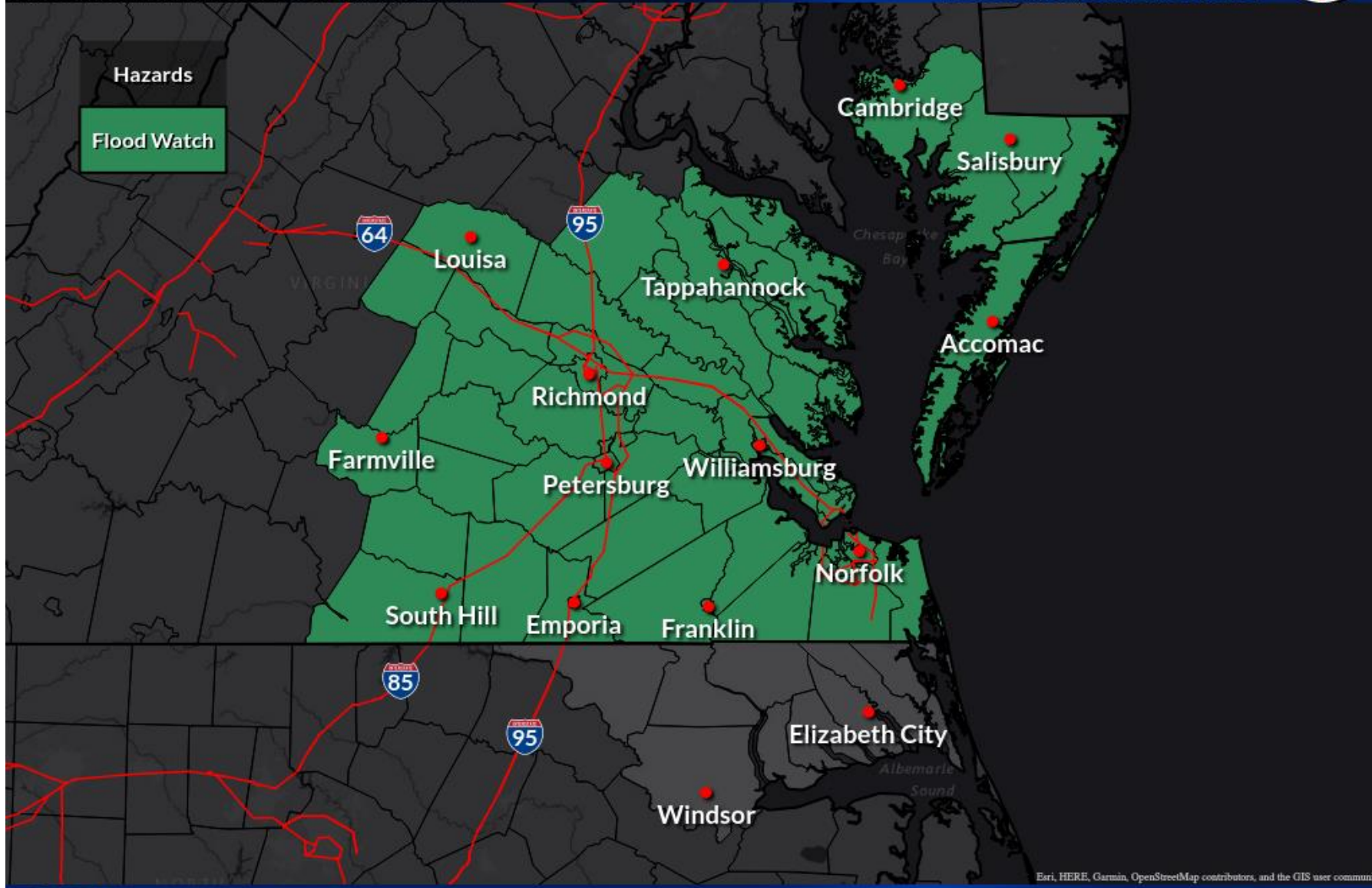
January 9, 2024
9:00 AM

Locally Heavy Rainfall Possible

Flood Watch in Effect for Much of the Area

Weather Forecast Office
Wakefield, VA

Issued Jan 09, 2024 5:48 AM EST



f t NWSWakefieldVA

weather.gov/akq

- A Flood Watch is in effect this afternoon through early Wednesday morning for all local VA and MD counties
- Localized flash flooding is possible due to wet soil conditions. In addition, minor to moderate river flooding is likely
- See www.weather.gov/akq for the latest information



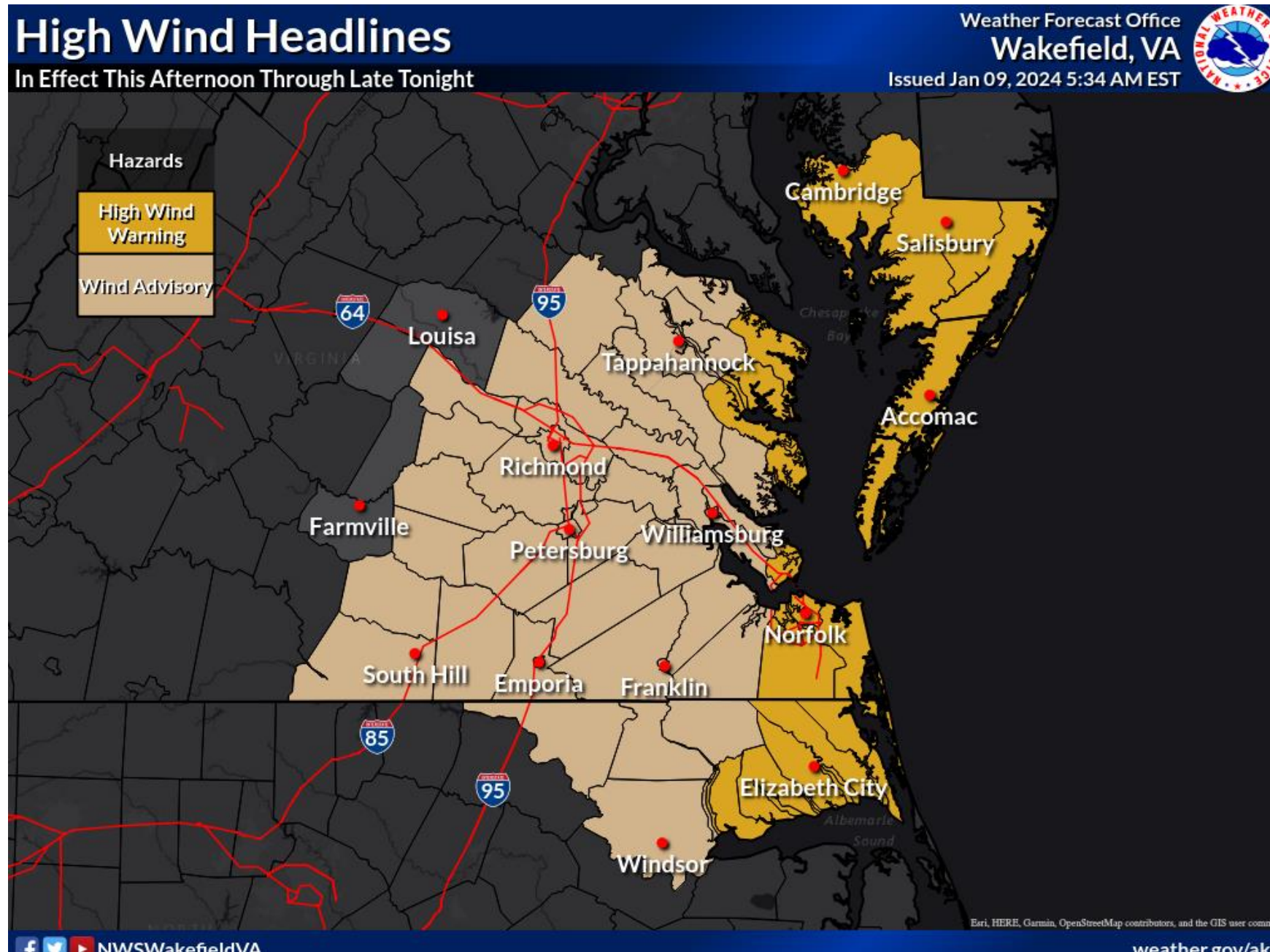
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National Weather Service
Wakefield, VA



Hazard Overview

January 9, 2024
9:00 AM



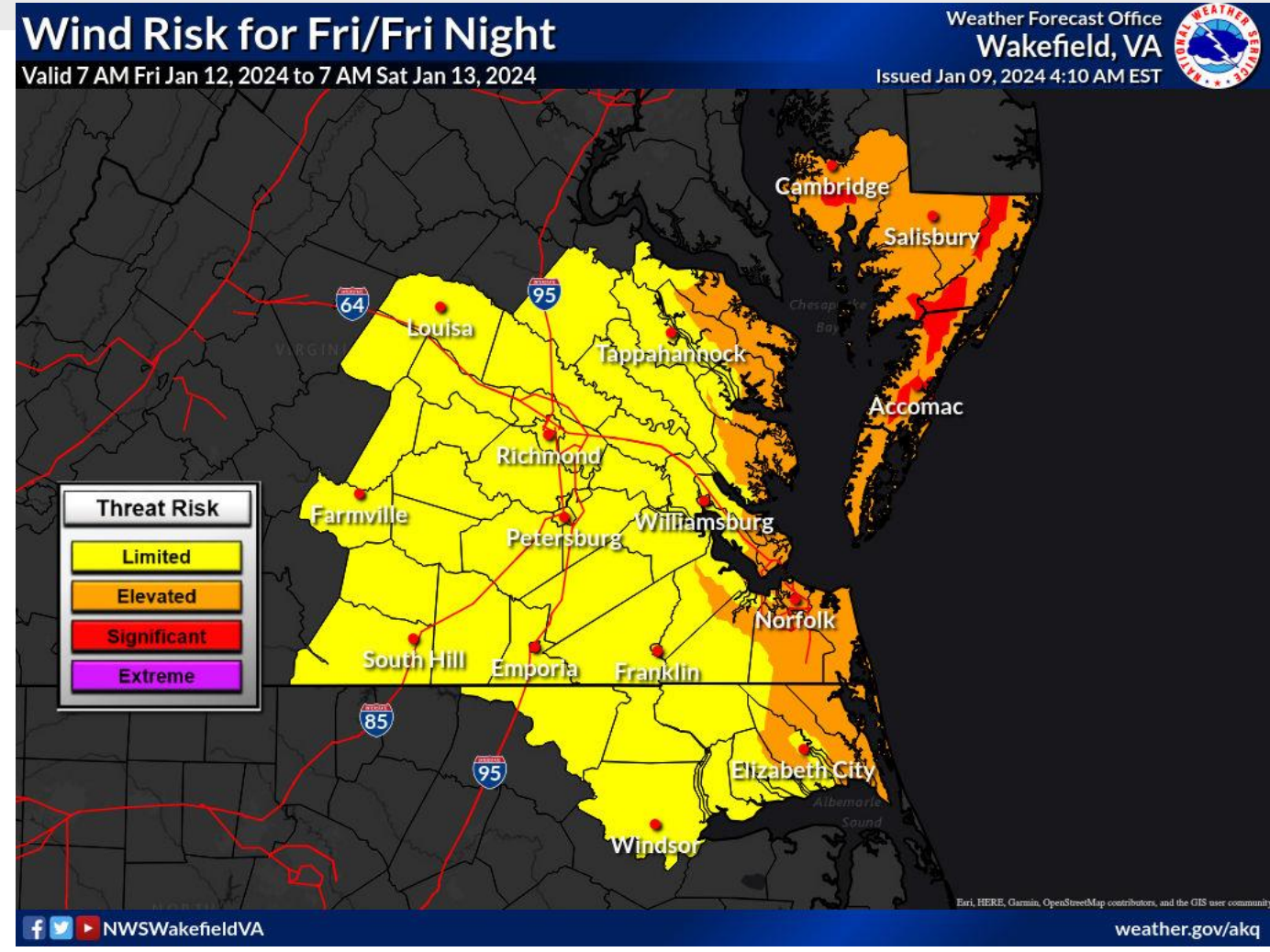
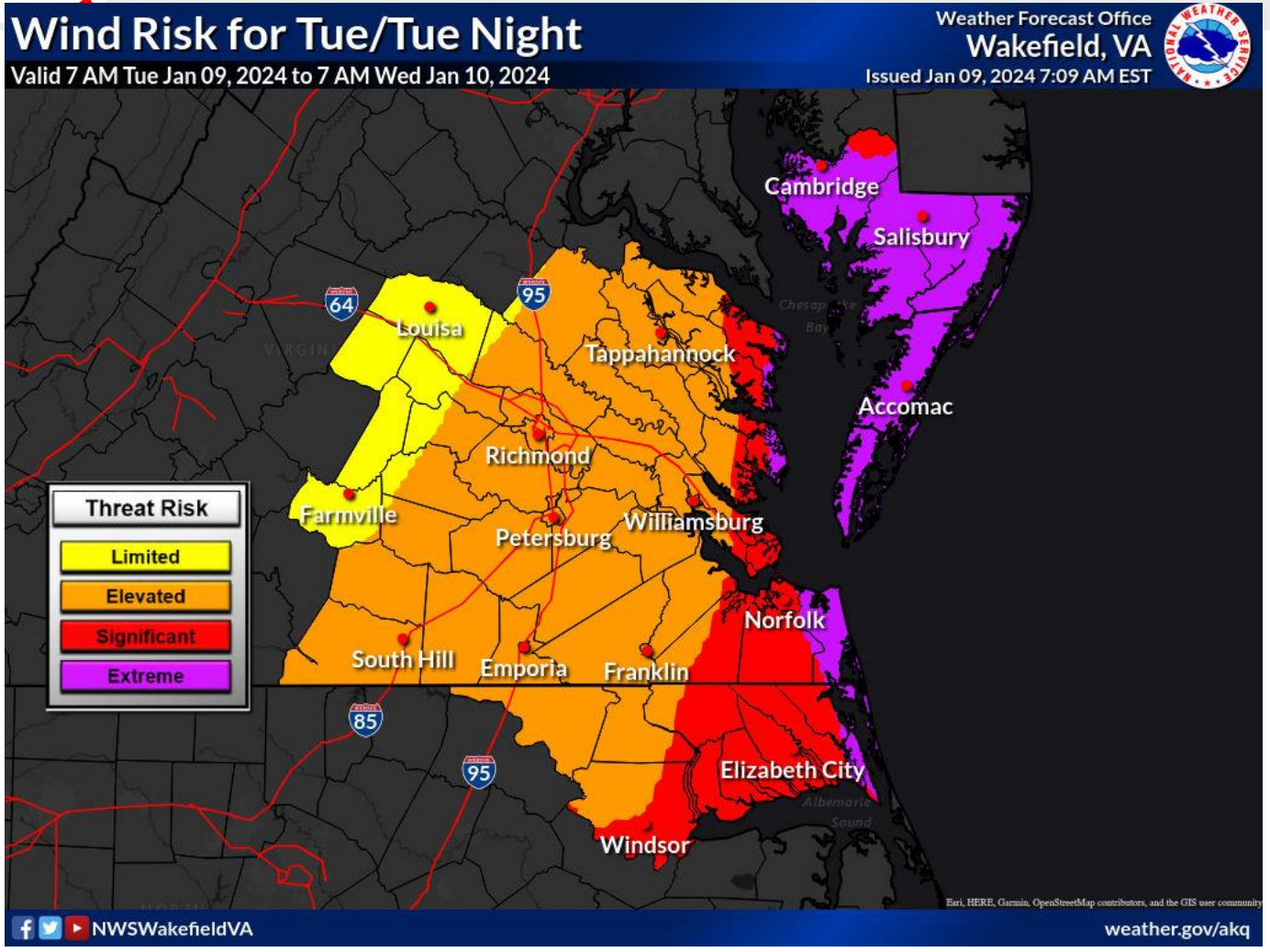
- High Wind Warnings are in effect for locations near the Chesapeake Bay, Atlantic Ocean, and Albemarle Sound this afternoon into tonight
- Wind Advisories are in effect for inland counties to just west of the I-95/I-85 corridor.
- See www.weather.gov/akq for the latest information





High Wind Today & Fri Night

January 9, 2024
9:00 AM



Limited	Breezy conditions with 30 to 40 mph wind gusts could blow around unsecured items and result in hazardous driving conditions for high-profile vehicles.
Elevated	Windy conditions with 40 to 50 mph wind gusts could damage light outdoor items, cause isolated power outages and result in hazardous driving conditions for high-profile vehicles.
Significant	Very windy conditions with 50 to 60 mph wind gusts could blow down trees, result in some property damage and cause power outages.
Extreme	Extremely windy conditions with wind gusts greater than 60 mph will damage numerous trees, cause property damage in addition to widespread power outages.



High Wind Potential

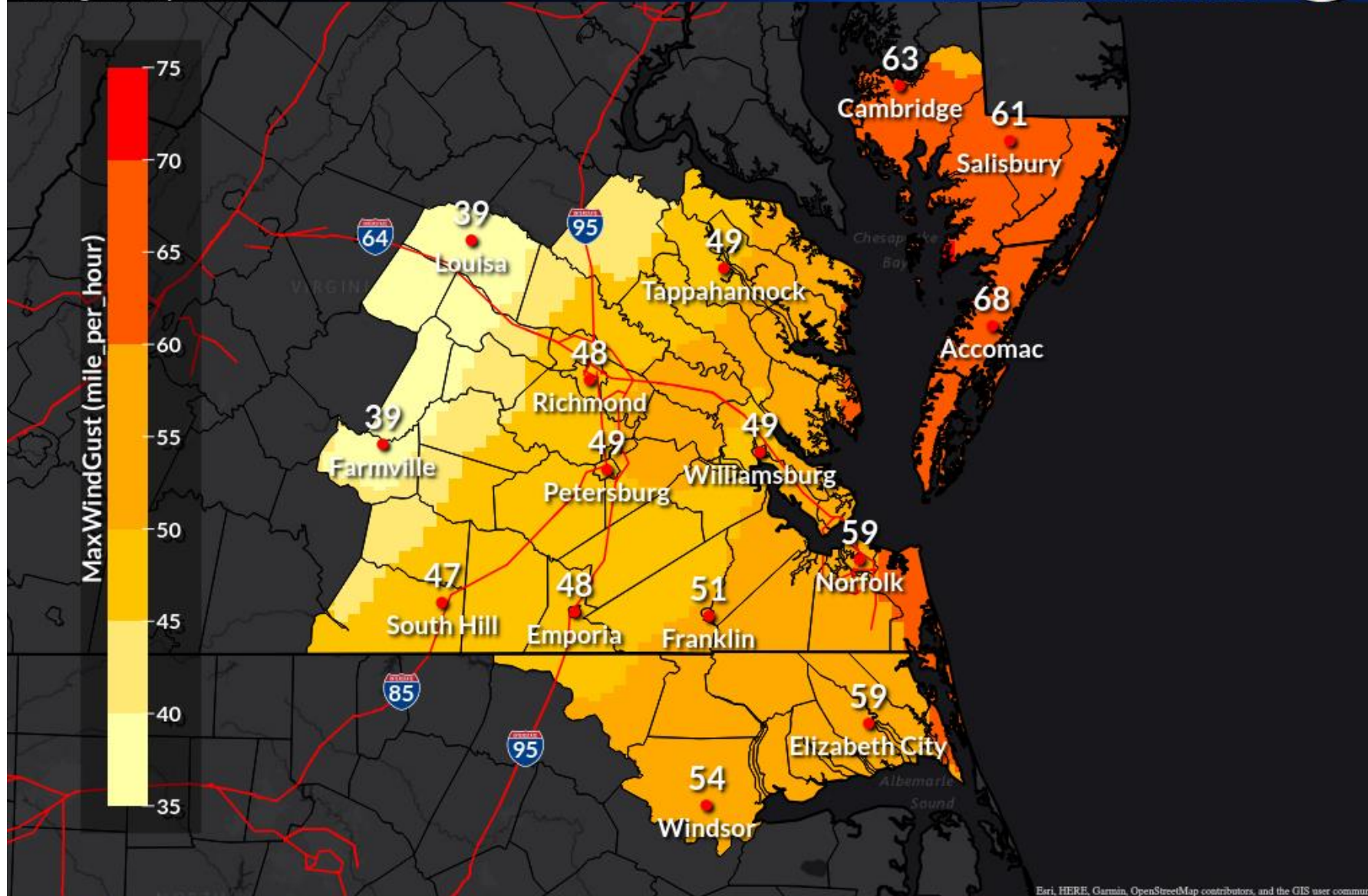
January 9, 2024
9:00 AM

Max Wind Gusts Through 72 Hours

Through Friday 7:00 EST

Weather Forecast Office
Wakefield, VA

Issued Jan 09, 2024 5:42 AM EST



NWSWakefieldVA

weather.gov/akq

- A strong southeast, then south, wind is expected this afternoon into tonight
- The wind will be highest from the I-95 corridor to the coast, and strongest (potentially damaging) near the coast
- Localized higher wind gusts are possible due to isolated thunderstorms across southeast VA and northeast NC



National Oceanic and
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Wakefield, VA



Regional Winds Forecast Summary

January 9, 2024
9:00 AM

Maximum Wind Gust Forecast

	1/9 Tue			1/10 Wed				1/11 Thu				1/12 Fri				1/13 Sat				1/14 Sun			
	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm
Accomac	30↘	52↘	63↗	51↗	44↗	40↗	25↗	16↗	15↗	17↗	15↗	9↗	15↗	25↘	44↘	51↗	41↗	44↗	40↗	37↗	29↗	25↗	18↗
Ahoski	30↘	47↗	49↗	33↗	31↗	29↗	15↗	7↗	10↗	13↗	10↗	6↗	12↗	22↘	32↗	35↗	35↗	38↗	35↗	24↗	21↗	22↗	13↗
Cambridge	30↘	48↗	59↗	45↗	36↗	36↗	22↗	13↗	14↗	16↗	15↗	9↗	13↗	21↘	39↗	47↗	38↗	40↗	38↗	32↗	25↗	25↗	18↗
Corolla	35↘	56↗	60↗	45↗	48↗	37↗	25↗	20↗	17↗	17↗	13↗	12↗	16↗	26↘	40↗	45↗	38↗	39↗	38↗	33↗	29↗	24↗	20↗
Elizabeth City	30↘	51↗	55↗	39↗	38↗	35↗	20↗	10↗	14↗	16↗	13↗	7↗	15↗	25↘	37↗	40↗	38↗	40↗	37↗	28↗	24↗	24↗	15↗
Emporia	25↘	45↗	45↗	30↗	31↗	30↗	15↗	6↗	10↗	12↗	9↗	6↗	12↗	21↘	31↗	35↗	33↗	37↗	35↗	24↗	21↗	23↗	12↗
Farmville	25↘	43↗	41↗	28↗	30↗	30↗	16↗	7↗	12↗	15↗	13↗	7↗	10↗	18↘	28↗	31↗	33↗	37↗	35↗	25↗	22↗	23↗	14↗
Louisa	24↘	39↗	40↗	25↗	30↗	30↗	17↗	9↗	13↗	15↗	15↗	7↗	9↗	16↘	29↗	33↗	32↗	38↗	35↗	24↗	21↗	23↗	13↗
Norfolk / Portsmouth	30↘	52↗	55↗	43↗	41↗	35↗	21↗	13↗	14↗	16↗	14↗	7↗	16↗	25↘	38↗	41↗	38↗	39↗	37↗	29↗	25↗	25↗	17↗
Ocean City	30↘	49↗	64↗	59↗	41↗	39↗	25↗	18↗	16↗	18↗	16↗	12↗	14↗	23↘	41↗	48↗	41↗	41↗	38↗	36↗	28↗	25↗	20↗
Richmond	26↘	44↗	45↗	31↗	32↗	33↗	18↗	9↗	13↗	15↗	13↗	7↗	12↗	20↘	32↗	37↗	35↗	38↗	36↗	24↗	22↗	24↗	15↗
Salisbury	28↘	48↗	58↗	49↗	39↗	38↗	23↗	12↗	14↗	16↗	16↗	9↗	14↗	22↘	40↗	48↗	39↗	45↗	38↗	33↗	26↗	26↗	18↗
South Hill	29↘	44↗	43↗	29↗	30↗	29↗	14↗	7↗	10↗	13↗	10↗	5↗	12↗	21↘	31↗	35↗	33↗	38↗	35↗	24↗	22↗	23↗	13↗
Tappahannock	26↘	44↗	46↗	31↗	30↗	30↗	18↗	9↗	12↗	14↗	13↗	6↗	12↗	20↘	31↗	37↗	31↗	35↗	32↗	23↗	21↗	22↗	15↗
Virginia Beach	33↘	58↗	61↗	45↗	43↗	37↗	23↗	16↗	15↗	16↗	13↗	8↗	16↗	26↘	41↗	45↗	37↗	38↗	37↗	31↗	25↗	24↗	18↗
Williamsburg	26↘	46↗	46↗	37↗	33↗	32↗	18↗	9↗	13↗	16↗	13↗	6↗	13↗	21↘	33↗	38↗	35↗	38↗	36↗	26↗	22↗	22↗	13↗

*Table values in mph

**Created: 8 am EST Tue 1/9/2024

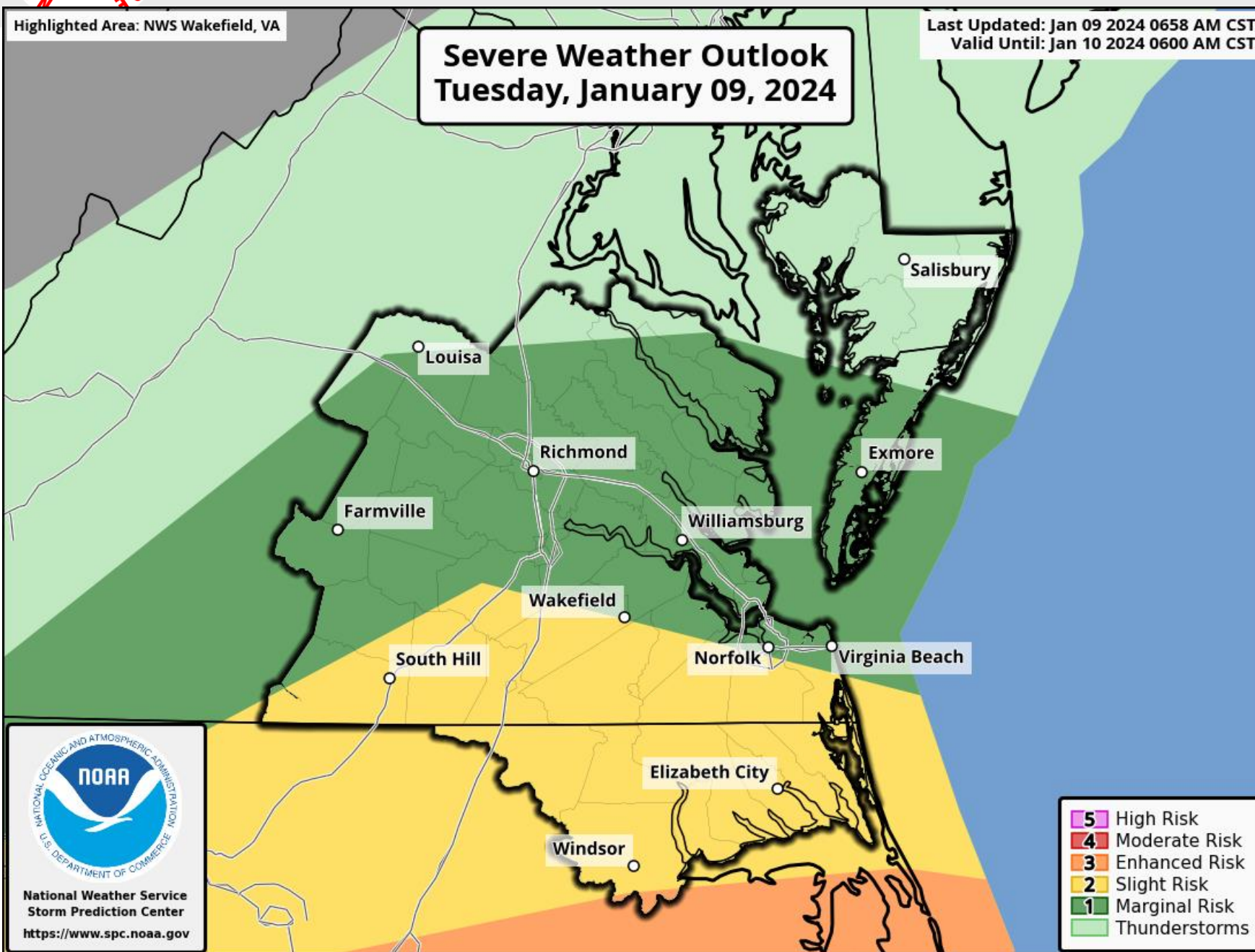
***Values are maximums over the period beginning at the time shown.





Today - Severe Weather Outlook

January 9, 2024
9:00 AM



- **Timing:** This evening into the early overnight hours
- **Potential Impacts:** Damaging wind gusts and a few brief tornadoes
- **Locations:** Most of eastern/Central VA into Northeast NC
- **Storm Coverage:** Storms will form into a line with localized impacts within the the line

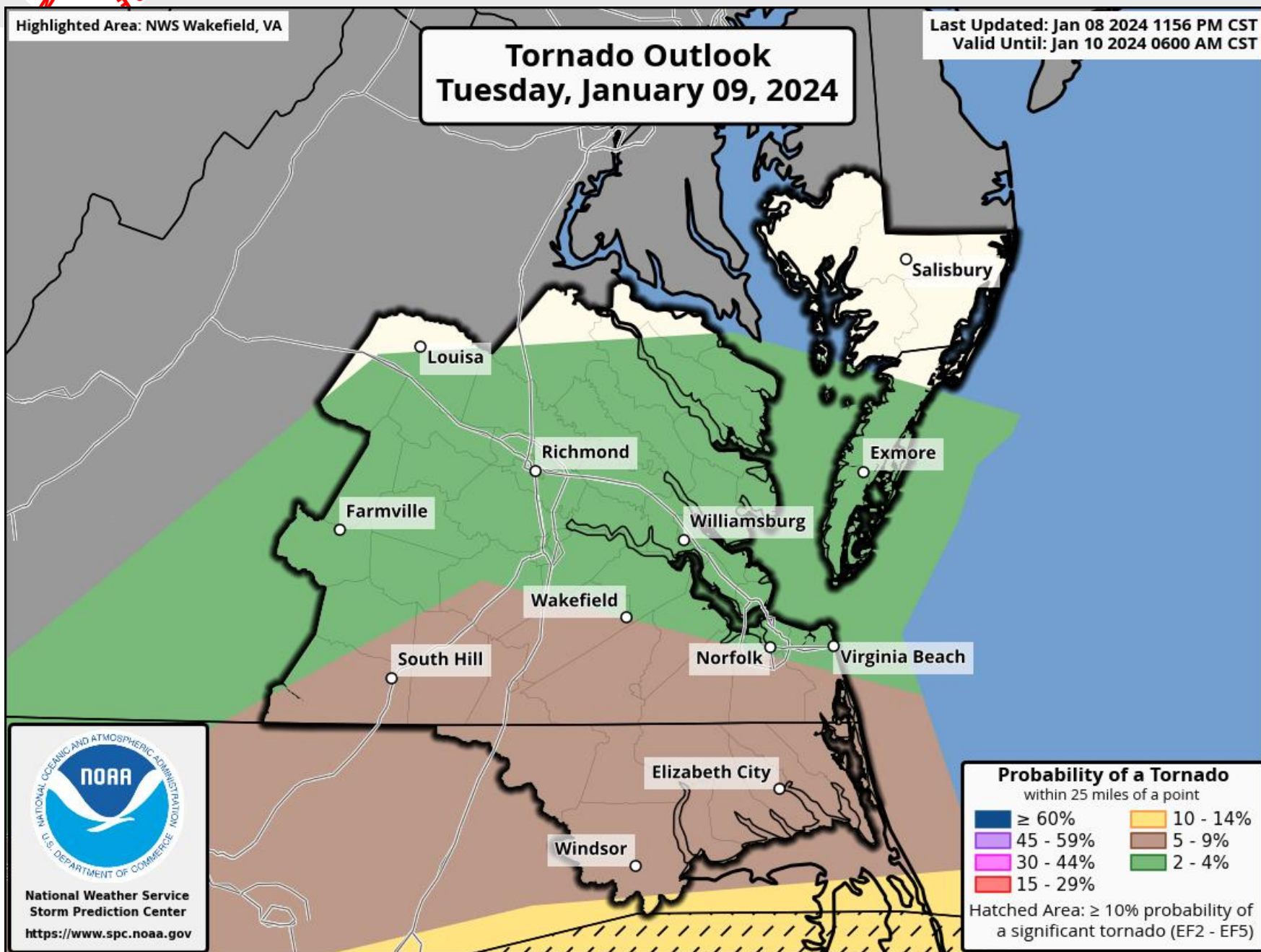
<u>TSTORM</u>	<u>MARGINAL</u>	<u>SLIGHT</u>	<u>ENHANCED</u>	<u>MODERATE</u>	<u>HIGH</u>
No severe storms expected	Isolated severe possible	Scattered severe possible	Numerous severe possible	Widespread severe likely	Widespread severe expected





Today - Tornado Threat

January 9, 2024
9:00 AM



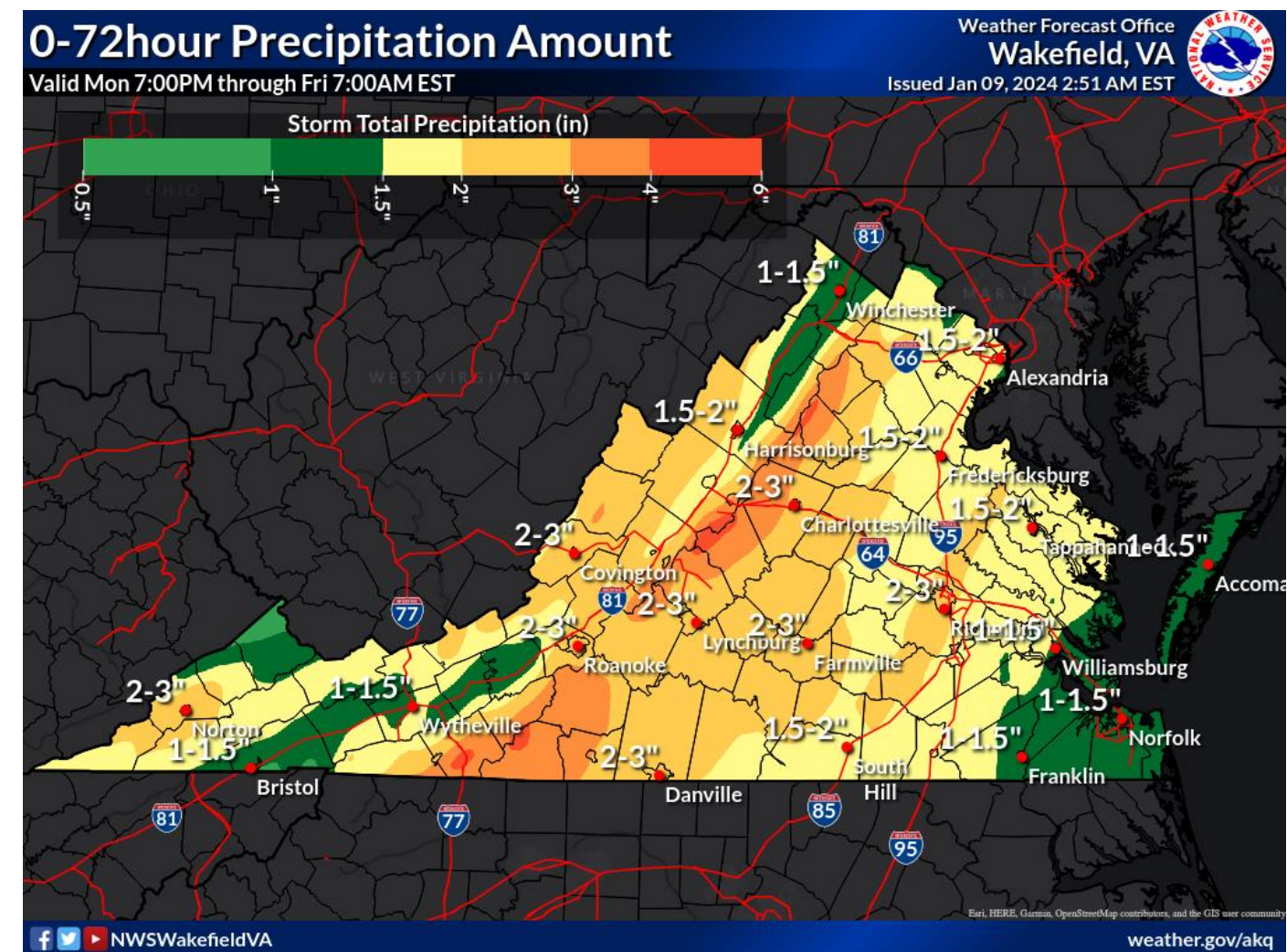
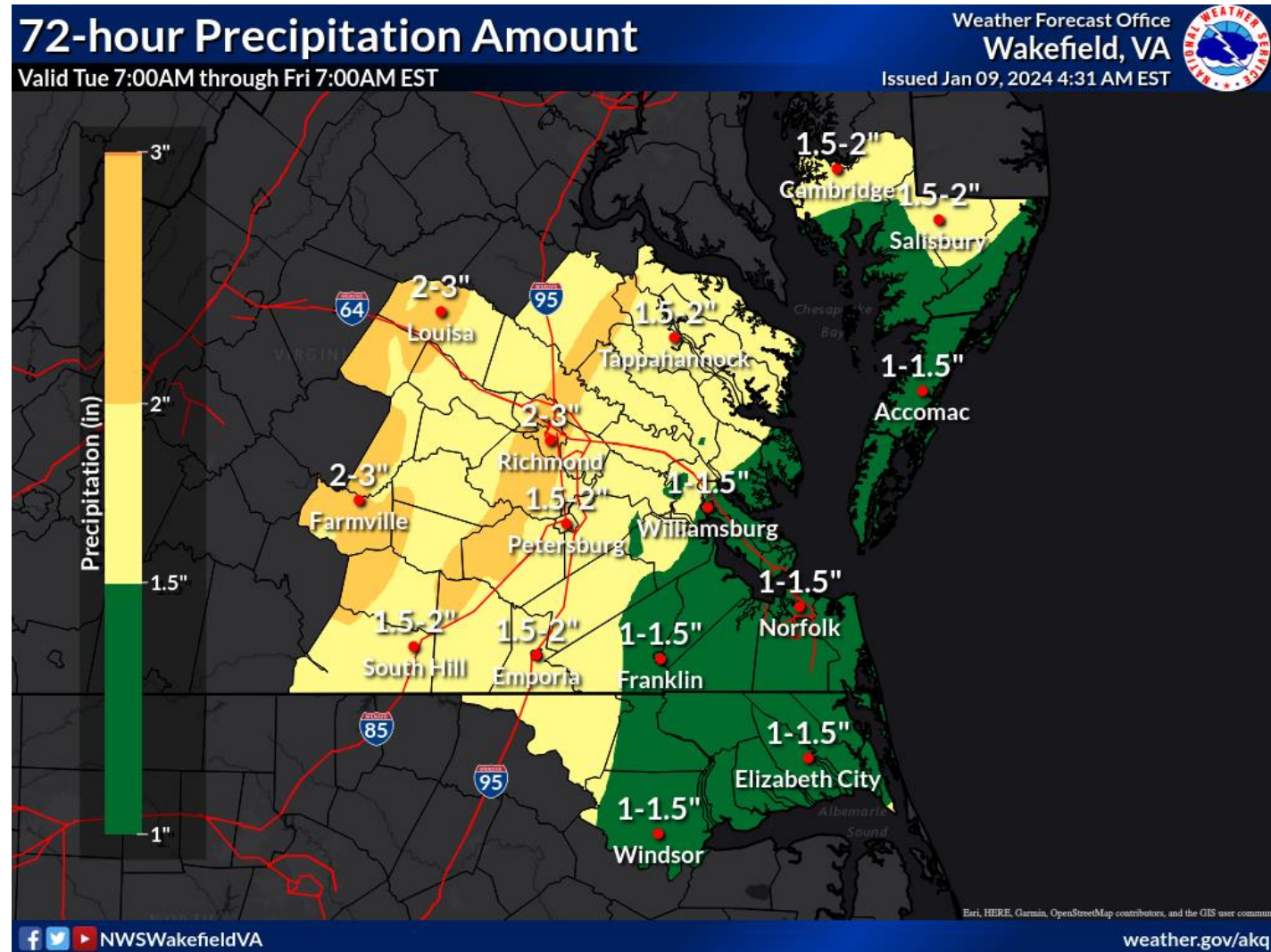
- **Timing:** This evening into the early overnight hours
- **Potential Impacts:** A few brief tornadoes are possible
- **Locations:** Southeast VA and Northeast NC (a potential for significant tornadoes is near the local area, immediately south of the Albemarle Sound)
- **Storm Coverage:** Storms will form into a line with localized impacts within the the line





Expected Rainfall Forecast

January 9, 2024
9:00 AM



- Moderate to heavy rain is expected across the entire area today and this evening
- The greatest amounts are expected across the mountains and Piedmont placing the heaviest rainfall in the headwaters of the James and other main rivers



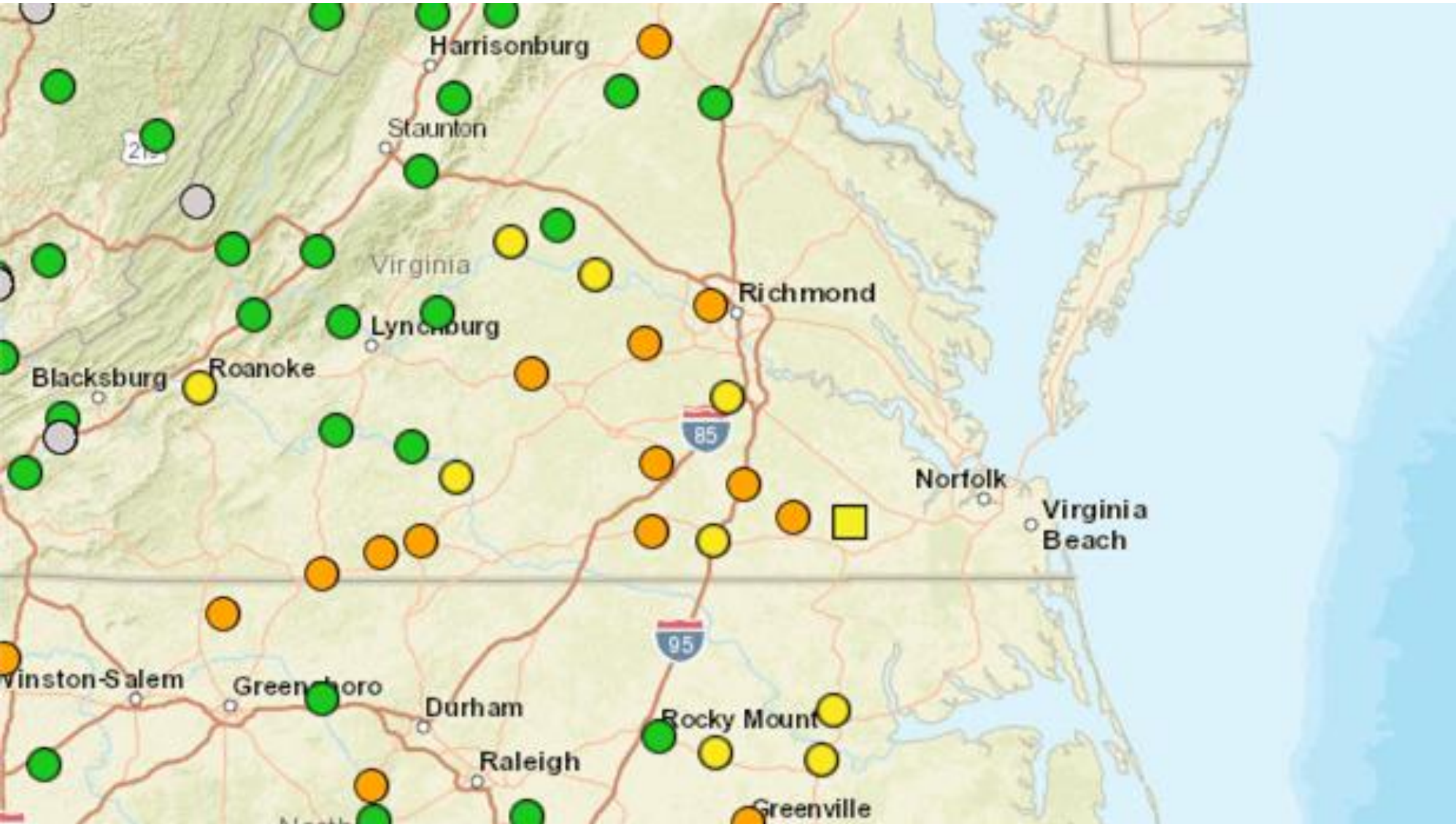
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Wakefield, VA



Potential River Flooding

January 9, 2024
9:00 AM



Minor to Moderate river flooding is possible along mainstem rivers and tributaries this week following heavy rain Tuesday and Tuesday night.

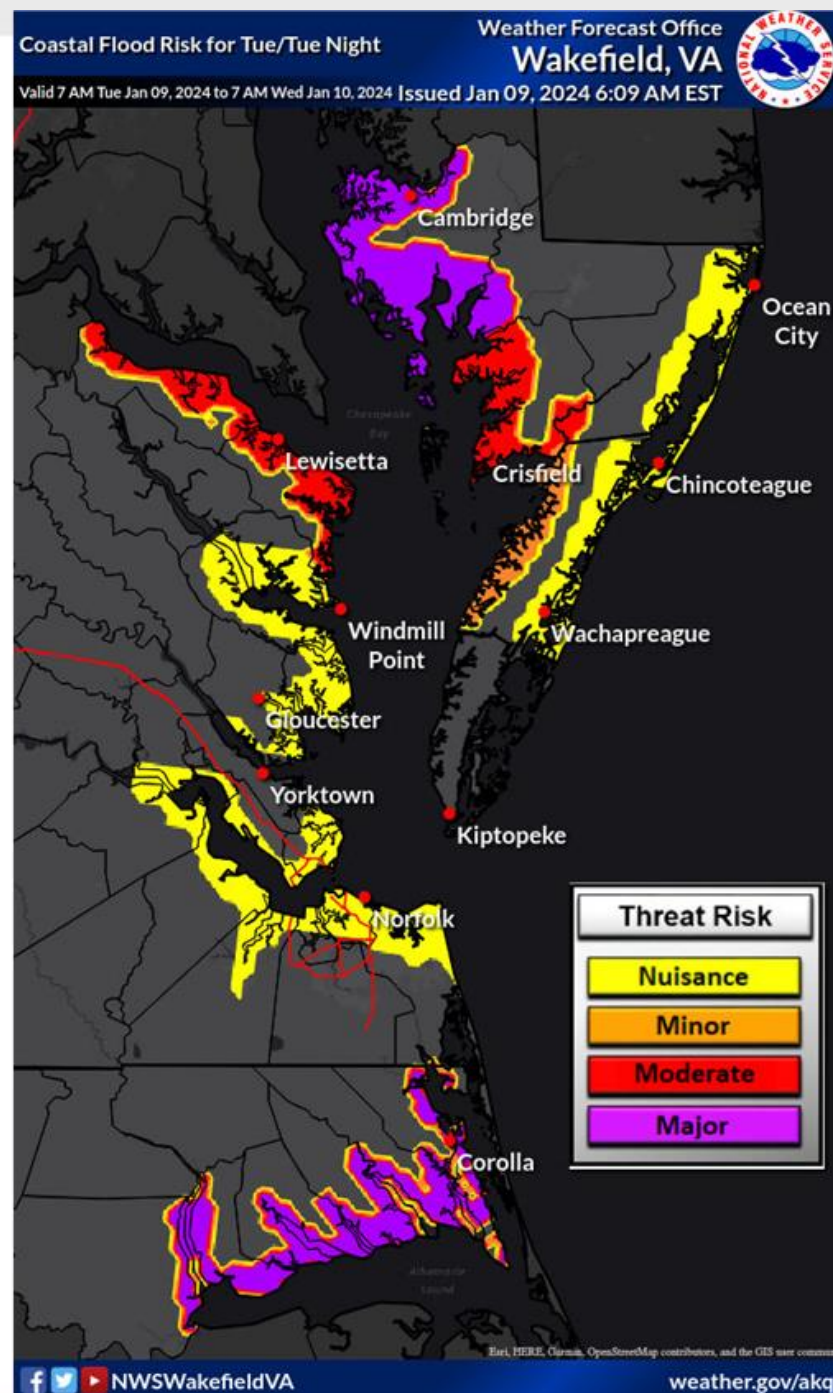
Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		





Tidal Flooding Overview

January 9, 2024
9:00 AM



- Strong southeast winds will push water up the Chesapeake Bay and the northern shore of the Albemarle Sound. Peak winds from the southeast will occur from late this afternoon into early Wednesday morning. Winds decrease and shift from the west early Wednesday morning, but remain strong.
- Major tidal flooding is expected for the bay-side of the lower MD Eastern Shore. Widespread moderate tidal flooding farther south to Windmill Point and Bayford.
- 2 to 3 ft of inundation (or more) is possible. Water will likely close roads and threaten some homes and businesses in some areas in areas of Major to Moderate flooding.

[Coastal Flood Webpage](https://www.weather.gov/erh/coastalflood?wfo=akq)

<https://www.weather.gov/erh/coastalflood?wfo=akq>



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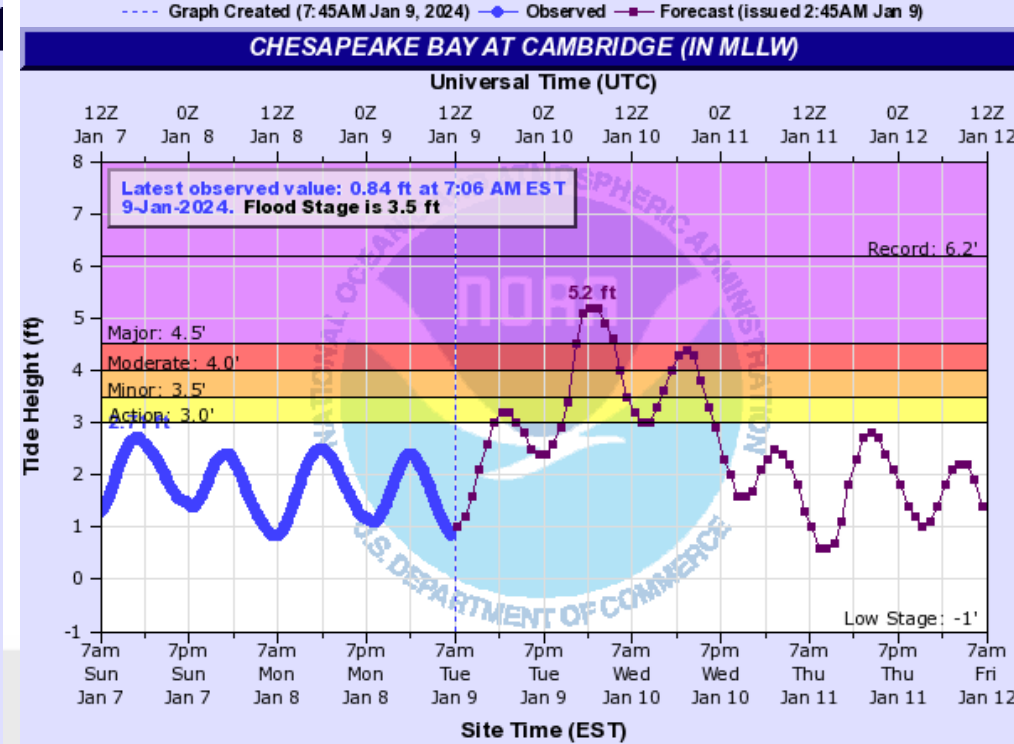
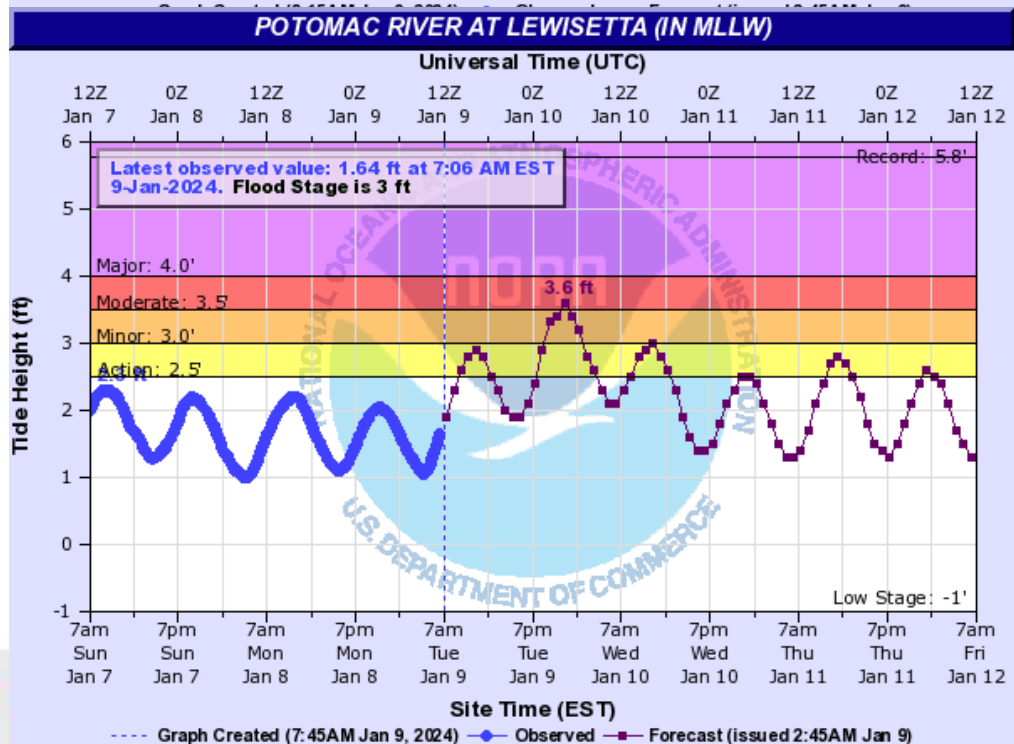
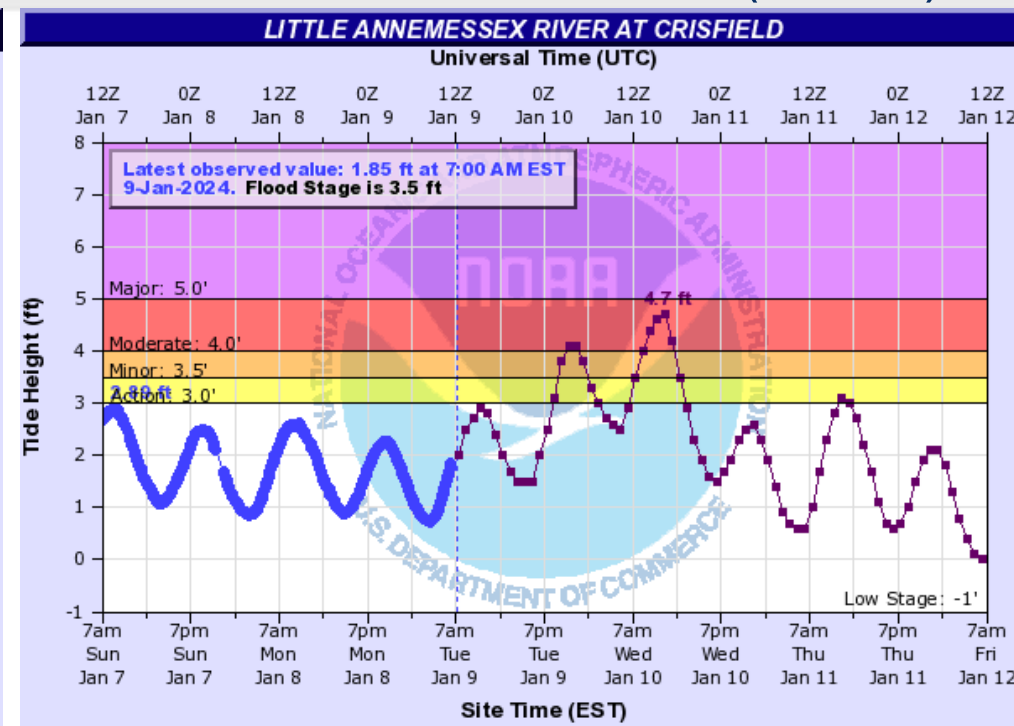
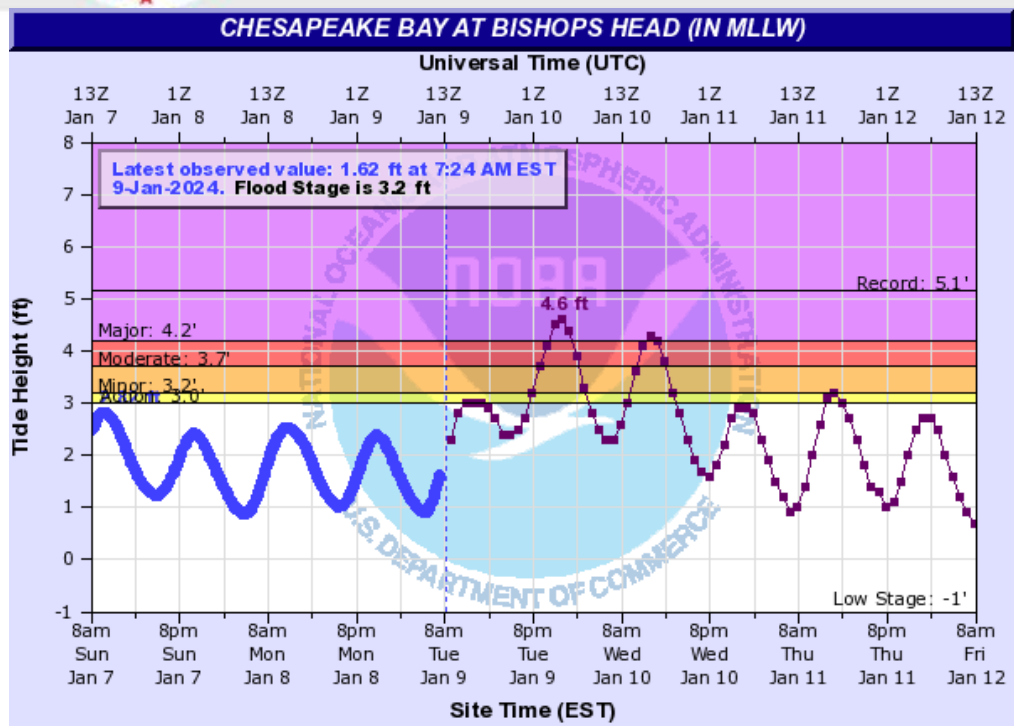
National Weather Service
Wakefield, VA



Tidal Overview - Upper Bay

January 9, 2024
9:00 AM

Note: All forecasts reference Mean Lower Low Water (MLLW).



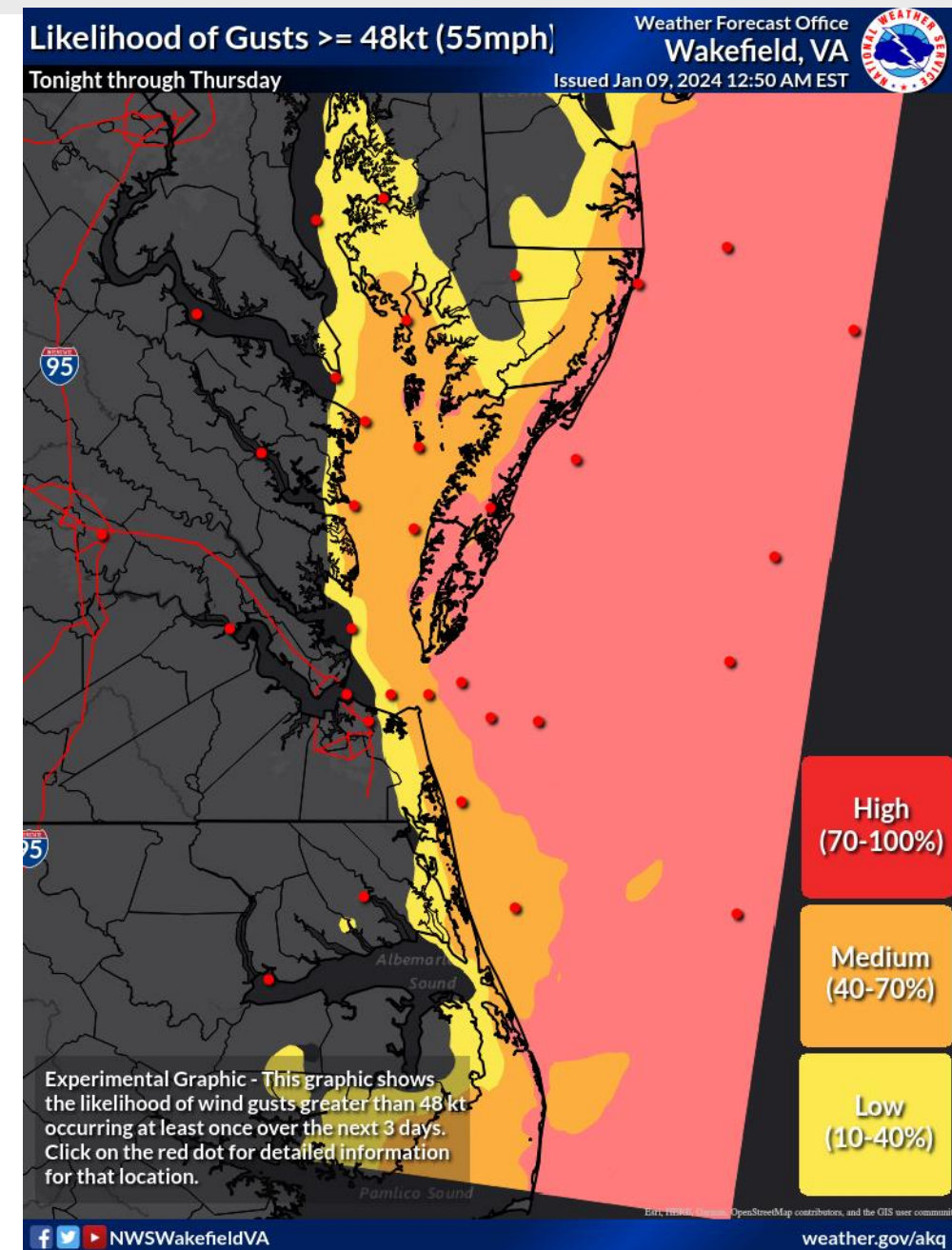
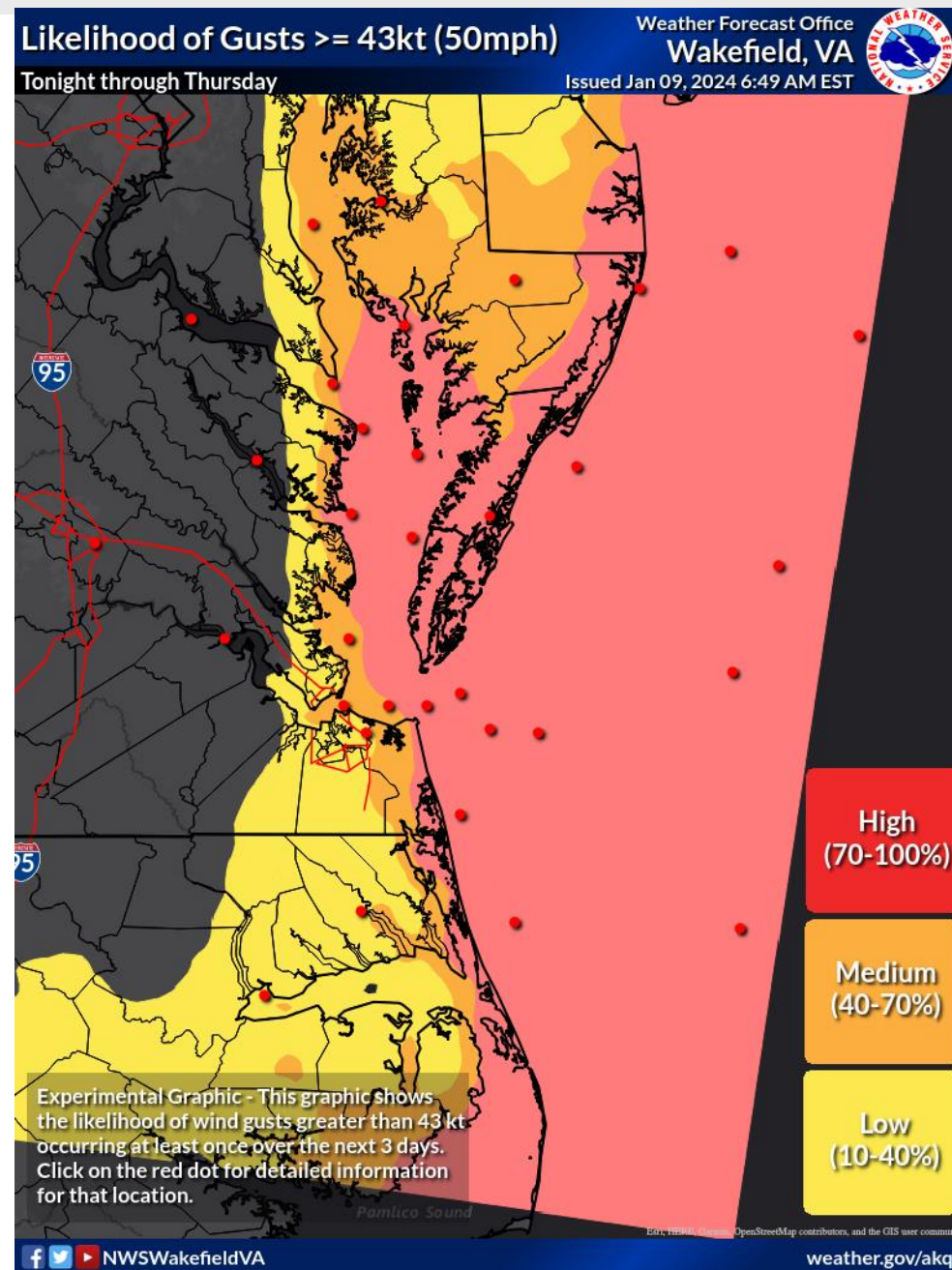
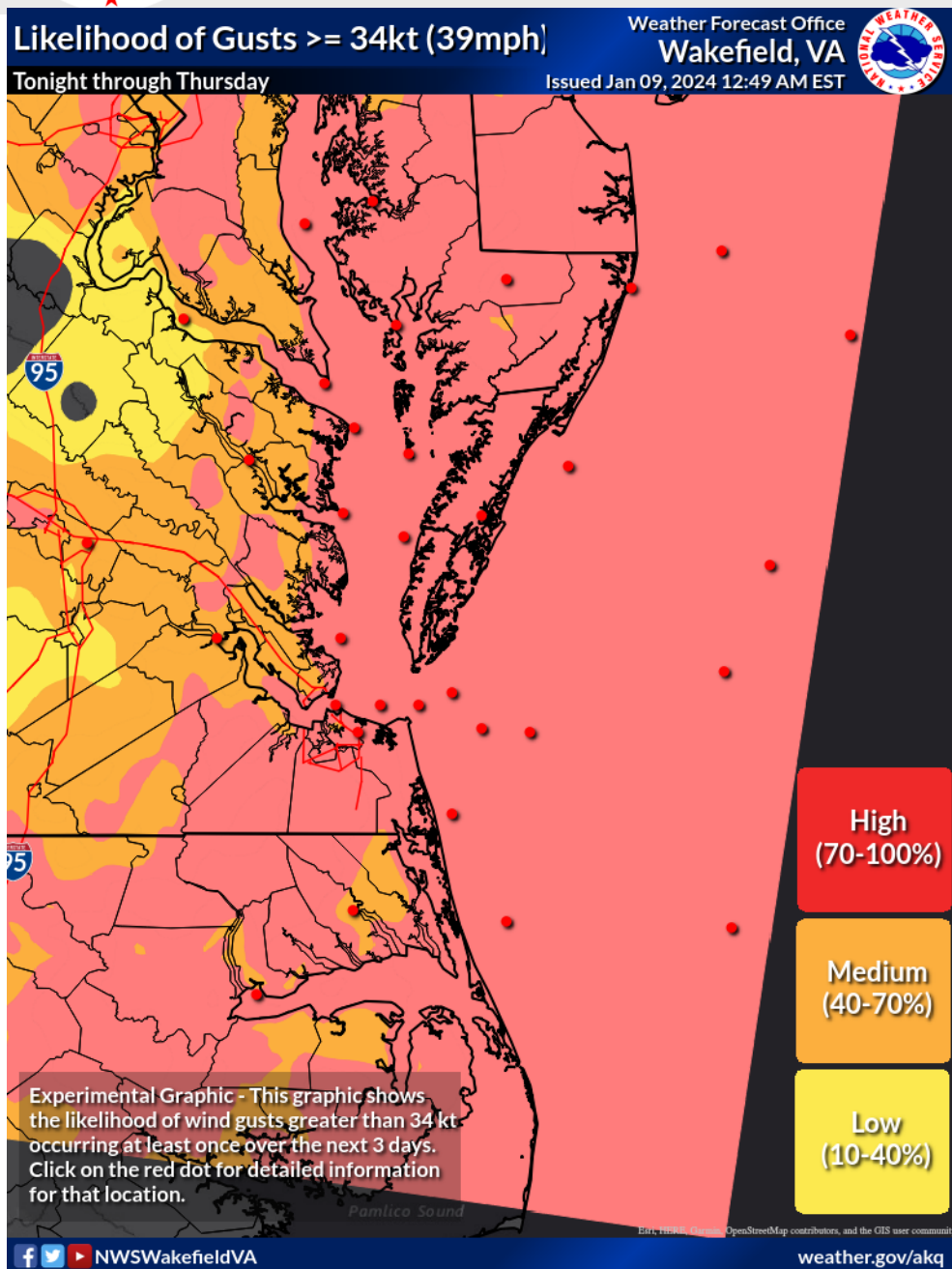
Summary of Tidal Trends

- Moderate to major tidal flooding is likely over portions of the middle and upper Chesapeake Bay and tributaries.
- Timing of peak tides will be Tuesday evening into early Wednesday.
- 2 to 3 ft of inundation (or more) is possible. Water will likely close roads and threaten some homes and businesses in some areas in areas of Major to Moderate flooding.



Marine Wind Probabilities (34kt, 43kt, 48kt)

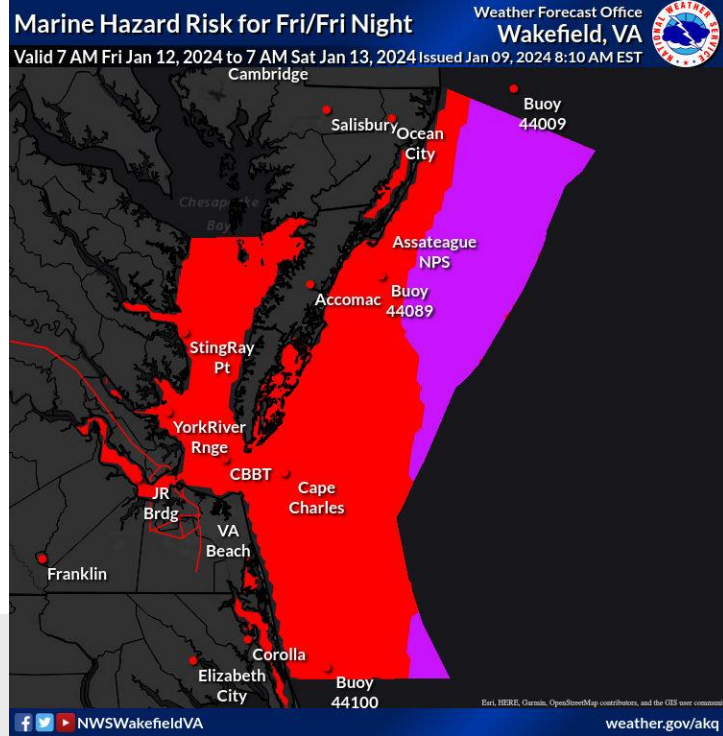
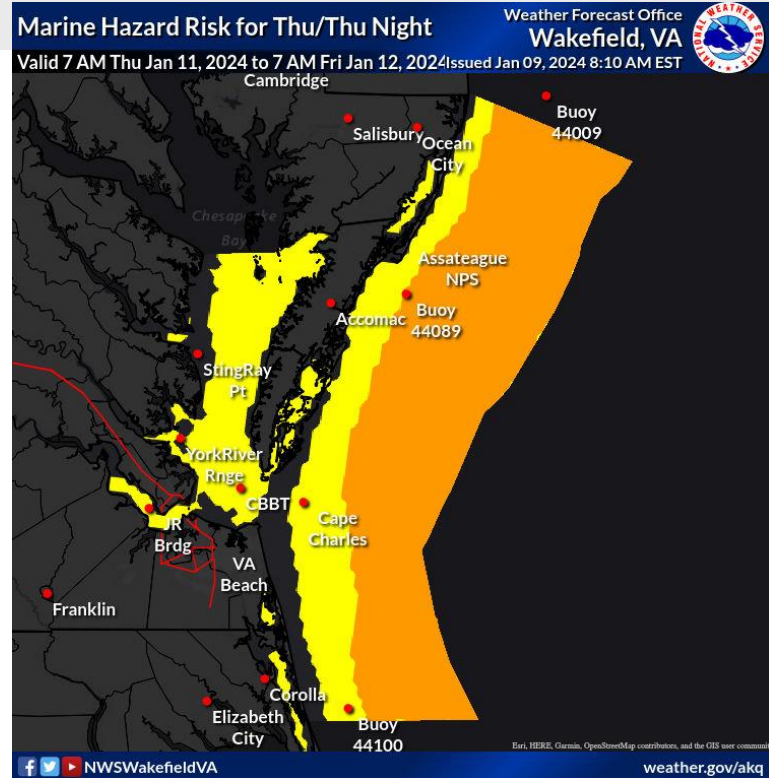
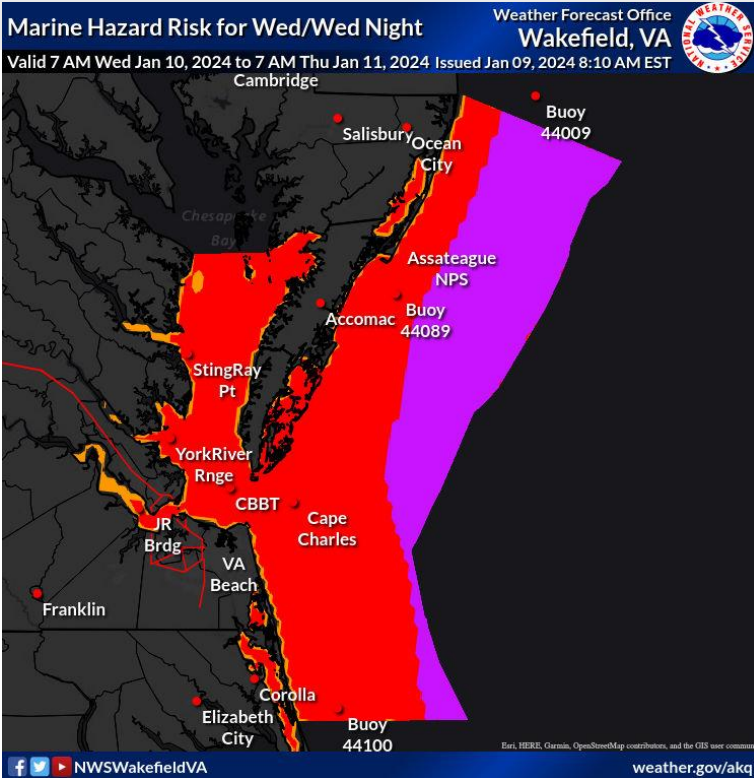
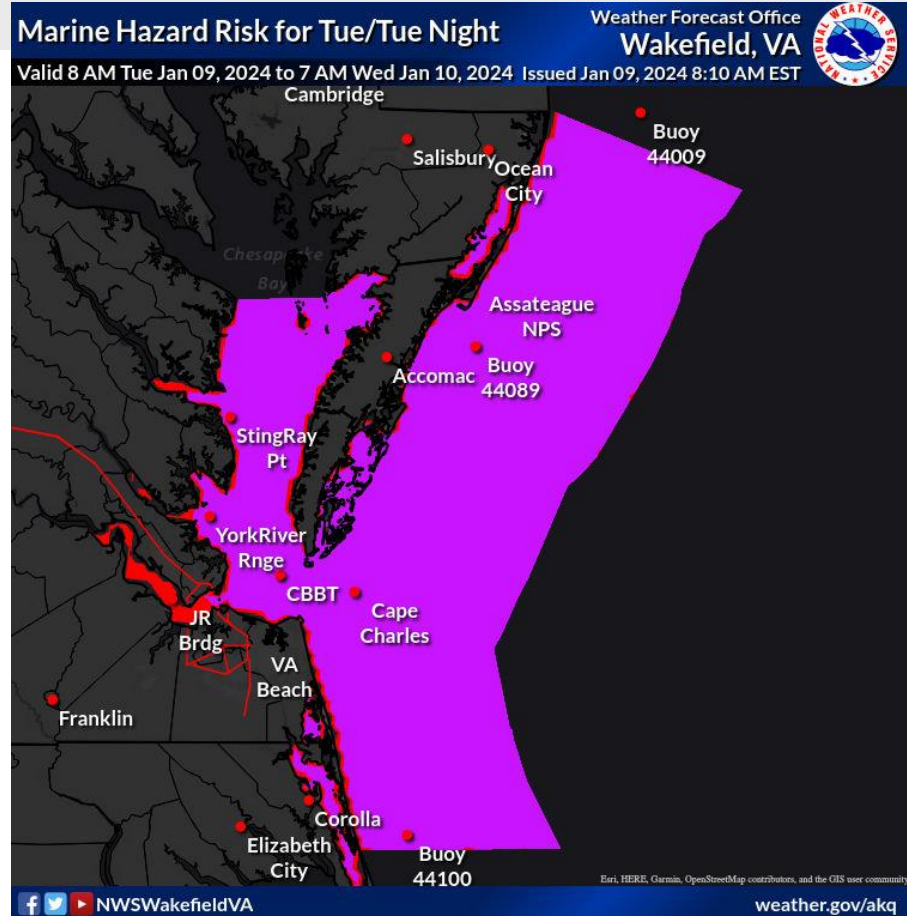
January 9, 2024
9:00 AM





Marine Threat Potential - Next 5 Days

January 9, 2024
9:00 AM



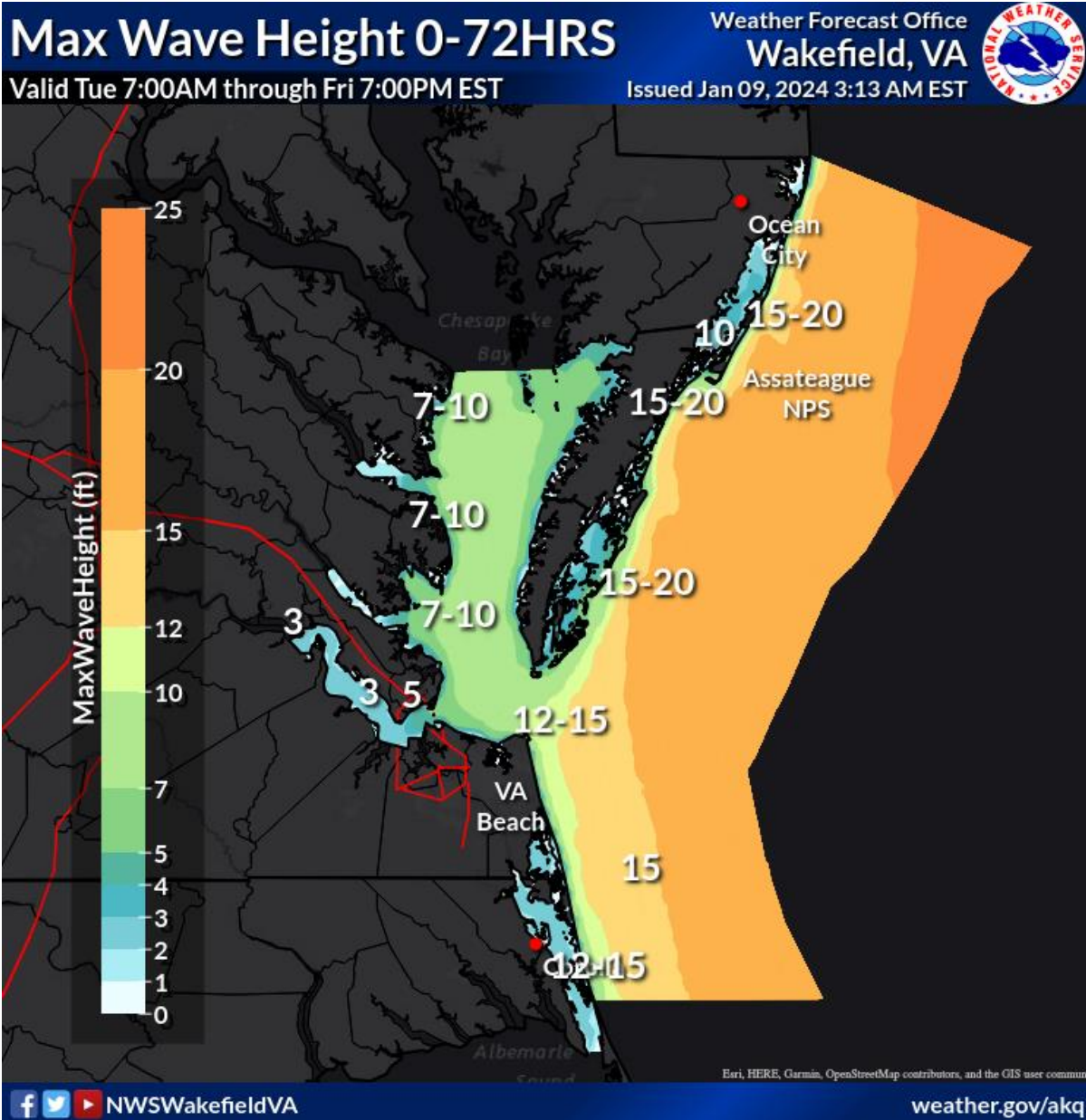
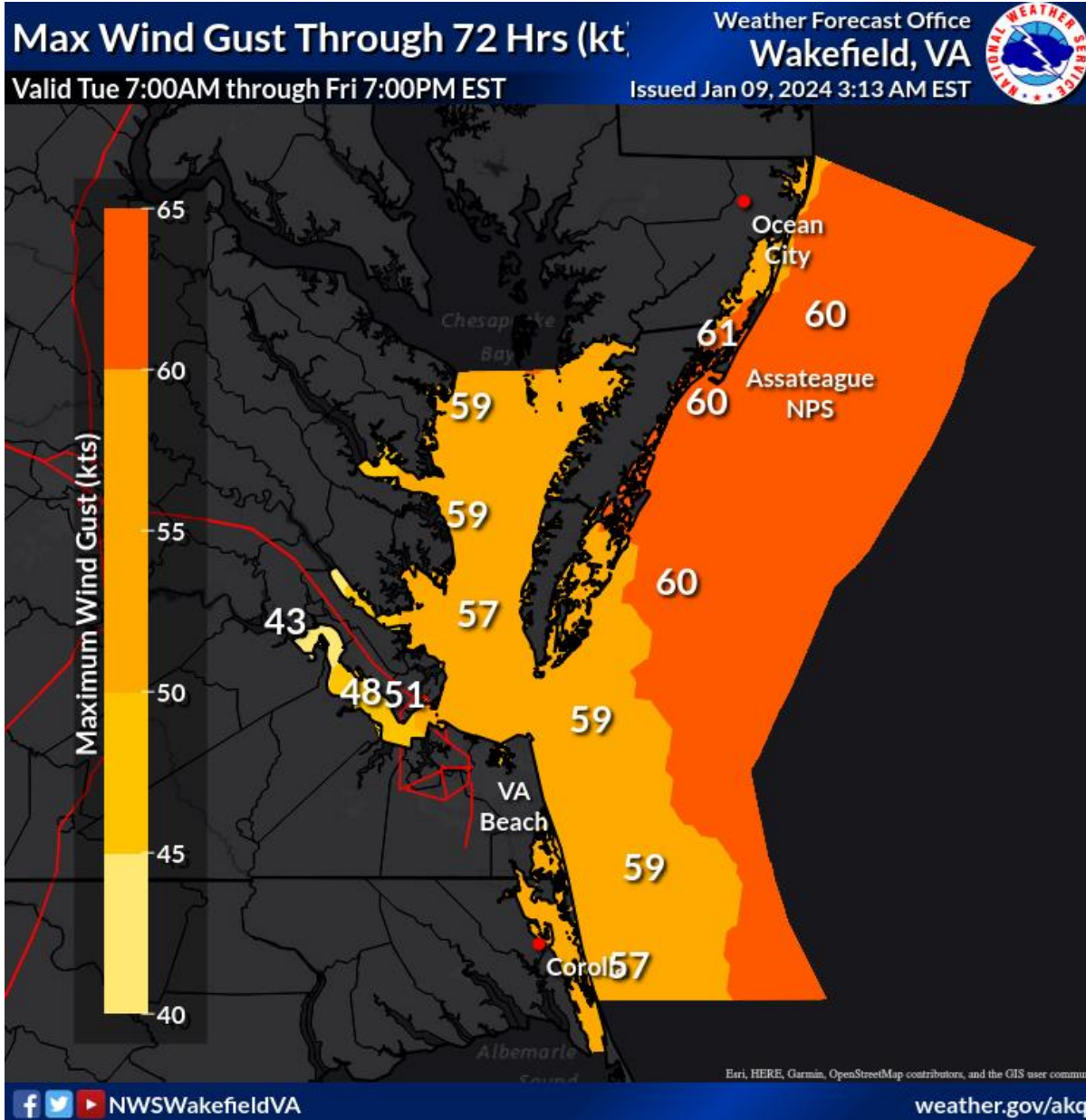
Limited	Wind Gusts \geq 20 knots (15 kt Bay & rivers) and/or Waves \geq 4 feet (2 ft Bay & rivers).
Elevated	Wind Gusts \geq 25 knots (20 kt Bay & rivers) and/or Waves \geq 5 feet (\geq 4 ft Bay & rivers).
Significant	Wind Gusts \geq 34 knots and/or Waves \geq 8 feet (\geq 5 ft Bay & rivers).
Extreme	Wind Gusts \geq 48 knots and/or Waves \geq 12 feet (\geq 8 ft Bay & rivers).





Marine Threat Potential

January 9, 2024
9:00 AM



Key Points:

- Storm Warnings are in effect for the Bay and all coastal waters.
- SE winds increase to 30 kt gust 40 kt by noon today, then SE 40 kt gust 50 kt this evening through midnight.
- Waves on the Bay rapidly build to 7 to 10 ft Tue evening, 12 to 20 ft on the ocean.
- Outlook: Gale conditions persist until noon Wed with a WSW wind

For Port specific forecast information visit: https://www.weather.gov/akq/dss_port



Marine Wind Forecast Summary

January 9, 2024
9:00 AM

Sustained Wind

Maximum Wind Speed Forecast

	1/9 Tue			1/10 Wed			
	6am	12pm	6pm	12am	6am	12pm	6pm
CBBT	26↘	40↗	43↗	32↗	33↗	27↗	19↗
Cape Henry	25↘	38↗	41↗	32↗	32↗	28↗	19↗
Chesapeake Light	25↘	37↗	41↗	33↗	34↗	28↗	22↗
Chincoteague Shoal	22↘	34↗	42↗	35↗	31↗	29↗	21↗
Duck, NC	24↘	35↗	38↗	31↗	33↗	25↗	17↗
Fenwick Shoal	19↘	30↗	41↗	38↗	27↗	27↗	18↗
HRBT	20↘	36↗	37↗	30↗	27↗	23↗	15↗
JRB	20↘	31↗	32↗	28↗	25↗	22↗	14↗
New Point Comfort	24↘	38↗	41↗	28↗	27↗	24↗	16↗
Parramore Banks	23↘	35↗	42↗	35↗	32↗	29↗	20↗
Rappahannock Light	23↘	38↗	41↗	30↗	29↗	26↗	18↗
Tangier	23↘	39↗	43↗	29↗	29↗	25↗	19↗
Thimble Shoal	26↘	40↗	42↗	29↗	31↗	26↗	17↗

*Table values in kt
**Created: 8 am EST Tue 1/9/2024
***Values are maximums over the period beginning at the time shown.

Wind Gusts

Maximum Wind Gust Forecast

	1/9 Tue			1/10 Wed			
	6am	12pm	6pm	12am	6am	12pm	6pm
CBBT	33↘	50↗	53↗	39↗	38↗	34↗	24↗
Cape Henry	31↘	49↗	53↗	40↗	40↗	35↗	24↗
Chesapeake Light	31↘	48↗	56↗	44↗	43↗	35↗	27↗
Chincoteague Shoal	28↘	45↗	56↗	48↗	39↗	37↗	27↗
Duck, NC	30↘	47↗	53↗	41↗	42↗	32↗	22↗
Fenwick Shoal	27↘	41↗	55↗	51↗	35↗	36↗	26↗
HRBT	26↘	44↗	48↗	37↗	34↗	31↗	20↗
JRB	26↘	43↗	45↗	35↗	31↗	30↗	18↗
New Point Comfort	31↘	49↗	52↗	37↗	33↗	32↗	21↗
Parramore Banks	29↘	46↗	56↗	45↗	40↗	36↗	26↗
Rappahannock Light	29↘	48↗	53↗	38↗	34↗	32↗	23↗
Tangier	29↘	49↗	55↗	38↗	34↗	32↗	24↗
Thimble Shoal	33↘	49↗	52↗	38↗	36↗	33↗	22↗

*Table values in kt
**Created: 8 am EST Tue 1/9/2024
***Values are maximums over the period beginning at the time shown.





Marine Wave Forecast Summary

January 9, 2024
9:00 AM

Wave Height Forecast

	1/9 Tue			1/10 Wed			
	6am	12pm	6pm	12am	6am	12pm	
CBBT	4.0	8.0	9.0	7.0	6.0	6.0	4.0
Cape Henry	6.0	10.0	12.0	10.0	7.0	6.0	5.0
Chesapeake Light	6.0	12.0	16.0	14.0	10.0	9.0	7.0
Chincoteague Shoal	5.0	10.0	15.0	14.0	12.0	9.0	8.0
Duck, NC	6.0	10.0	12.0	10.0	7.0	6.0	5.0
Fenwick Shoal	4.0	10.0	16.0	16.0	12.0	10.0	8.0
HRBT	3.0	5.0	5.0	4.0	4.0	3.0	2.0
JRB	2.0	3.0	3.0	2.0	2.0	2.0	2.0
New Point Comfort	4.0	7.0	8.0	5.0	4.0	4.0	2.0
Parramore Banks	6.0	11.0	14.0	13.0	10.0	8.0	7.0
Rappahannock Light	3.0	7.0	8.0	7.0	5.0	5.0	3.0
Tangier	3.0	6.0	7.0	6.0	5.0	4.0	3.0
Thimble Shoal	4.0	7.0	8.0	7.0	5.0	5.0	3.0

*Table values in feet

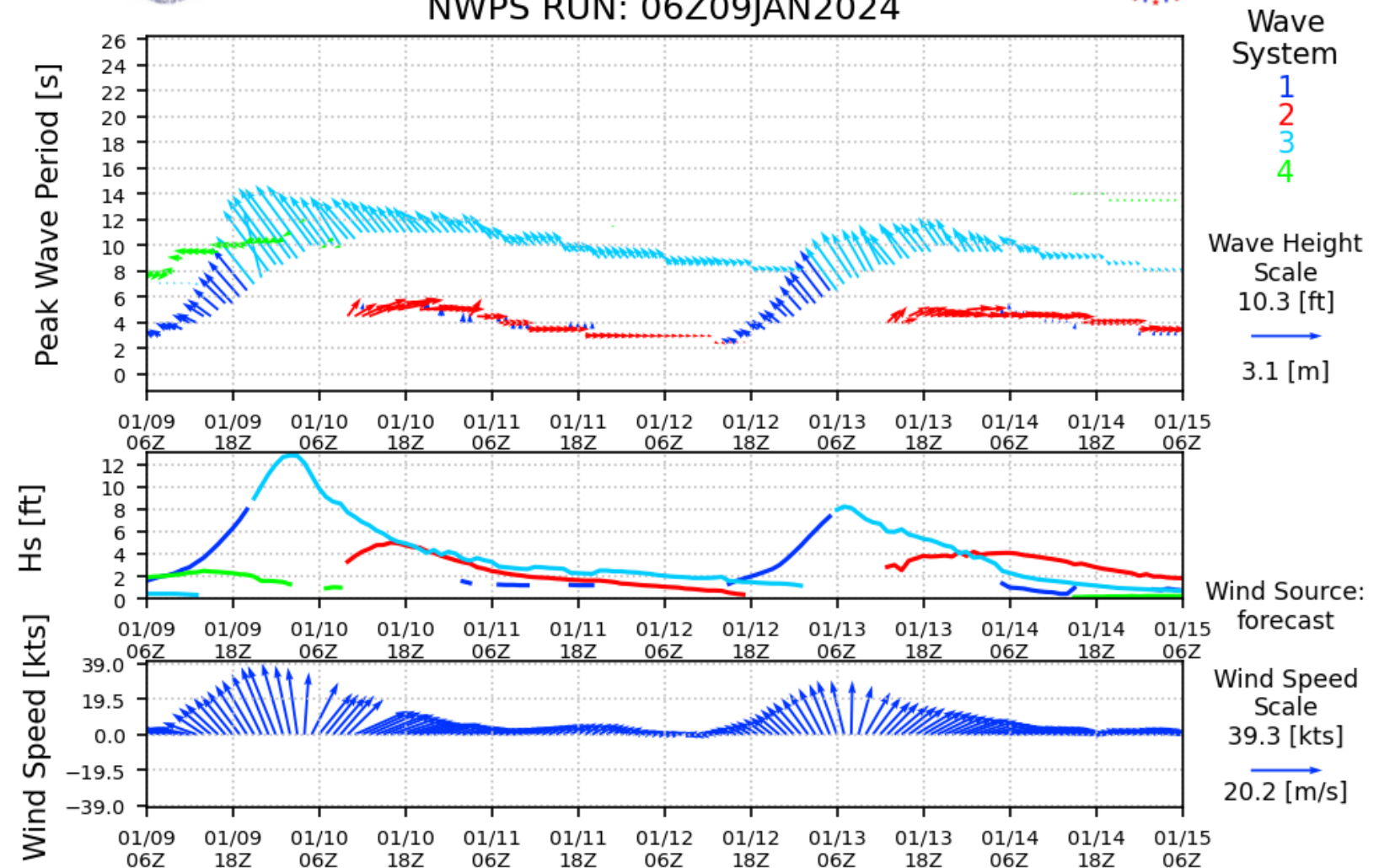
**Created: 8 am EST Tue 1/9/2024

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

Cape Henry Wave



Gerling-Hanson Plot for 44096 (284.19 °, 37.023 °)
NWPS RUN: 06Z09JAN2024



National Oceanic and
Atmospheric Administration

U.S. Department of Commerce

National Weather Service
Wakefield, VA



Summary of Greatest Impacts

January 9, 2024
9:00 AM



High Wind: Highest threat along the immediate coast

None

Limited

Elevated

Significant

Extreme



Tornadoes

None

Limited

Elevated

Significant

Extreme



Heavy Rain / Flooding

None

Limited

Elevated

Significant

Extreme



Coastal Flooding: Highest threat MD Eastern Shore and along the Albemarle Sound

None

Limited

Elevated

Significant

Extreme



Marine

None

Limited

Elevated

Significant

Extreme





Key Messages

January 9, 2024
9:00 AM

- Strong low pressure and a cold front will track from the Appalachian Mountains today and move off the Mid-Atlantic coast tonight.
- Moderate to heavy rain and strong winds are expected across the area this morning through Wednesday morning.
- Rain will begin from southwest to northeast this morning, exiting the region late tonight. The heaviest rain will occur between 5 pm and midnight.
- Winds increase through the day today and are expected to peak this evening into tonight.
- There is a risk for strong to severe storms across northeast North Carolina and Southeast Virginia this evening. Strong, damaging wind gusts are the main threat, but there is also a potential for tornadoes.
- There will be the potential for localized power outages from wind and flooding from rainfall in addition to tidal flooding.





Contact and Next Briefing Information

January 9, 2024
9:00 AM

For NWS Wakefield, Virginia



Briefing Webpage

→ [NWS Wakefield Briefing](#)



Next Briefing

- By 5 PM Tuesday, January 9, 2024
- Method: Email and Online



Disclaimer

- Information contained in this briefing is time-sensitive
- See www.weather.gov/akq for the latest information



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