



Heavy Rain/Storm Briefing

January 8, 2024
9:30 AM

Prepared by National Weather Service Wakefield, VA

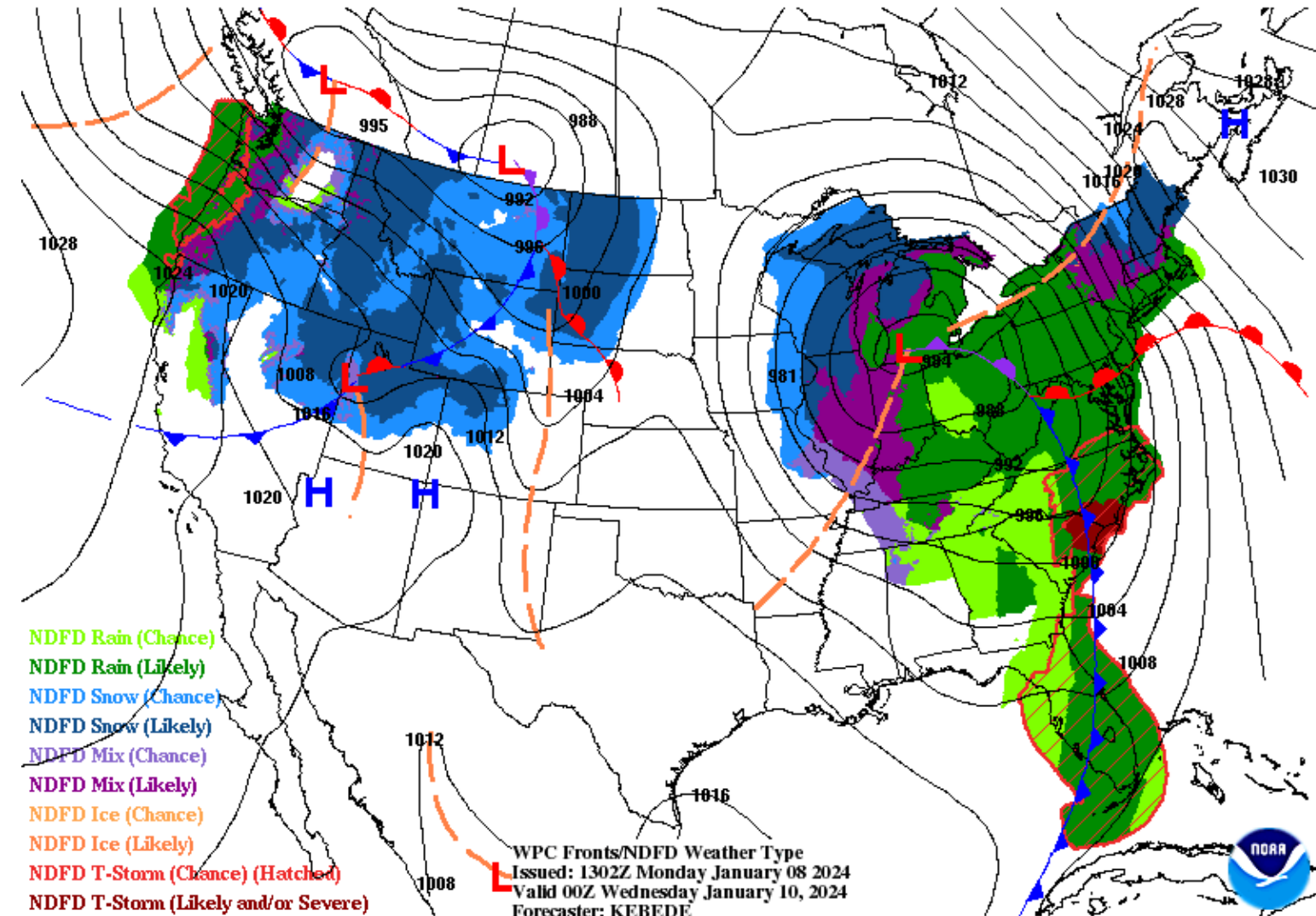
Decision Support Briefing #1

→ As of 9:30 AM EST
Monday, January 8, 2023

NEW

Important Updates

- Storm Watches are in effect for the ocean, Chesapeake Bay, lower James River, and Currituck Sound
- Coastal Flood Watches are 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 Watches 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



Disclaimer: Information may become outdated after briefing time.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 8, 2024
9:30 AM






- Strong low pressure and a cold front track from the Appalachians Tuesday to off the Mid-Atlantic coast Tuesday night.
- This will bring moderate to heavy rain and strong winds to the region Tuesday morning through Wednesday morning.
- Rain will begin from west to east Tuesday morning, exiting the region late Tuesday night. Winds increase through the day Tuesday and are expected to peak Tuesday evening into Tuesday night.
- There is a risk for strong to severe storms across northeast North Carolina and Southeast Virginia Tuesday 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.
- **Reminder: We will have a live recorded briefing at 11 AM this morning**





Summary of Greatest Impacts

January 8, 2024
9:30 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 potential for moderate to major tidal flooding	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	There is the potential for very dangerous to extreme conditions	All waters coastal and nearshore waters	Tuesday afternoon through Wednesday morning



Hazard Overview

January 8, 2024
9:30 AM

Marine Headlines

Weather Forecast Office
Wakefield, VA

Issued Jan 08, 2024 8:25 AM EST



f t NWSWakefieldVA

weather.gov/akq

- A Storm Watch is in effect for most of the marine area Tuesday afternoon into Tuesday night
- A Gale Watch is in effect for the Rappahannock, York, and upper James River Tuesday afternoon into Tuesday night
- Hazardous marine conditions will continue into Wednesday
- See www.weather.gov/akq for the latest information



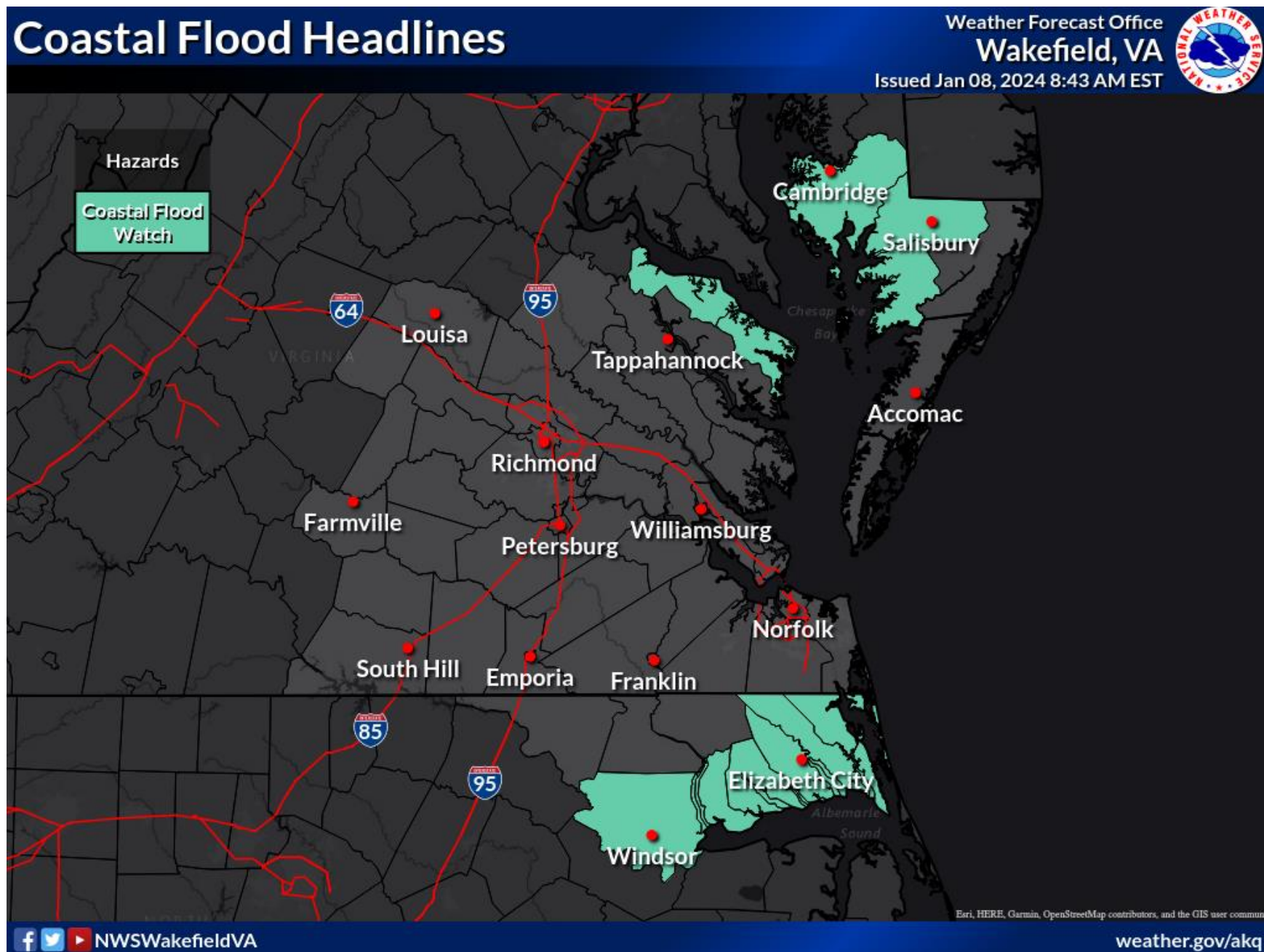
National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Wakefield, VA



Hazard Overview

January 8, 2024
9:30 AM



- Coastal Flood Watches 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
- Moderate to major to major tidal flooding is possible Tuesday night into Wednesday morning
- See www.weather.gov/akq for the latest information





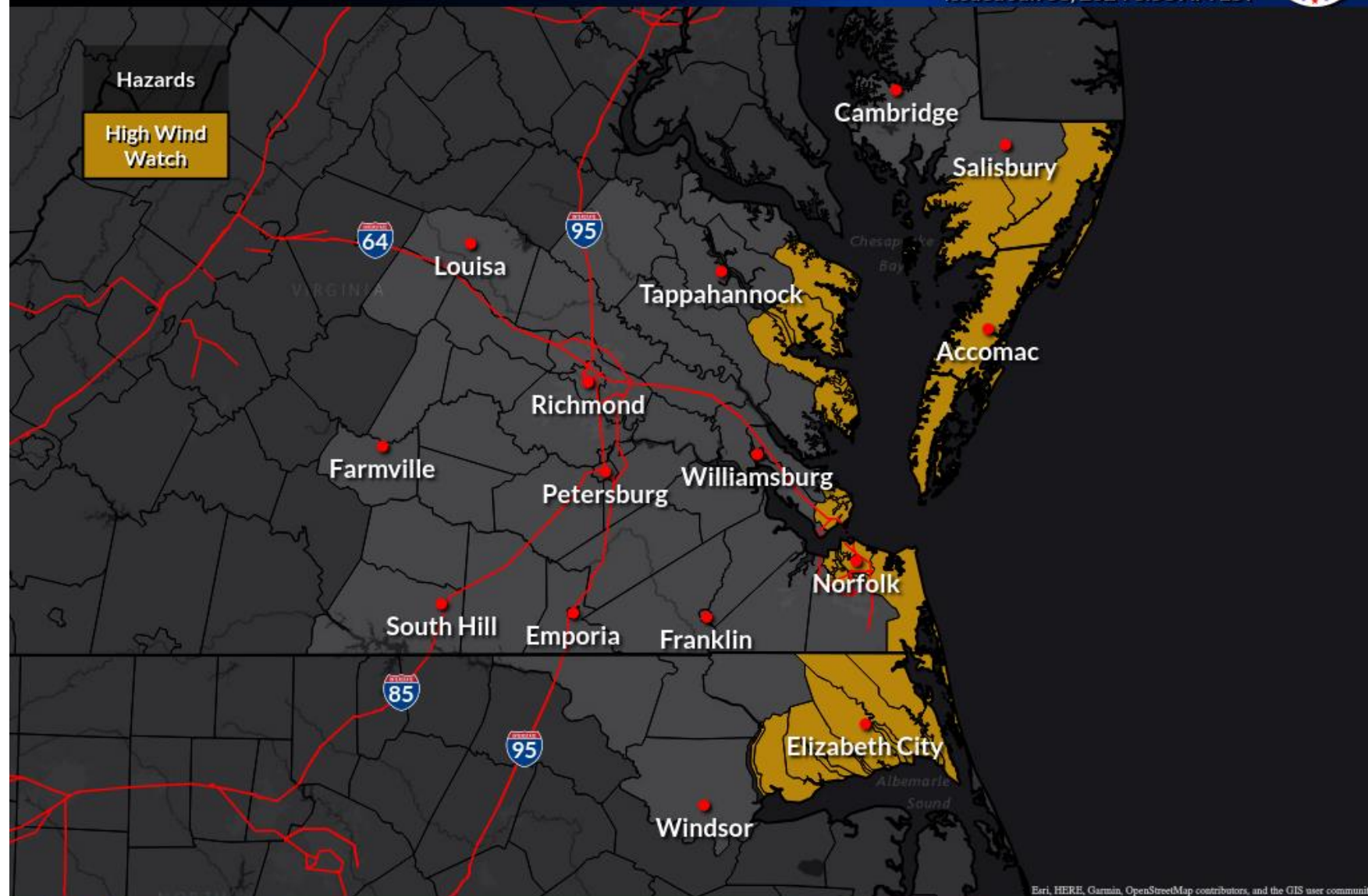
Hazard Overview

January 8, 2024
9:30 AM

High Wind Headlines

Weather Forecast Office
Wakefield, VA

Issued Jan 08, 2024 8:53 AM EST



f t NWSWakefieldVA

weather.gov/akq

- High Wind Watches are in effect toward and along the coastlines Tuesday afternoon into Tuesday night
- Monitor the latest forecasts for potential expansion of headlines later today
- See www.weather.gov/akq for the latest information



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

National Weather Service
Wakefield, VA



High Wind Potential

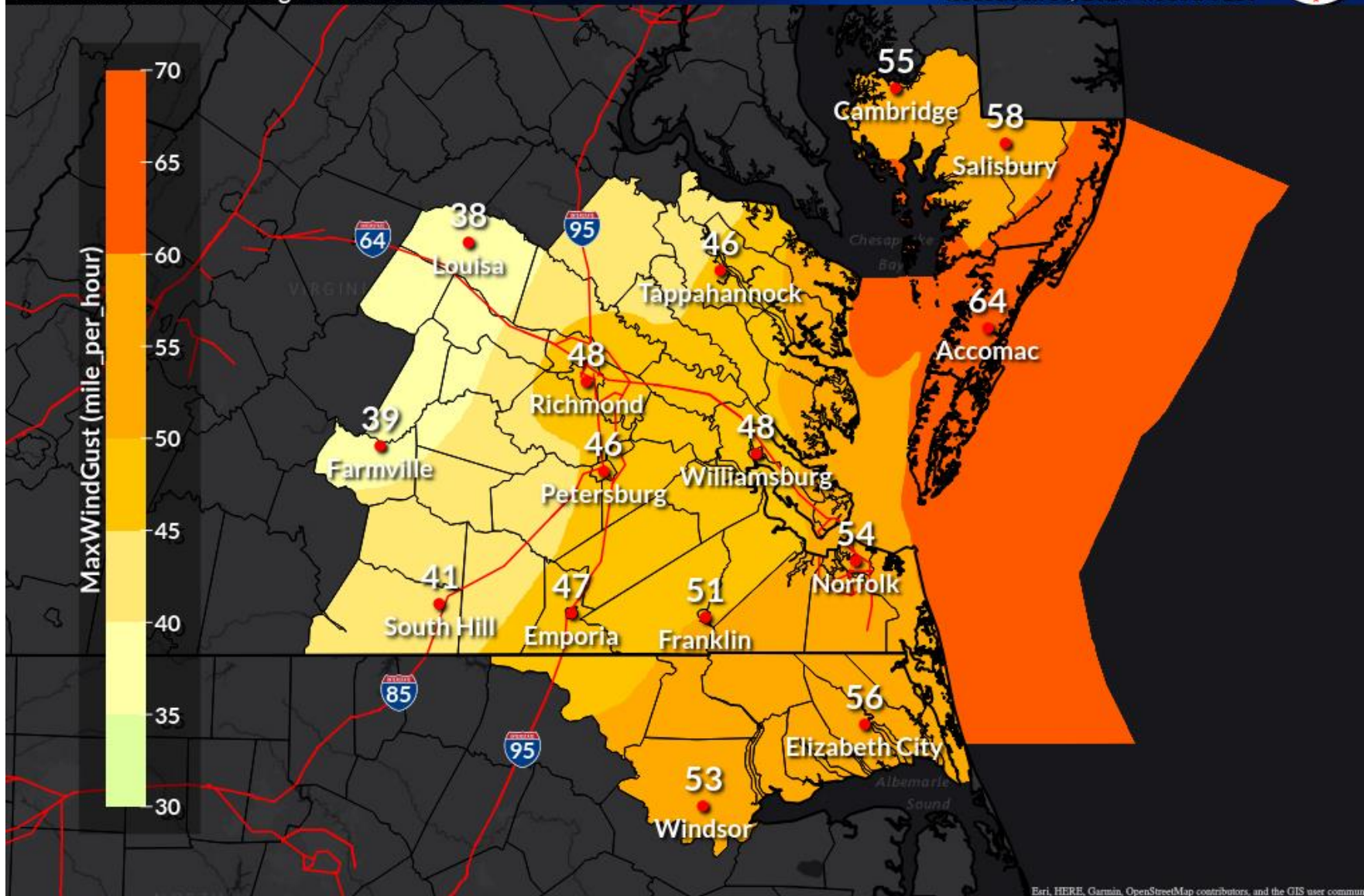
January 8, 2024
9:30 AM

Max Wind Gust Through 72 Hrs

Valid Mon 7:00AM through Thu 7:00PM EST

Weather Forecast Office
Wakefield, VA

Issued Jan 08, 2024 4:30 AM EST



- A strong southeast then south wind is expected Tuesday afternoon into Tuesday night
- The wind will be highest from the I-95 corridor to the coast, and strongest (potentially damaging) toward the coast
- Localized enhancement to the wind due to storms is possible across southeast VA and northeast NC

f t NWSWakefieldVA

weather.gov/akq



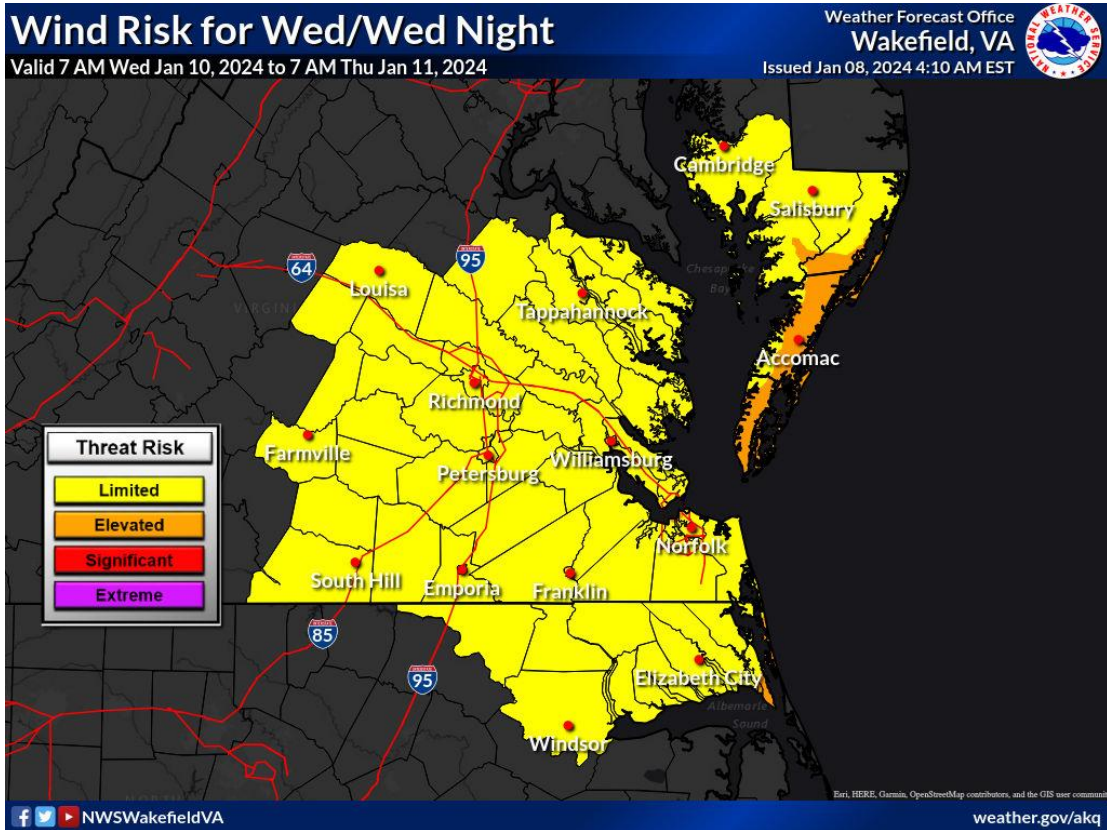
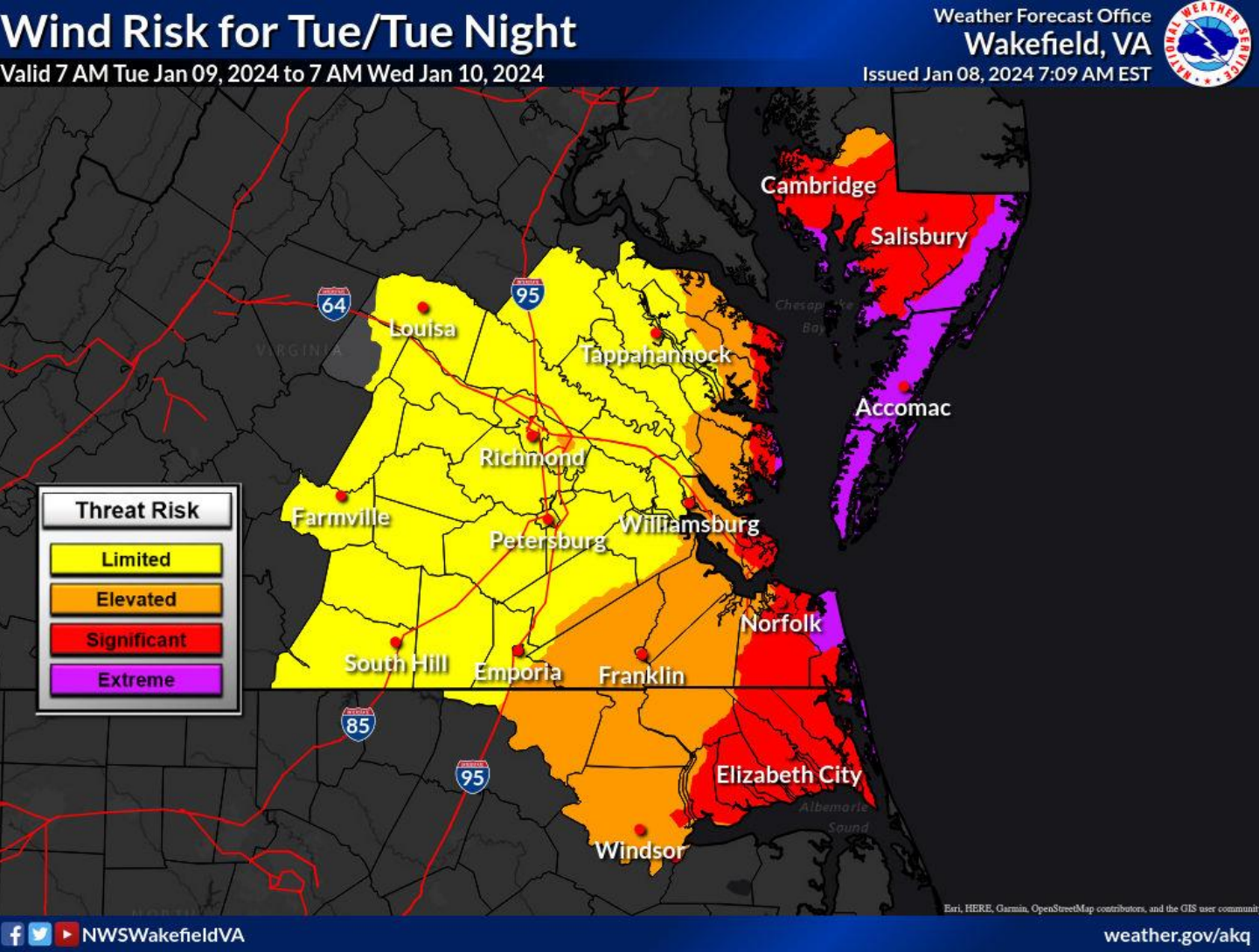
National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Wakefield, VA



High Wind Potential

January 8, 2024
9:30 AM

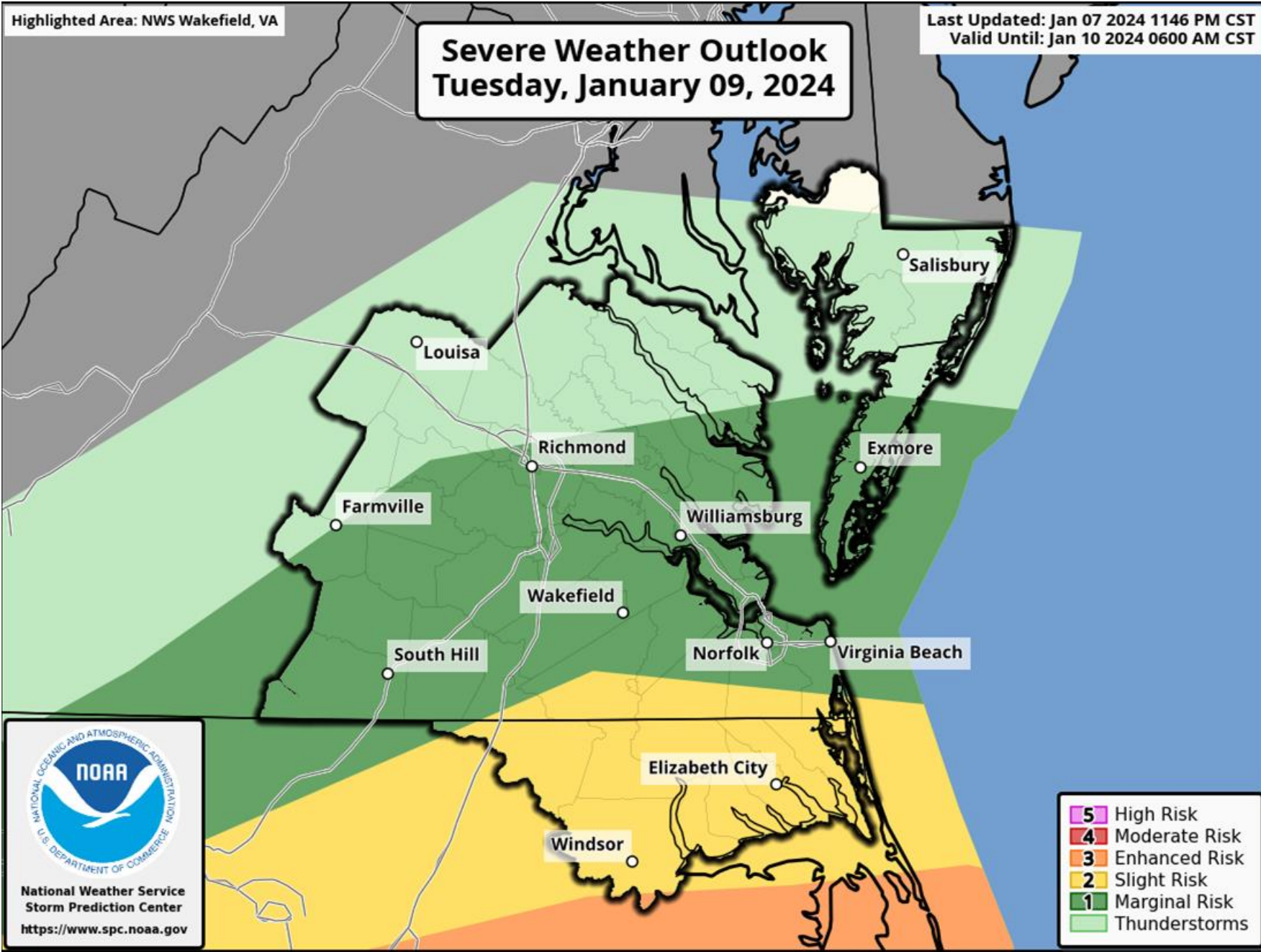


Limited	Breezy conditions with 30 to 40 mph wind gusts could blow around unsecured items and result in hazardous driving conditions for high-profile vehicles.
Elevated	Windy conditions with 40 to 50 mph wind gusts could damage light outdoor items, cause isolated power outages and result in hazardous 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.



Tomorrow - Severe Weather Outlook

January 8, 2024
9:30 AM



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

5	High Risk
4	Moderate Risk
3	Enhanced Risk
2	Slight Risk
1	Marginal Risk
	Thunderstorms

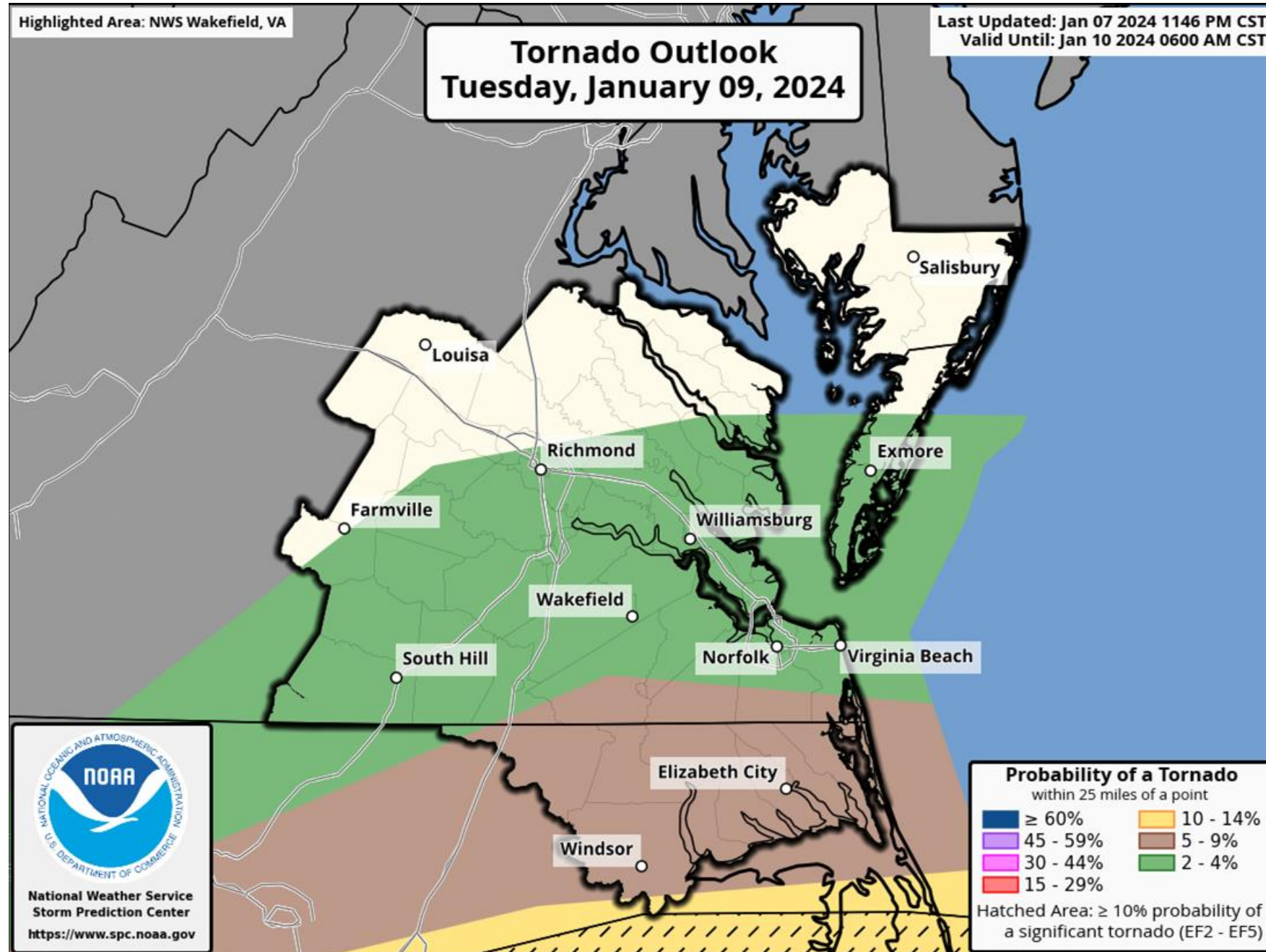
<u>TSTORM</u>	<u>MARGINAL</u>	<u>SLIGHT</u>	<u>ENHANCED</u>	<u>MODERATE</u>	<u>HIGH</u>
No severe storms expected	Isolated severe possible	Scattered severe possible	Numerous severe possible	Widespread severe likely	Widespread severe expected





Tomorrow - Tornado Threat

January 8, 2024
9:30 AM



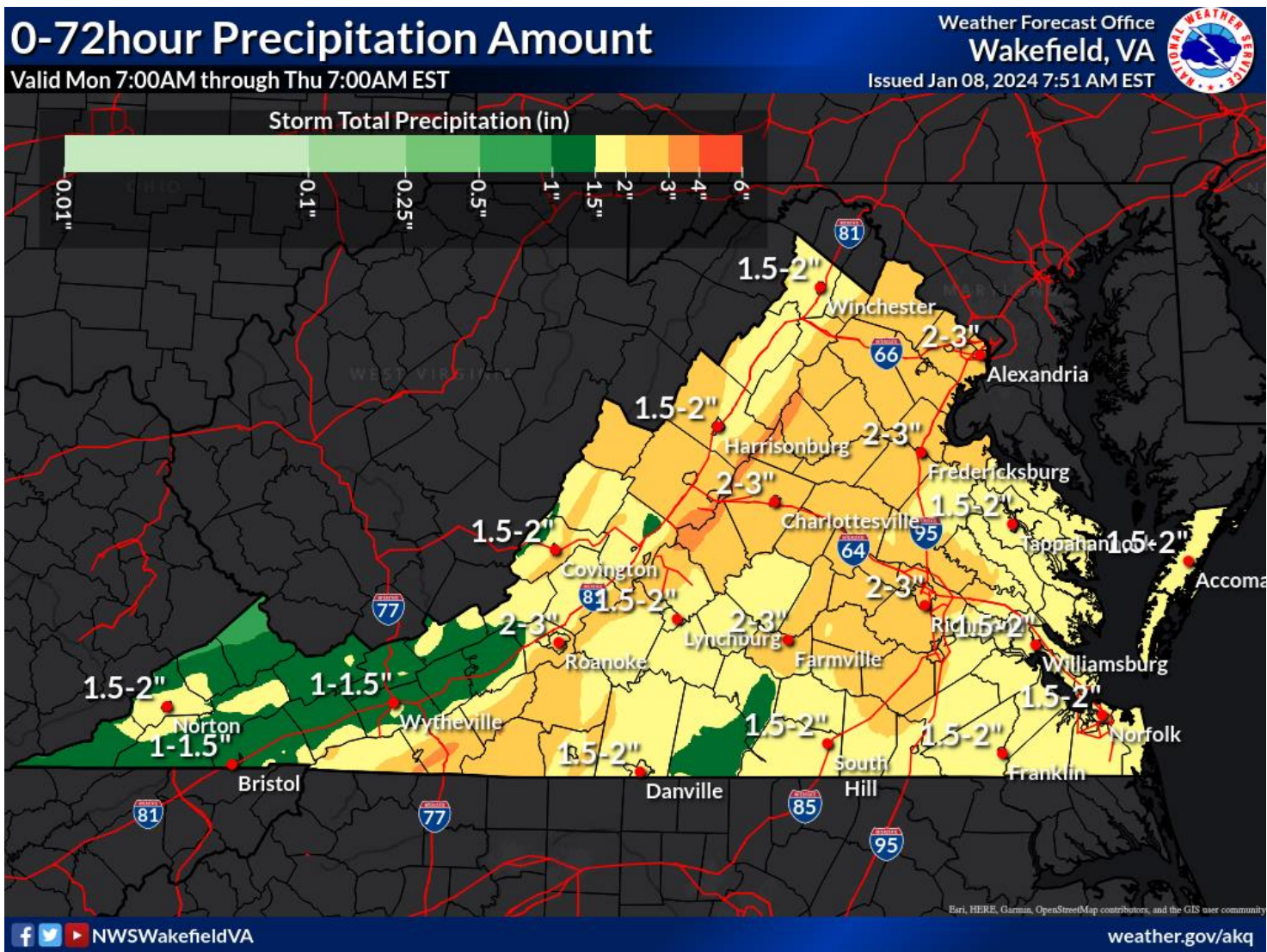
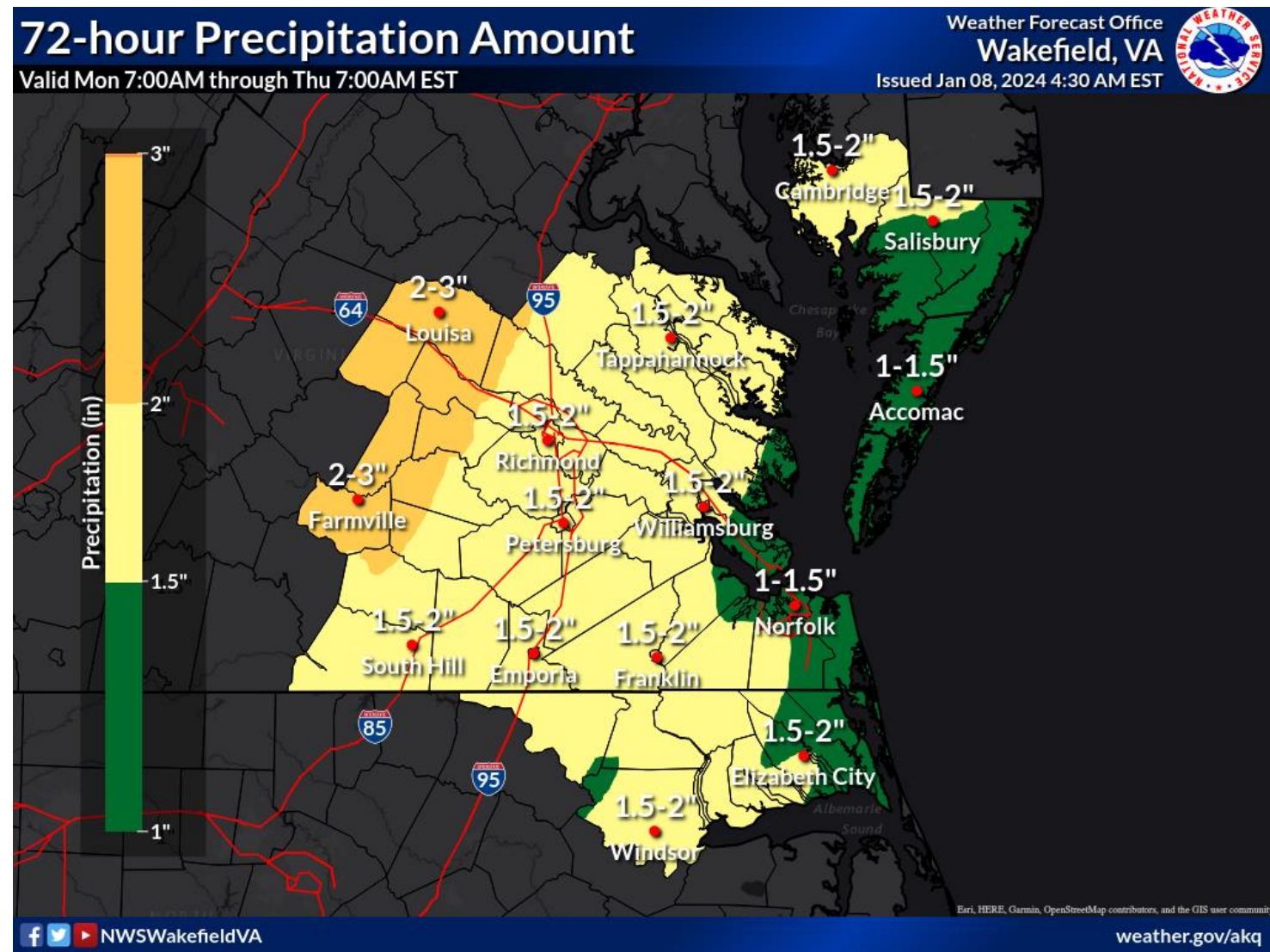
- **Timing:** Tuesday evening into the early overnight hours
- **Potential Impacts:** A few brief tornadoes are possible
- **Locations:** Southeast VA and Northeast NC (a potential for significant tornadoes is near the local area, immediately south of the Albemarle Sound)
- **Storm Coverage:** Storms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





Expected Rainfall Forecast

January 8, 2024
9:30 AM

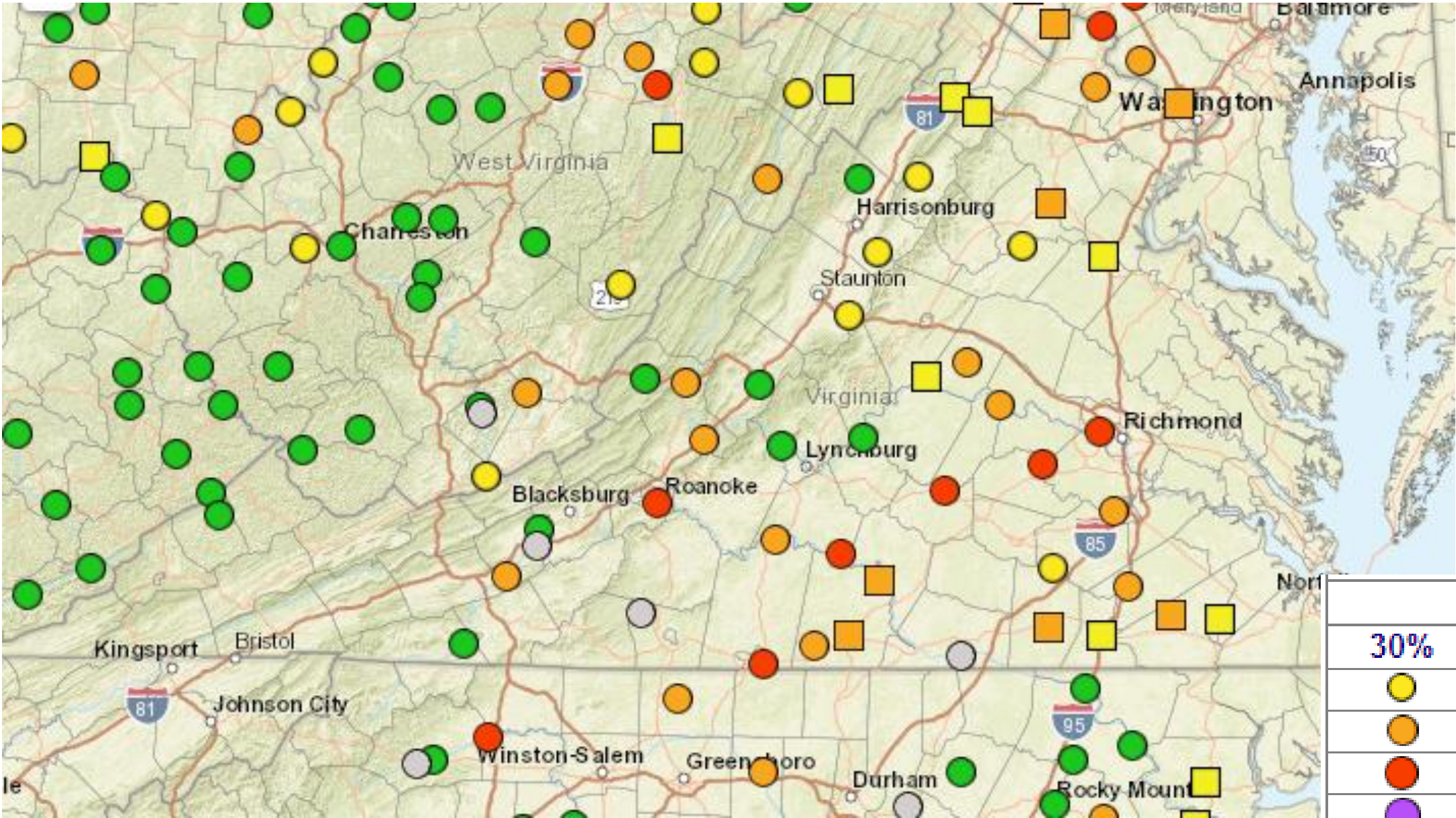


- Heavy rain is expected across the entire area
- The greatest amounts are expected across the Piedmont and upstream of the local area into the headwaters of the James River



Potential River Flooding

January 8, 2024
9:30 AM



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

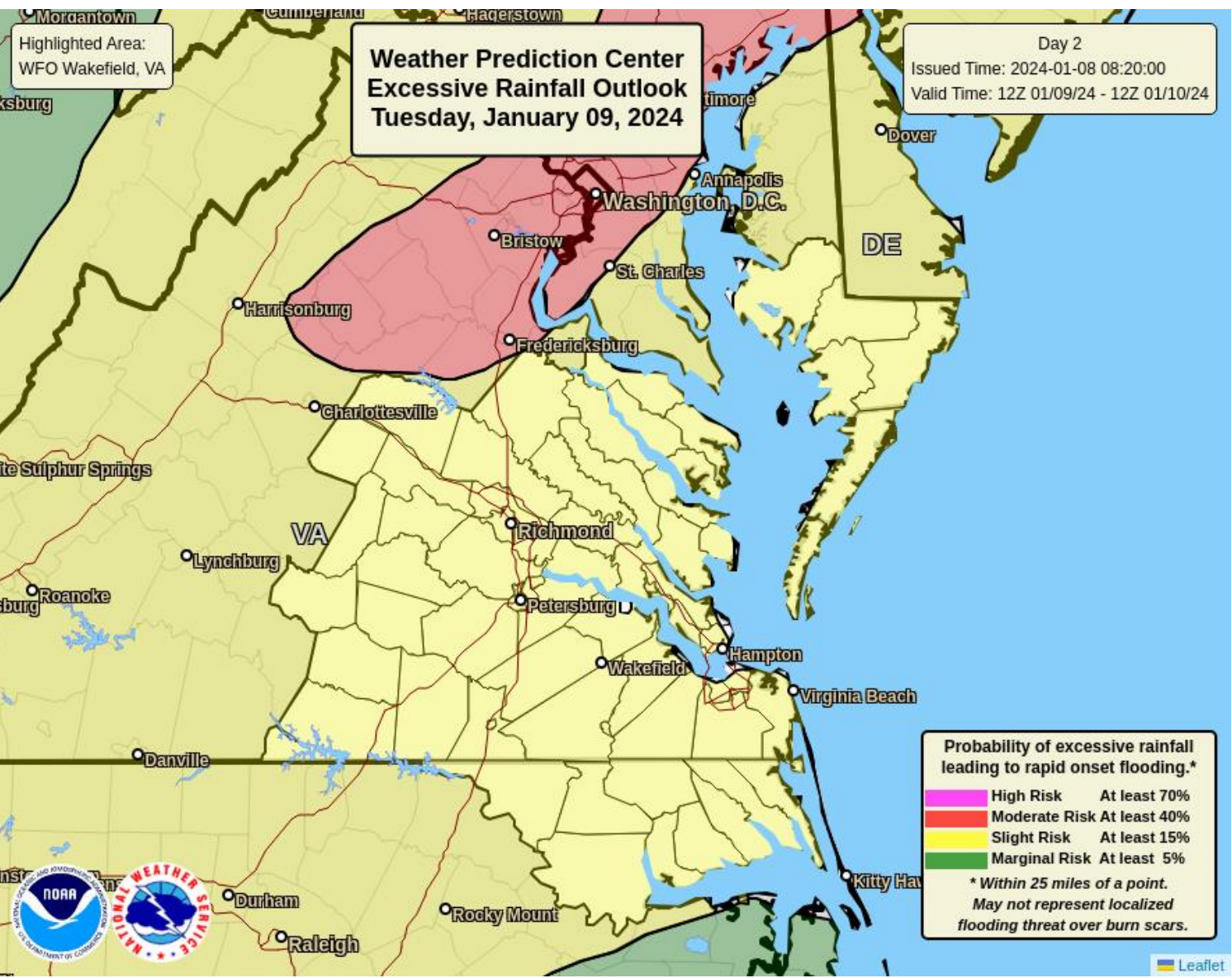
Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		





Flood Threat - Tomorrow

January 8, 2024
9:30 AM



- Rain is expected to develop Tuesday and become heavy Tuesday evening into the early overnight hours
- Localized flash flooding is possible, especially given recent rain and wet soil conditions

<u>MARGINAL</u>	<u>SLIGHT</u>	<u>MODERATE</u>	<u>HIGH</u>
Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected



Regional Forecast Summary

January 8, 2024
9:30 AM

Maximum Wind Gust Forecast

	1/9 Tue				1/10 Wed				1/11 Thu			
	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm
Accomac	15↩	31↩	48↩	60↩	51↗	41↗	40↗	29↗	17↗	14↗	15↗	14↗
Ahoski	13↩	25↩	43↩	45↩	35↗	33↗	35↗	16↗	13↗	12↗	13↗	8↗
Cambridge	12↩	25↩	46↩	54↩	44↗	33↗	36↗	24↗	15↗	13↗	14↗	13↗
Corolla	21↩	33↩	52↩	59↩	48↗	41↗	41↗	26↗	18↗	15↗	15↗	13↗
Elizabeth City	14↩	30↩	47↩	54↩	40↗	37↗	38↗	22↗	13↗	13↗	15↗	10↗
Emporia	13↩	24↩	38↩	39↩	29↗	31↗	33↗	16↗	13↗	12↗	14↗	9↗
Farmville	12↩	24↩	36↩	32↩	23↗	31↗	33↗	16↗	12↗	13↗	15↗	12↗
Louisa	9↩	21↩	31↩	30↩	22↗	28↗	31↗	18↗	13↗	12↗	15↗	12↗
Norfolk / Portsmouth	14↩	30↩	49↩	52↩	41↗	37↗	38↗	23↗	15↗	13↗	14↗	12↗
Ocean City	17↩	28↩	45↩	60↩	54↗	39↗	39↗	29↗	20↗	15↗	16↗	15↗
Richmond	9↩	25↩	37↩	38↩	29↗	33↗	35↗	21↗	13↗	13↗	15↗	12↗
Salisbury	9↩	26↩	44↩	54↩	45↗	39↗	39↗	25↗	14↗	14↗	16↗	13↗
South Hill	15↩	25↩	39↩	35↩	28↗	31↗	33↗	16↗	13↗	13↗	14↗	10↗
Tappahannock	10↩	24↩	33↩	36↩	28↗	30↗	31↗	20↗	13↗	12↗	13↗	12↗
Virginia Beach	20↩	32↩	54↩	58↩	47↗	38↗	38↗	26↗	18↗	14↗	14↗	13↗
Williamsburg	13↩	25↩	39↩	40↩	35↗	32↗	33↗	20↗	13↗	12↗	14↗	12↗

*Table values in mph
**Created: 7 am EST Mon 1/8/2024
***Values are maximums over the period beginning at the time shown.

Rain Forecast

	1/9 Tue				1/10 Wed			
	1am	7am	1pm	7pm	1am	7am	1pm	7pm
Accomac	0	0.08	0.29	0.79	0.03	0	0	0
Ahoski	0	0.06	0.42	1.04	0.02	0	0	0
Cambridge	0	0.19	0.50	0.93	0.05	0.01	0	0
Corolla	0	0.04	0.17	1.10	0.05	0	0	0
Elizabeth City	0	0.03	0.29	1.13	0.03	0	0	0
Emporia	0	0.13	0.71	0.98	0.02	0	0	0
Farmville	0.02	0.52	1.10	0.44	0.02	0	0	0
Louisa	0	0.51	1.06	0.57	0.01	0	0	0
Norfolk / Portsmouth	0	0.06	0.31	1.07	0.03	0	0	0
Ocean City	0	0.08	0.34	0.76	0.08	0.02	0	0
Richmond	0	0.26	0.75	0.90	0.03	0	0	0
Salisbury	0	0.12	0.40	0.89	0.06	0.02	0	0
South Hill	0.02	0.22	0.91	0.60	0.02	0	0	0
Tappahannock	0	0.20	0.52	1.01	0.04	0	0	0
Virginia Beach	0	0.05	0.24	1.01	0.03	0	0	0
Williamsburg	0	0.10	0.40	1.08	0.02	0	0	0

*Table values in inches
**Created: 7 am EST Mon 1/8/2024
***Values are accumulations over the period beginning at the time shown.

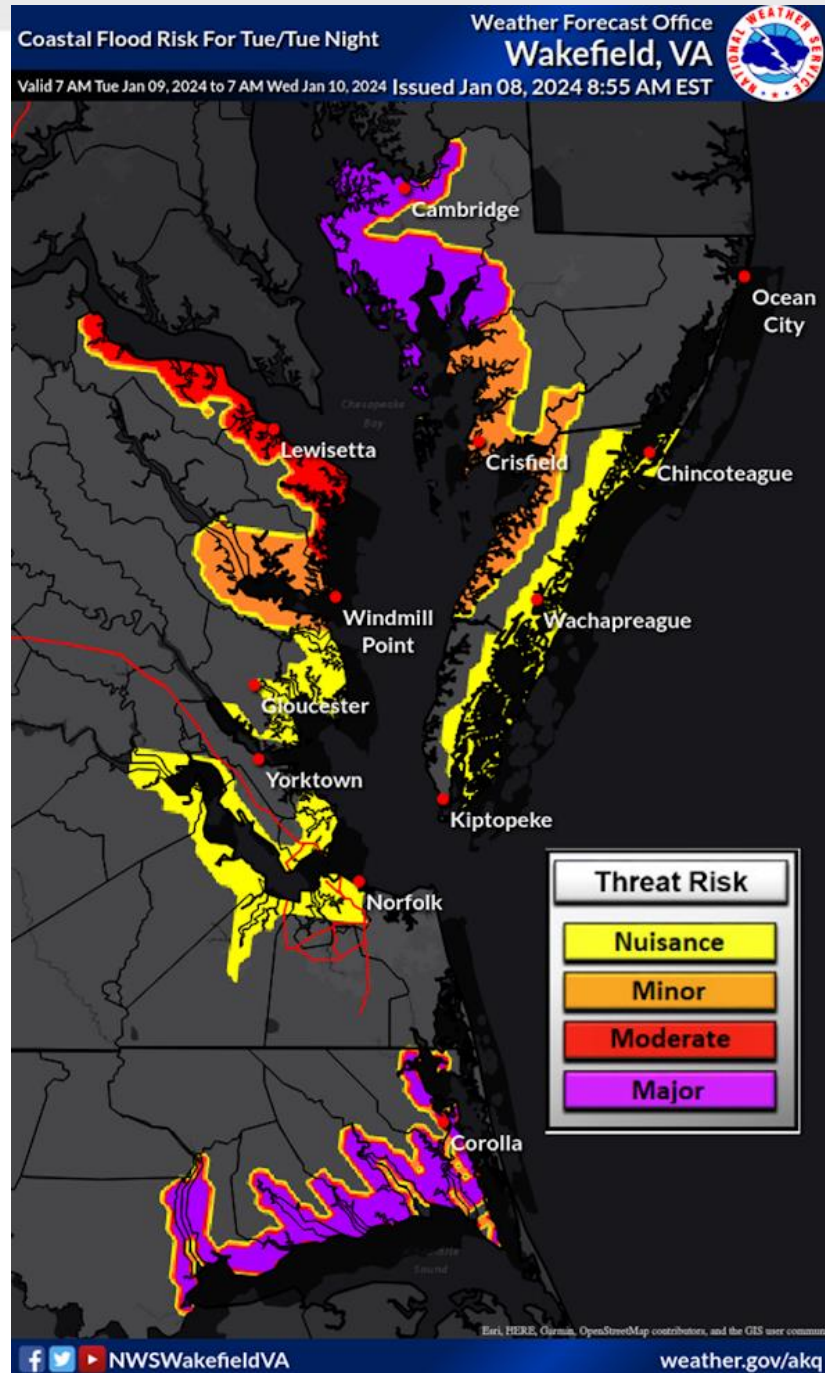
6 Hourly
Rainfall
Amounts





Tidal Flooding Overview

January 8, 2024
9:30 AM



- Strong southeast winds will push water up the Bay and to the northern side of the Albemarle Sound. Peak winds from the southeast will occur from late Tuesday afternoon into early Tuesday morning. Winds shift to the west early Wednesday morning, but remain strong.
- Major tidal flooding is likely over the upper Bay with widespread moderate tidal flooding as far south as Windmill Point and Bayford.
- 2 to 3 ft of inundation (or more) is possible in the hardest hit. 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>

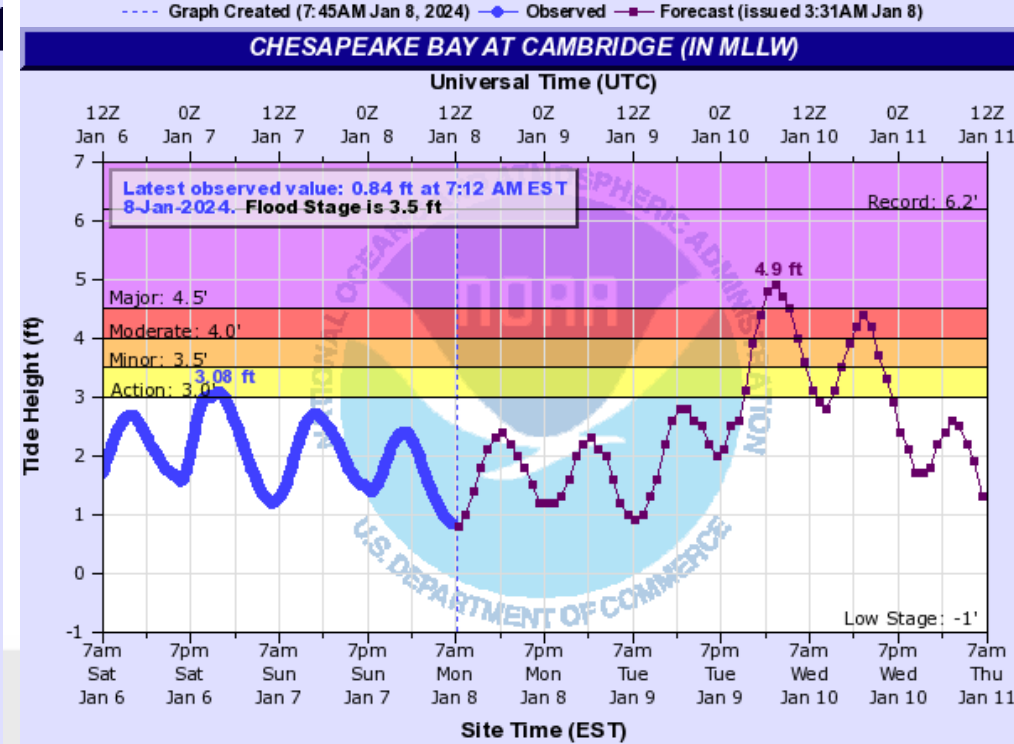
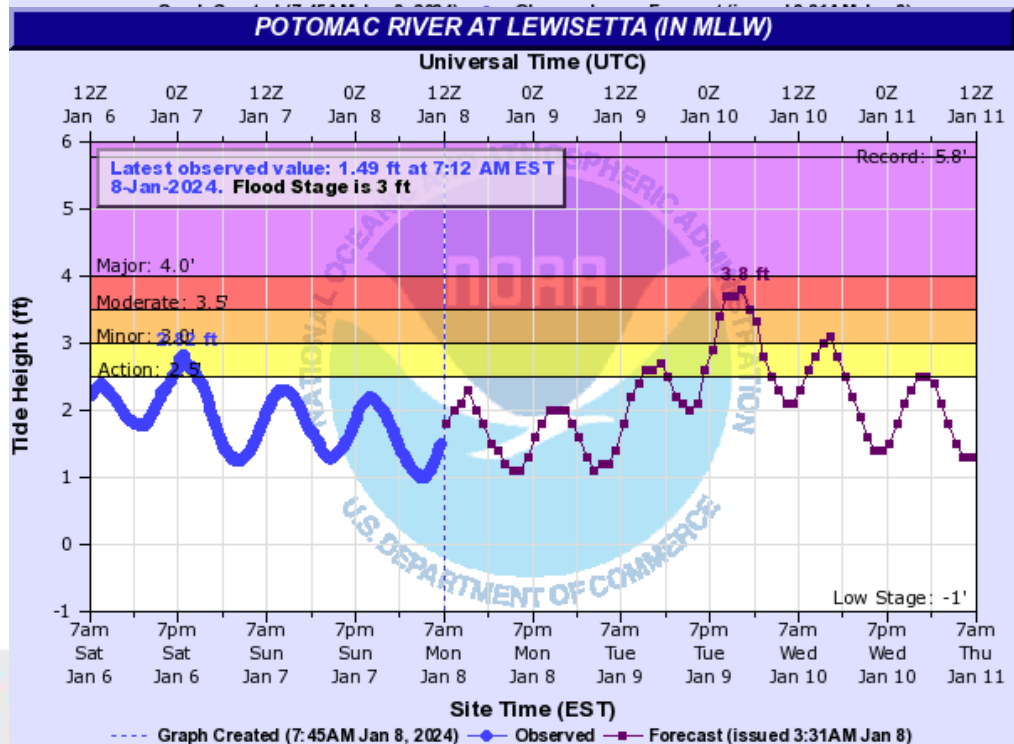
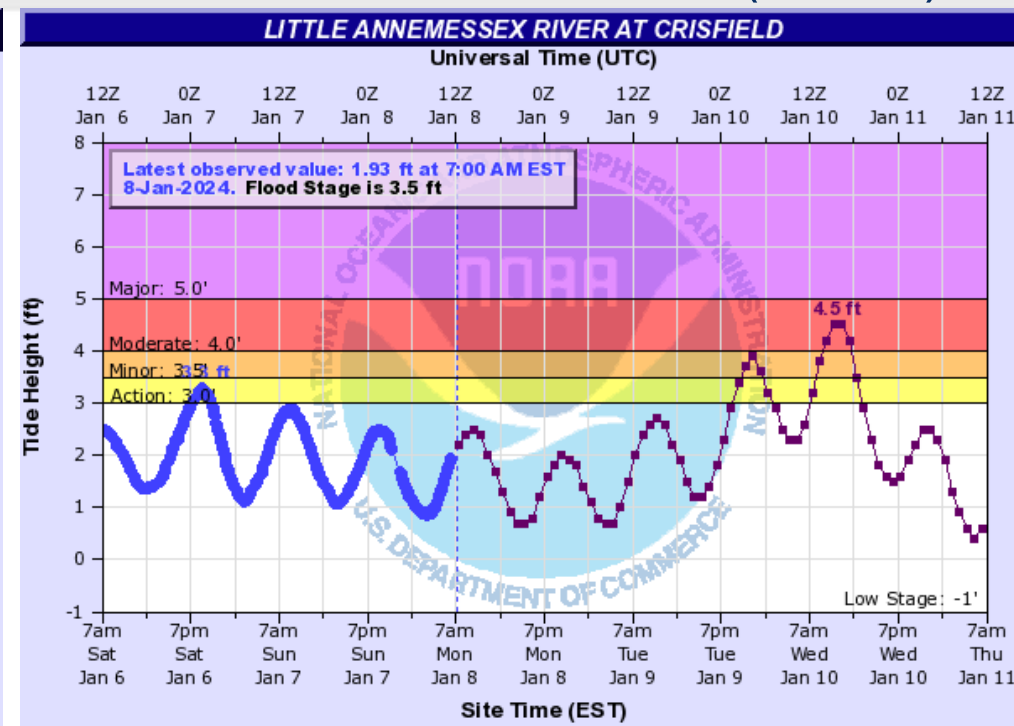
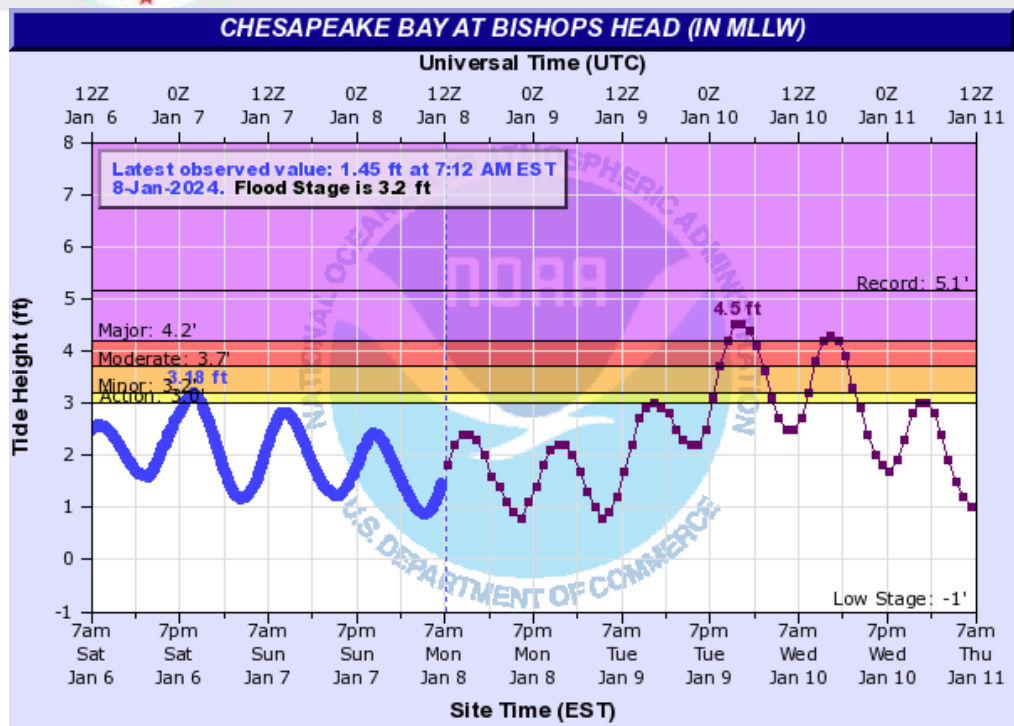




Tidal Overview - Upper Bay

January 8, 2024
9:30 AM

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



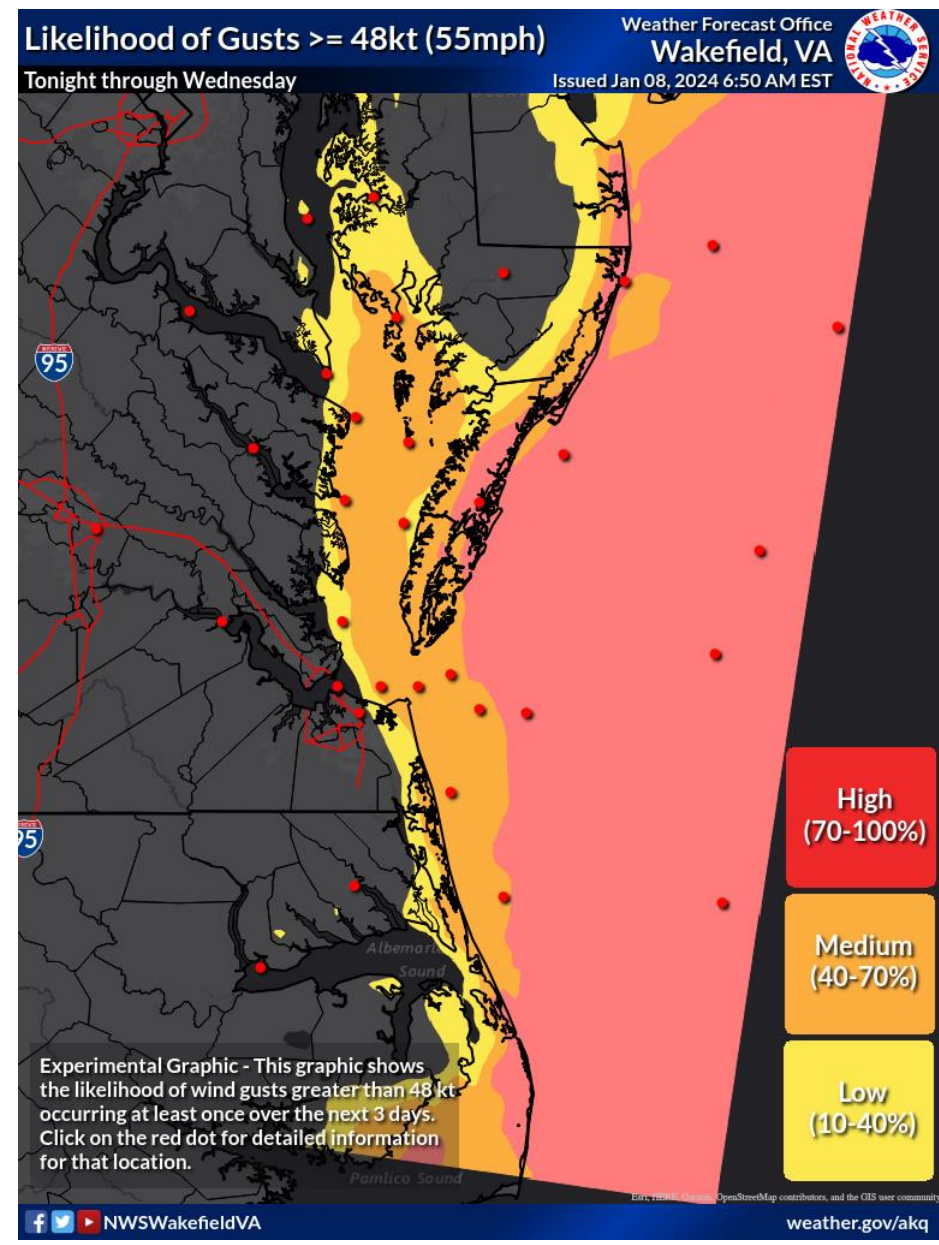
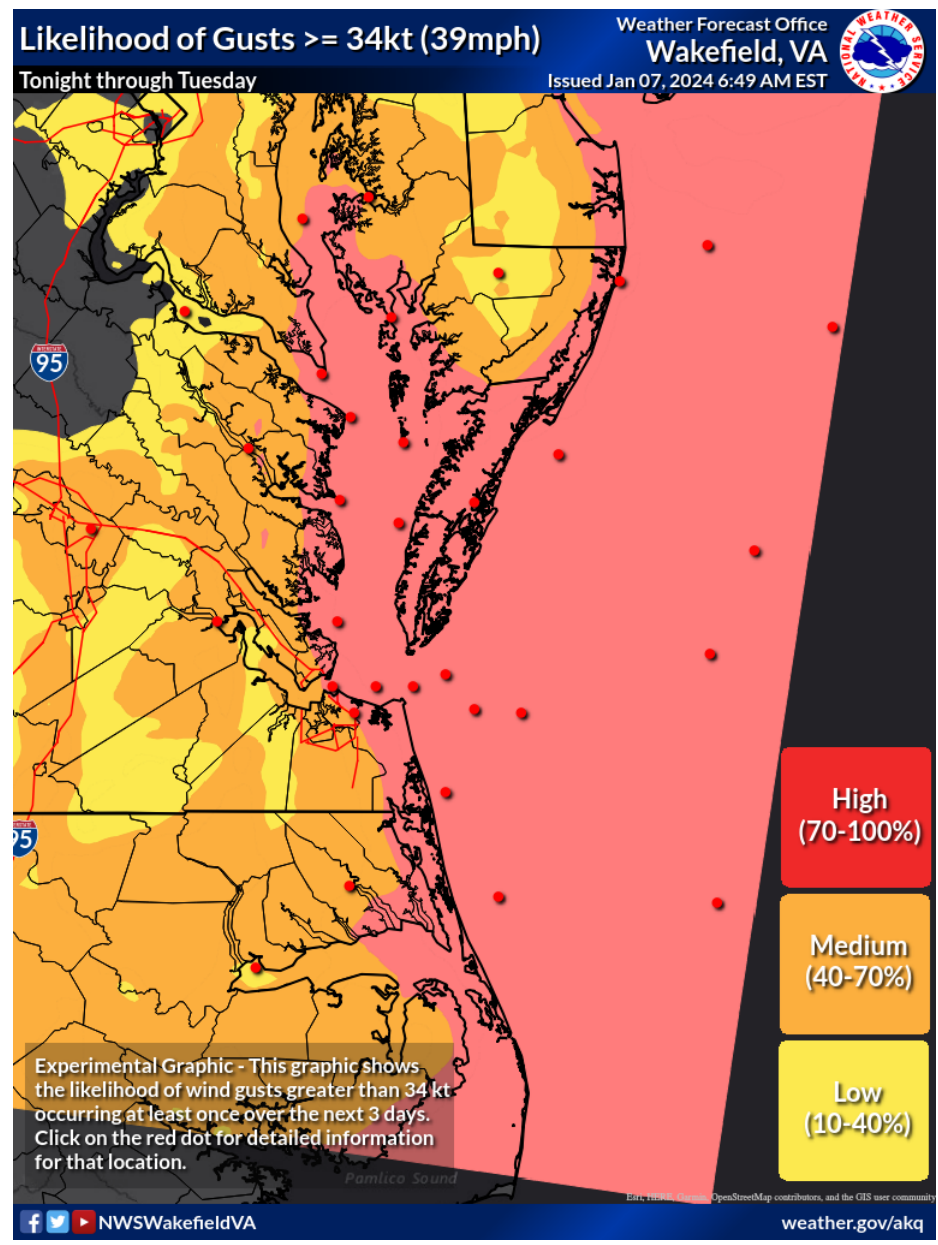
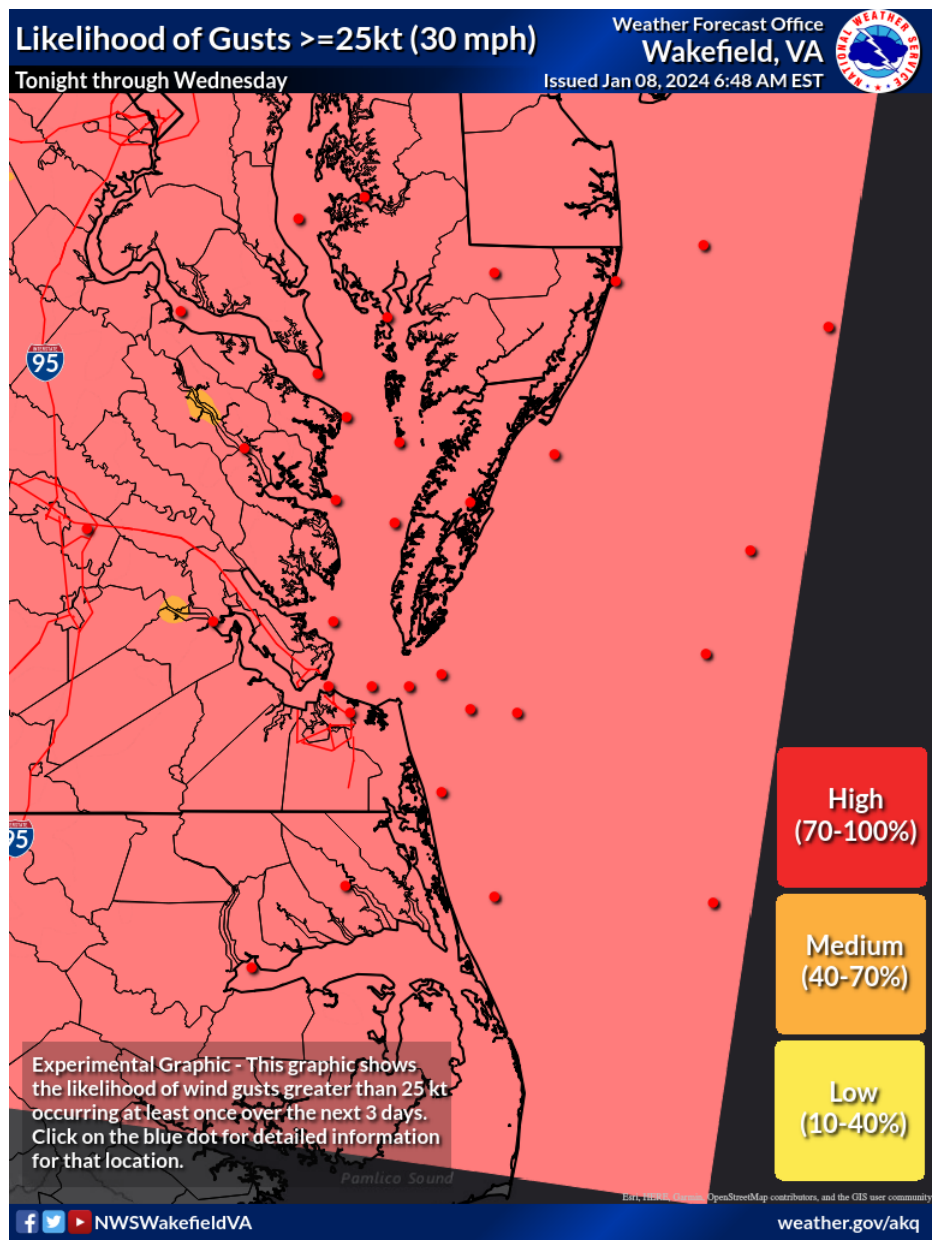
Summary of Tidal Trends

- 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 in the hardest hit. Water will likely close roads and threaten some homes and businesses in some areas in areas of Major to Moderate flooding.



Marine Wind Probabilities

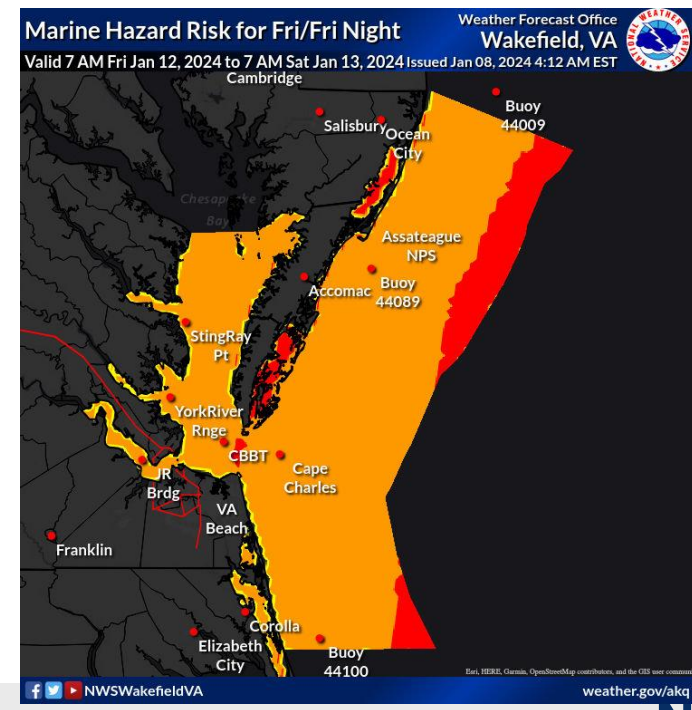
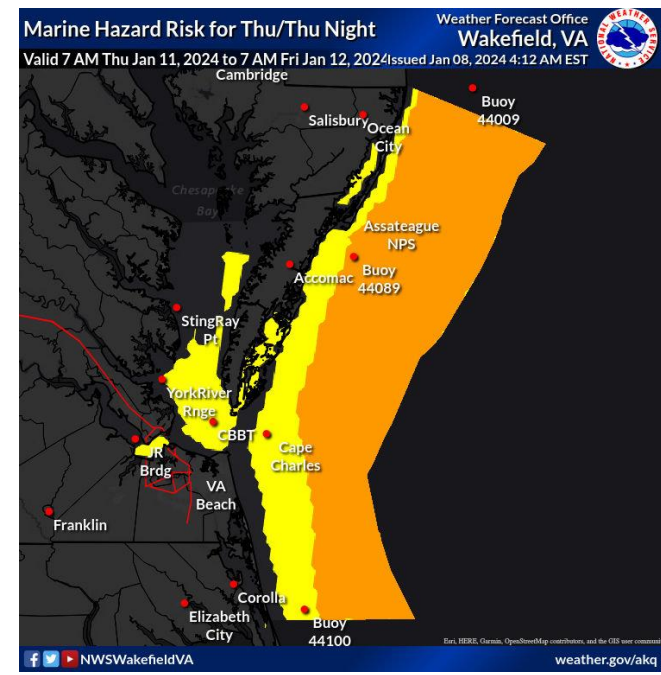
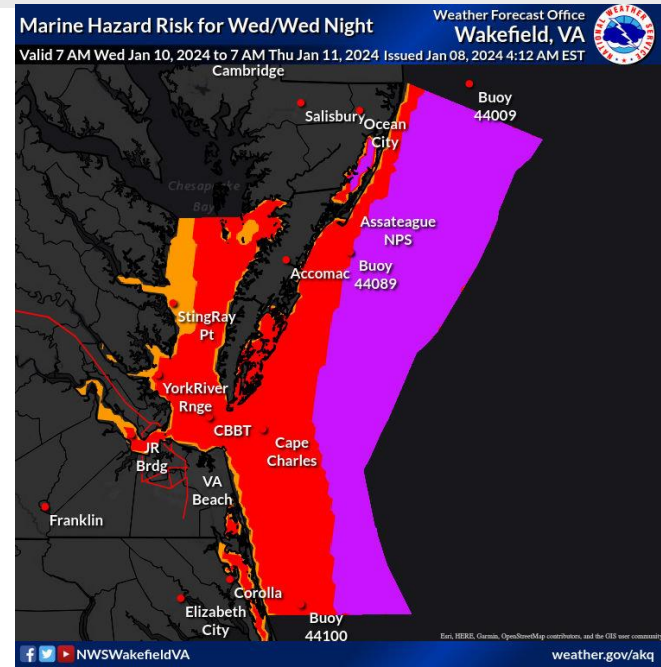
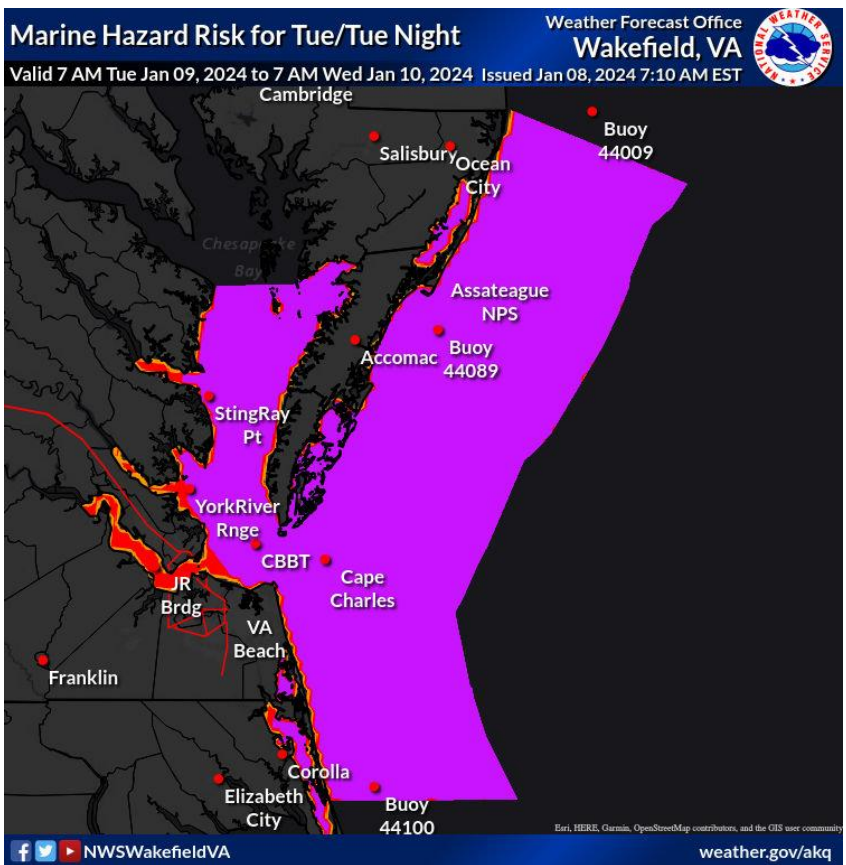
January 8, 2024
9:30 AM





Marine Threat Potential - Next 5 Days

January 8, 2024
9:30 AM



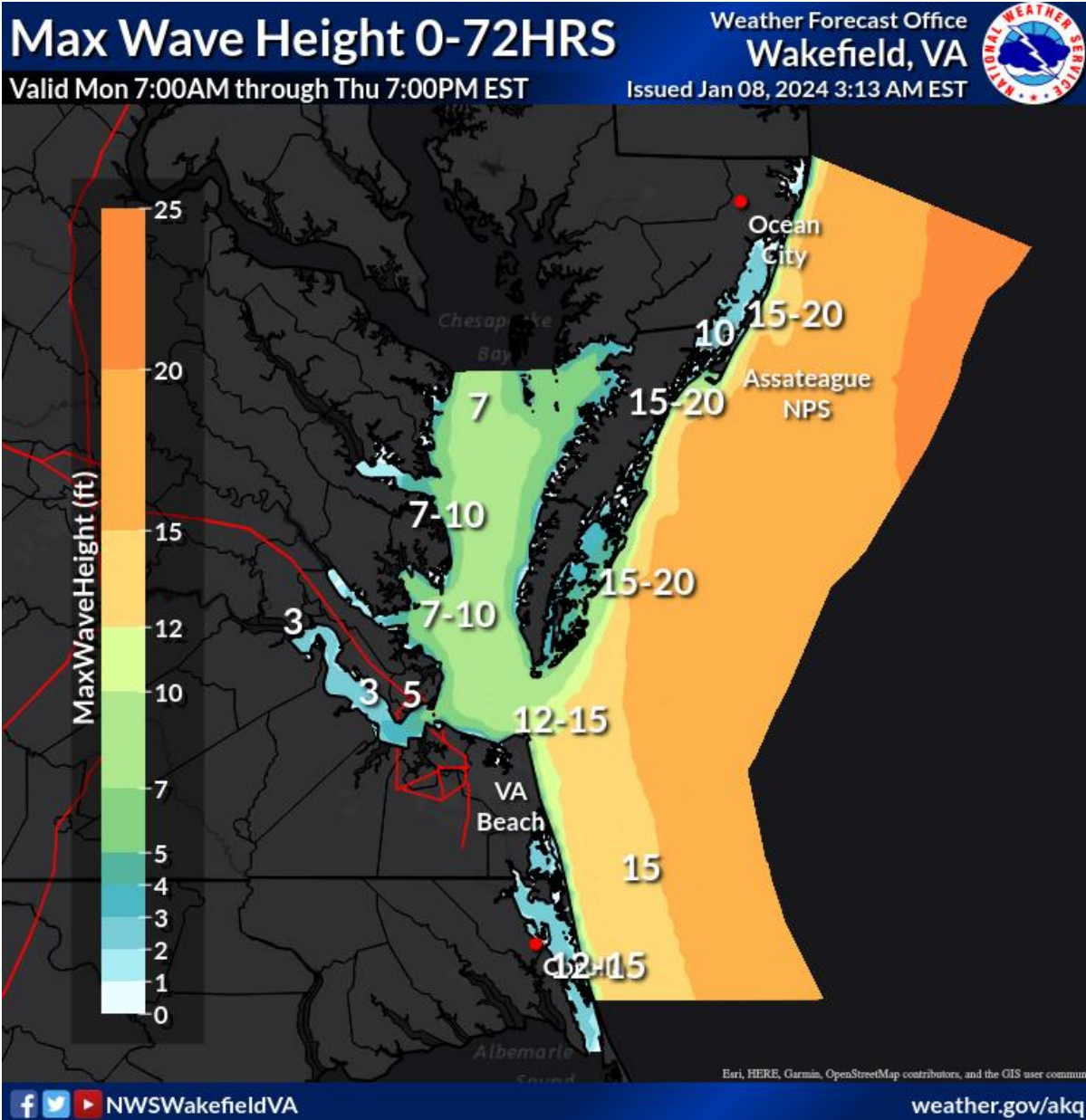
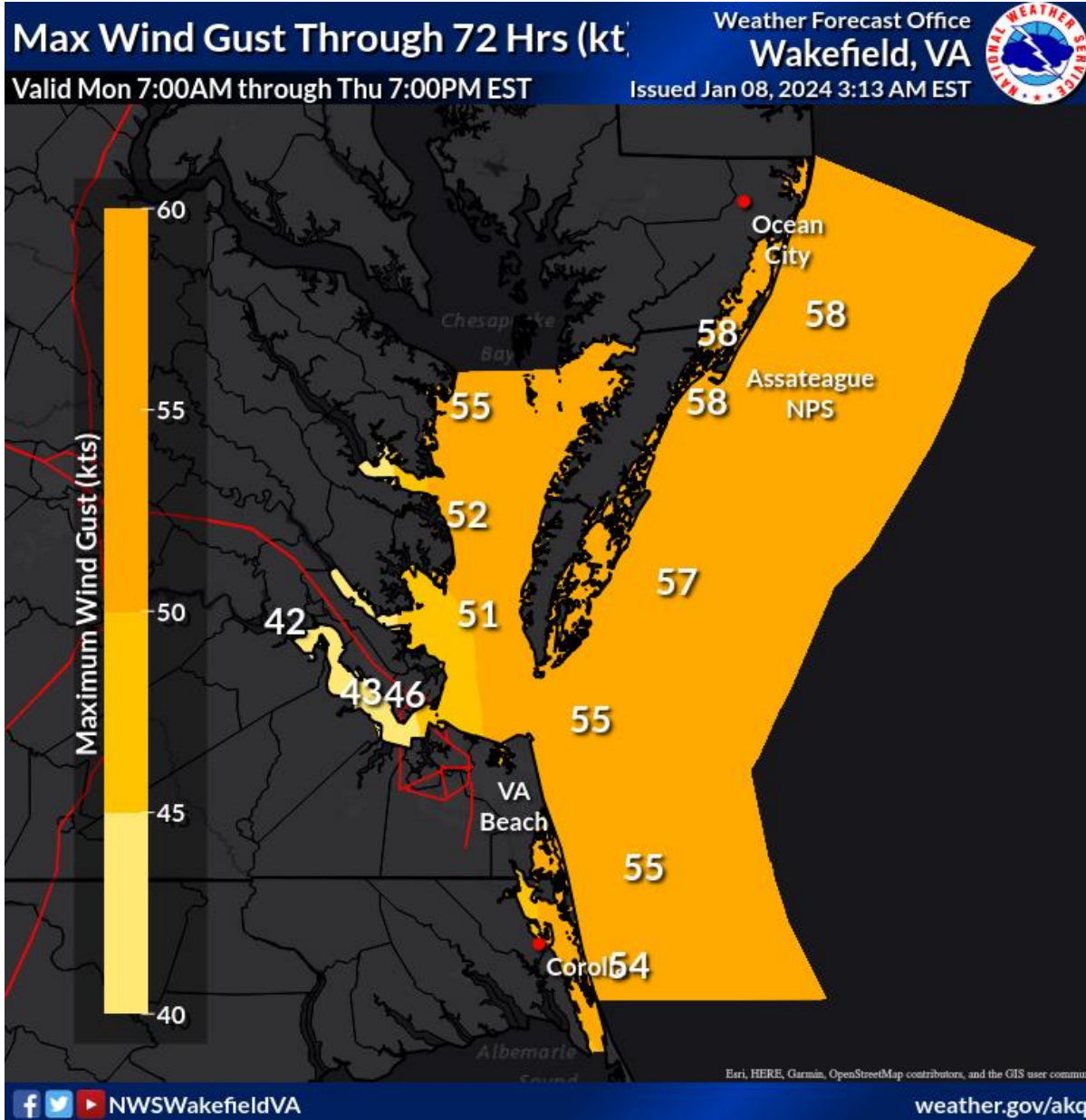
Limited	Wind Gusts \geq 20 knots (15 kt Bay & rivers) and/or Waves \geq 4 feet (2 ft Bay & rivers).
Elevated	Wind Gusts \geq 25 knots (20 kt Bay & rivers) and/or Waves \geq 5 feet (\geq 4 ft Bay & rivers).
Significant	Wind Gusts \geq 34 knots and/or Waves \geq 8 feet (\geq 5 ft Bay & rivers).
Extreme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





Marine Threat Potential

January 8, 2024
9:30 AM



Key Points:

- Storm Watches are in effect for the Bay and all coastal waters.
- SE winds increase to 30 kt gust 40 kt by noon Tue, then SE 40 kt gust 50 kt Tue 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 8, 2024
9:30 AM

Sustained Wind

Maximum Wind Speed Forecast

	1/9 Tue				1/10 Wed				1/11 Thu			
	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm
CBBT	17↙	24↙	40↙	41↙	34↗	28↗	27↗	19↗	14↗	12↗	11↗	10↗
Cape Henry	16↙	24↙	38↙	39↙	33↗	28↗	27↗	20↗	15↗	13↗	11↗	11↗
Chesapeake Light	16↙	24↙	38↙	41↗	35↗	30↗	28↗	22↗	17↗	13↗	12↗	12↗
Chincoteague Shoal	14↙	21↙	34↙	43↗	37↗	29↗	28↗	22↗	16↗	12↗	13↗	11↗
Duck, NC	14↙	23↙	36↙	38↙	33↗	28↗	27↗	17↗	14↗	11↗	11↗	10↗
Fenwick Shoal	14↙	18↙	26↙	41↗	39↗	26↗	27↗	18↗	12↗	12↗	13↗	12↗
HRBT	13↙	18↙	32↙	32↙	29↗	26↗	26↗	15↗	11↗	10↗	10↗	9↗
JRB	12↙	17↙	30↙	31↙	29↗	25↗	24↗	14↗	10↗	10↗	10↗	8↗
New Point Comfort	14↙	21↙	38↙	39↙	30↗	26↗	26↗	17↗	12↗	11↗	10↗	10↗
Parramore Banks	14↙	22↙	35↙	43↗	37↗	29↗	28↗	21↗	16↗	12↗	12↗	10↗
Rappahannock Light	12↙	22↙	38↙	41↗	32↗	25↗	25↗	18↗	13↗	11↗	10↗	10↗
Tangier	13↙	23↙	39↙	43↗	32↗	26↗	26↗	19↗	14↗	11↗	10↗	10↗
Thimble Shoal	17↙	24↙	39↙	41↙	32↗	27↗	27↗	18↗	14↗	12↗	10↗	10↗

*Table values in kt
**Created: 7 am EST Mon 1/8/2024
***Values are maximums over the period beginning at the time shown.

Wind Gusts

Maximum Wind Gust Forecast

	1/9 Tue				1/10 Wed				1/11 Thu			
	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm
CBBT	21↙	29↙	51↙	54↙	45↗	37↗	34↗	26↗	19↗	16↗	14↗	13↗
Cape Henry	20↙	29↙	47↙	51↙	41↗	35↗	34↗	27↗	19↗	16↗	14↗	14↗
Chesapeake Light	20↙	29↙	47↙	55↗	44↗	37↗	35↗	30↗	22↗	18↗	16↗	15↗
Chincoteague Shoal	18↙	26↙	43↙	56↗	47↗	37↗	36↗	29↗	20↗	15↗	16↗	13↗
Duck, NC	18↙	28↙	46↙	53↗	42↗	36↗	35↗	24↗	17↗	14↗	15↗	13↗
Fenwick Shoal	16↙	25↙	35↙	55↗	53↗	35↗	35↗	25↗	18↗	18↗	19↗	18↗
HRBT	16↙	23↙	43↙	44↙	40↗	35↗	34↗	23↗	15↗	13↗	14↗	12↗
JRB	16↙	22↙	41↙	43↙	39↗	35↗	32↗	22↗	15↗	13↗	14↗	11↗
New Point Comfort	18↙	26↙	49↙	52↙	41↗	34↗	32↗	25↗	17↗	15↗	14↗	13↗
Parramore Banks	18↙	26↙	44↙	56↗	46↗	36↗	35↗	29↗	20↗	15↗	15↗	13↗
Rappahannock Light	15↙	27↙	48↙	53↙	42↗	32↗	31↗	25↗	18↗	14↗	13↗	13↗
Tangier	16↙	28↙	49↙	55↙	42↗	33↗	32↗	27↗	19↗	15↗	13↗	13↗
Thimble Shoal	21↙	29↙	50↙	53↙	43↗	35↗	33↗	25↗	19↗	16↗	13↗	13↗

*Table values in kt
**Created: 7 am EST Mon 1/8/2024





Marine Wave Forecast Summary

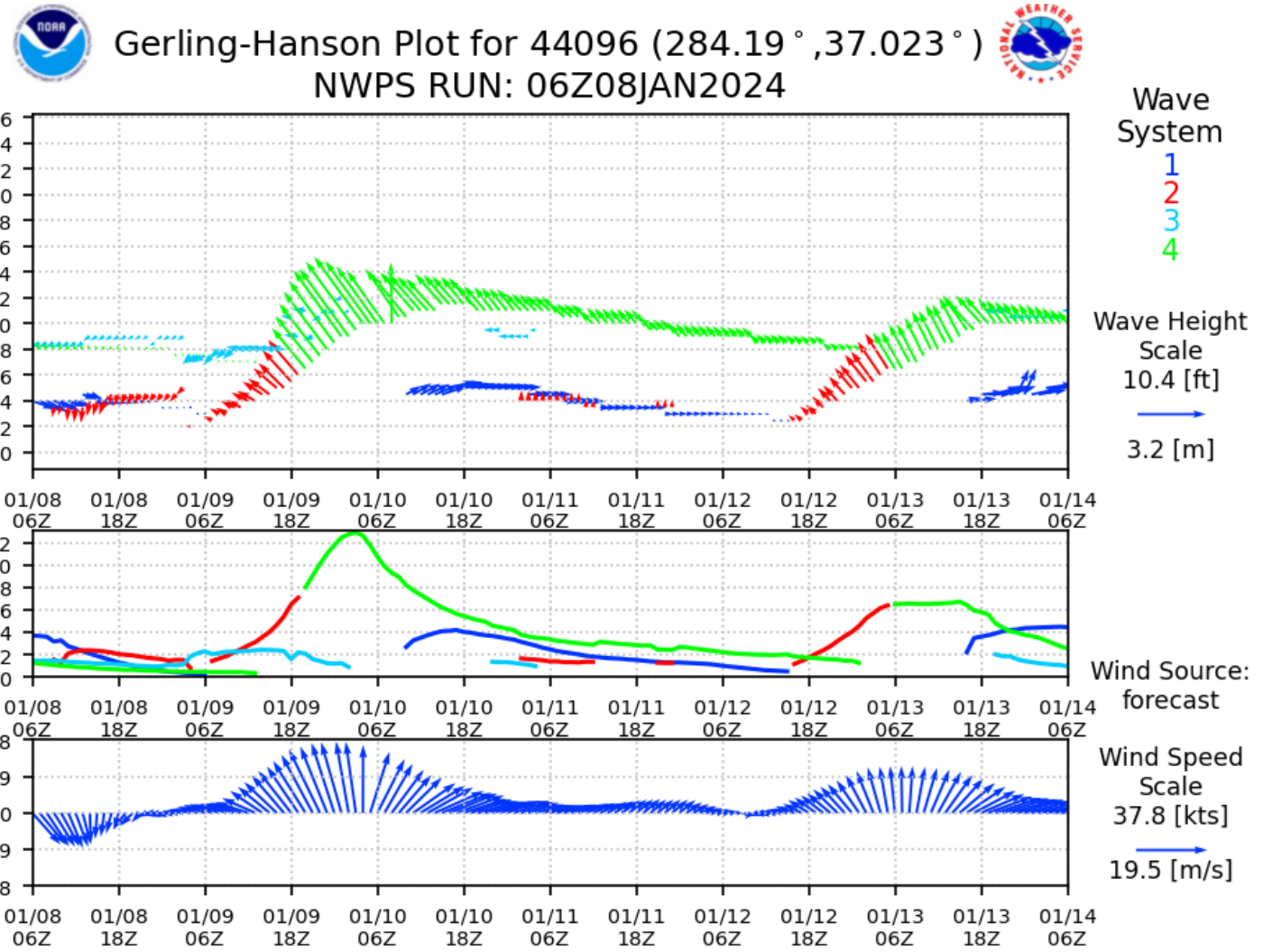
January 8, 2024
9:30 AM

Wave Height Forecast

	1/9 Tue				1/10 Wed				1/11 Thu			
	12am	6am	12pm	6pm	12am	6am	12pm	6pm	12am	6am	12pm	6pm
CBBT	3.0	5.0	8.0	9.0	7.0	6.0	6.0	5.0	3.0	3.0	2.0	2.0
Cape Henry	3.0	5.0	9.0	12.0	11.0	9.0	7.0	5.0	4.0	4.0	3.0	3.0
Chesapeake Light	4.0	6.0	12.0	16.0	14.0	11.0	9.0	7.0	5.0	5.0	4.0	4.0
Chincoteague Shoal	3.0	5.0	10.0	15.0	15.0	12.0	9.0	7.0	5.0	5.0	4.0	4.0
Duck, NC	3.0	5.0	9.0	12.0	11.0	9.0	7.0	5.0	4.0	3.0	3.0	3.0
Fenwick Shoal	3.0	4.0	9.0	16.0	16.0	12.0	9.0	8.0	6.0	5.0	4.0	4.0
HRBT	2.0	3.0	5.0	5.0	4.0	4.0	4.0	3.0	2.0	1.0	2.0	1.0
JRB	1.0	2.0	3.0	3.0	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0
New Point Comfort	2.0	4.0	6.0	7.0	6.0	4.0	4.0	3.0	2.0	1.0	1.0	1.0
Parramore Banks	3.0	5.0	10.0	14.0	13.0	11.0	8.0	7.0	5.0	4.0	4.0	4.0
Rappahannock Light	1.0	3.0	6.0	8.0	7.0	5.0	5.0	4.0	2.0	1.0	1.0	1.0
Tangier	1.0	3.0	5.0	6.0	6.0	5.0	4.0	3.0	2.0	1.0	1.0	1.0
Thimble Shoal	3.0	4.0	7.0	9.0	7.0	5.0	5.0	4.0	3.0	2.0	2.0	2.0

*Table values in feet
**Created: 7 am EST Mon 1/8/2024
***Values are maximums over the period beginning at the time shown.

Cape Henry Wave





Summary of Greatest Impacts

January 8, 2024
9:30 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 8, 2024
9:30 AM

- Strong low pressure and a cold front track from the Appalachians Tuesday to off the Mid-Atlantic coast Tuesday night.
- This will bring moderate to heavy rain and strong winds to the region Tuesday morning through Wednesday morning.
- Rain will begin from west to east Tuesday morning, exiting the region late Tuesday night. Winds increase through the day Tuesday and are expected to peak Tuesday evening into Tuesday night.
- There is a risk for strong to severe storms across northeast North Carolina and Southeast Virginia Tuesday 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.
- **Reminder: We will have a live recorded briefing at 11 AM this morning**





Contact and Next Briefing Information

January 8, 2024
9:30 AM

For NWS Wakefield, Virginia



Briefing Webpage

→ [NWS Wakefield Briefing](#)



Next Briefing

- By 6 PM Monday, January 8, 2024
- Method: Email and Online



Disclaimer

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



Contact Information

Web

→ weather.gov/wakefield

Phone

→ (757) 899-4200

Email

→ akq-report@noaa.gov

Facebook

→ www.facebook.com/NWSWakefieldVA

Twitter

→ [@NWSWakefieldVA](https://twitter.com/NWSWakefieldVA)

