



Weekend Storm Briefing

December 17, 2023
4:30 PM

Prepared by National Weather Service Wakefield, VA

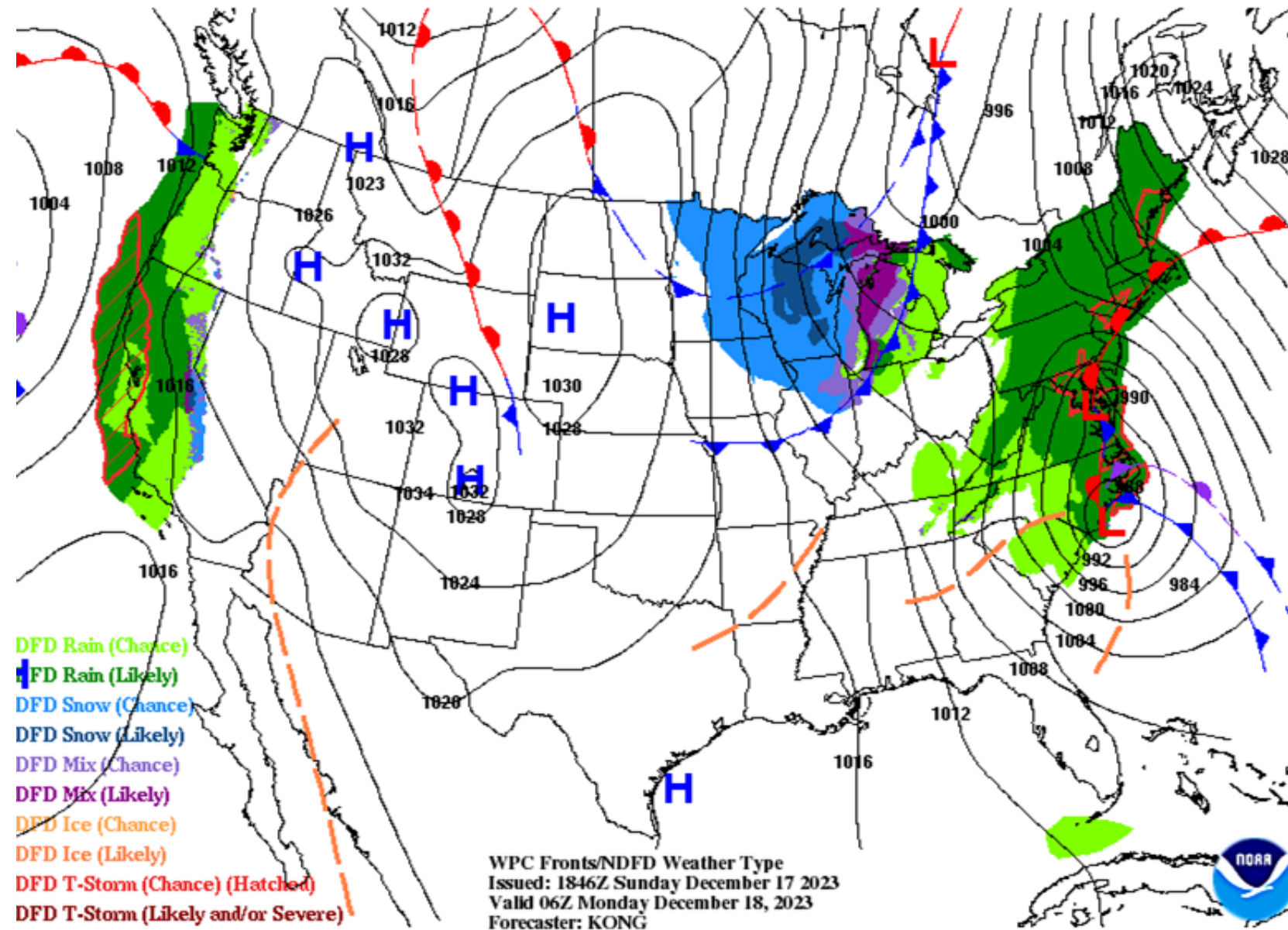
Decision Support Briefing #5

→ As of 4:30 PM EST
Sunday, December 17, 2023

NEW

Important Updates

- Rainfall totals have increased slightly
- **This will be the last briefing for this event**



Disclaimer: Information may become outdated after briefing time.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



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Key Messages

December 17, 2023

4:30 PM






- Moderate to heavy rain is expected to continue through Monday morning with a widespread 2-4" (locally higher) expected. This may lead to localized flooding, especially in urban areas and areas with poor drainage.
- Strong southeast winds expected through Monday. Strongest wind gusts will be this evening with 45-55 mph gusts expected near the coast and 25-40 mph gusts expected inland. Wind advisories remain in effect for areas near the bay/coast. Localized power outages are possible.
- Moderate coastal flooding is forecast in the middle/upper Chesapeake Bay as well as the north side of the Albemarle Sound with nuisance to minor flooding elsewhere. Highest tide would be Monday morning (water levels peak tonight from Edenton-Elizabeth City).
- Marine: Gale Warnings are in effect across all marine zones this afternoon into early Monday afternoon. Strong southeast winds will gust 40-50 kt this evening-tonight. Winds become west on Monday with 35-40 kt gusts expected. Seas build to 12-18 ft.





Summary of Greatest Impacts

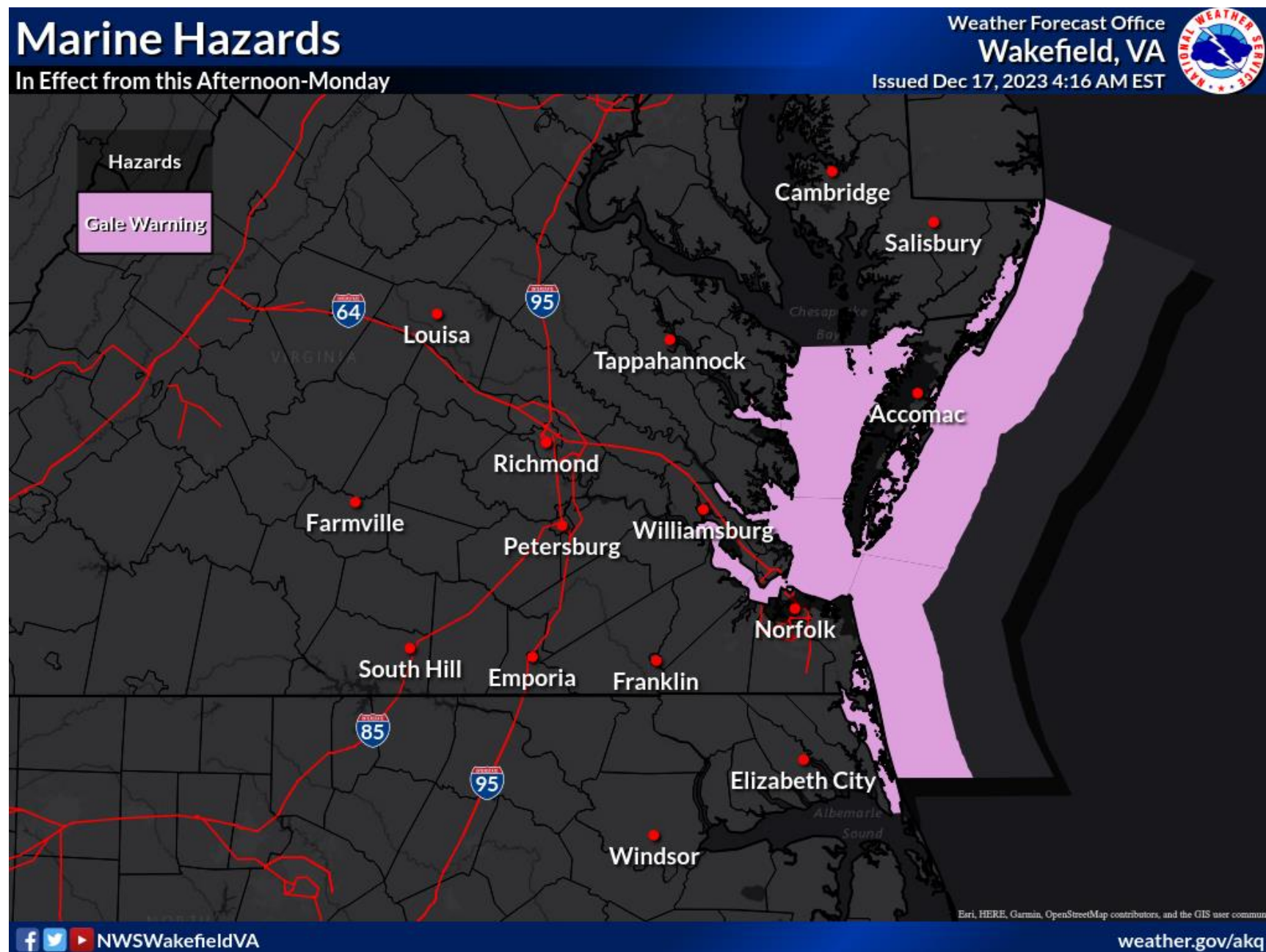
December 17, 2023
4:30 PM

Hazard	Impacts	Location	Timing
 Heavy Rain	Rainfall of 2-4" (locally higher) may lead to localized flooding, especially in urban areas	Entire forecast area	Through Monday morning
 High Wind	Gusts of 45 to 55 mph may result in localized power outages	Near/along the coast	Through Monday morning. Highest this evening
 Severe Thunderstorms	There is a chance of a few thunderstorms, some of which may become severe with wind gusts in excess of 60 mph.	Southeast Virginia and Northeast North Carolina	Through early Monday morning
 Coastal Flooding	Moderate tidal flooding (inundation of 1-2 ft AGL in vulnerable areas). Localized beach/dune erosion possible.	Middle and upper Chesapeake Bay (Lewisetta, VA - Cambridge, MD) North side of the Albemarle Sound. Atlantic coast for beach erosion.	Through Monday morning
 Marine	Strong SE winds with gusts of 40-50 kt and seas 12-18 ft	All waters coastal and nearshore waters	Through Monday morning. Highest winds this evening.



Marine Wind Hazard Overview

December 17, 2023
4:30 PM



- Gale Warnings remain in effect for all marine zones.
- Expect SE winds to gust to 40-50 kt this evening-tonight. Winds become W on Monday, with gusts of 35-40 kt expected.
- See www.weather.gov/akq for the latest information



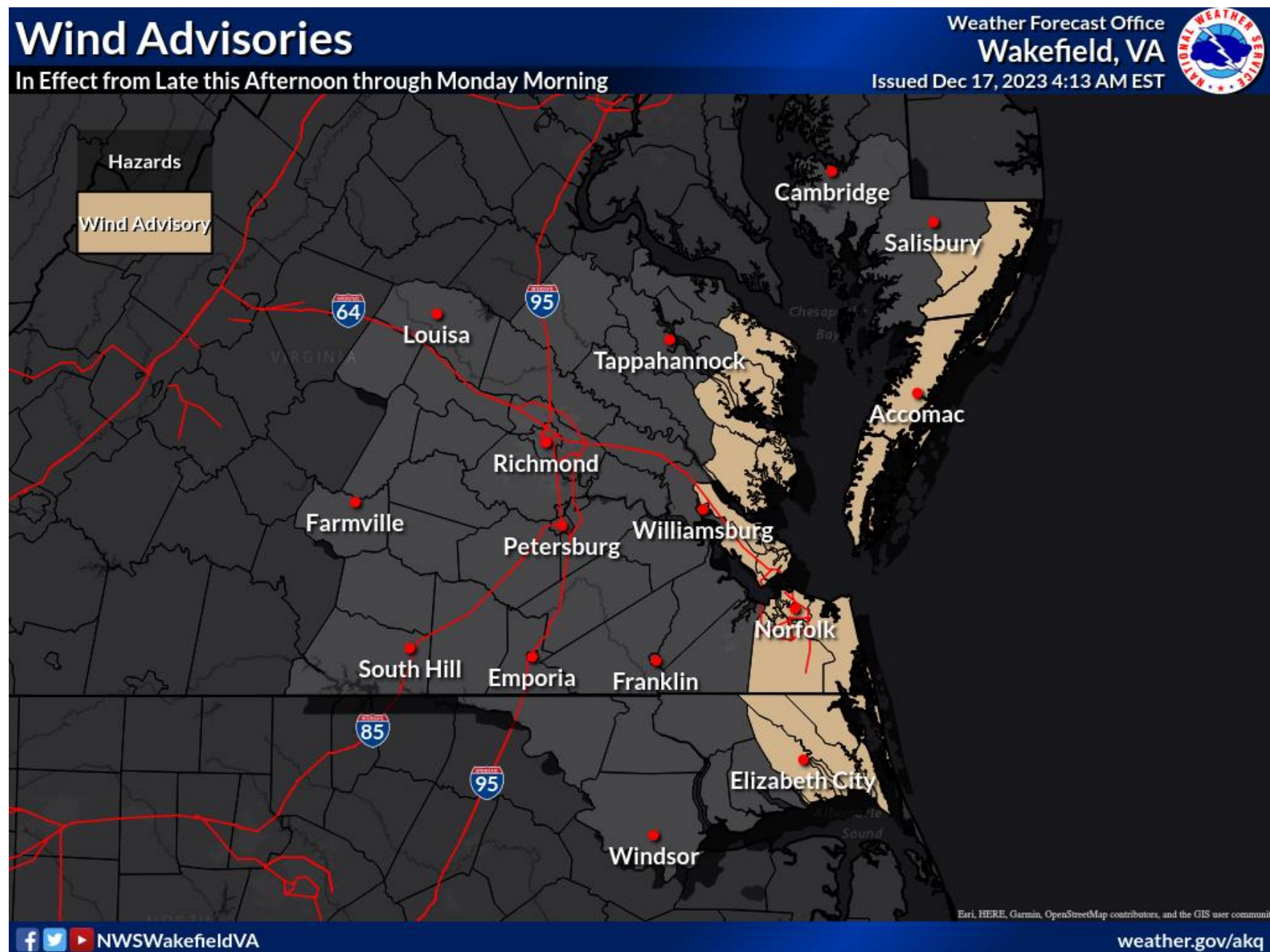
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Land Wind Hazard Overview

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4:30 PM



- Wind Advisories remain in effect for areas near the bay/coast.
- SE winds will gust to 45-55 mph in the advisory area.
- See www.weather.gov/akq for the latest information



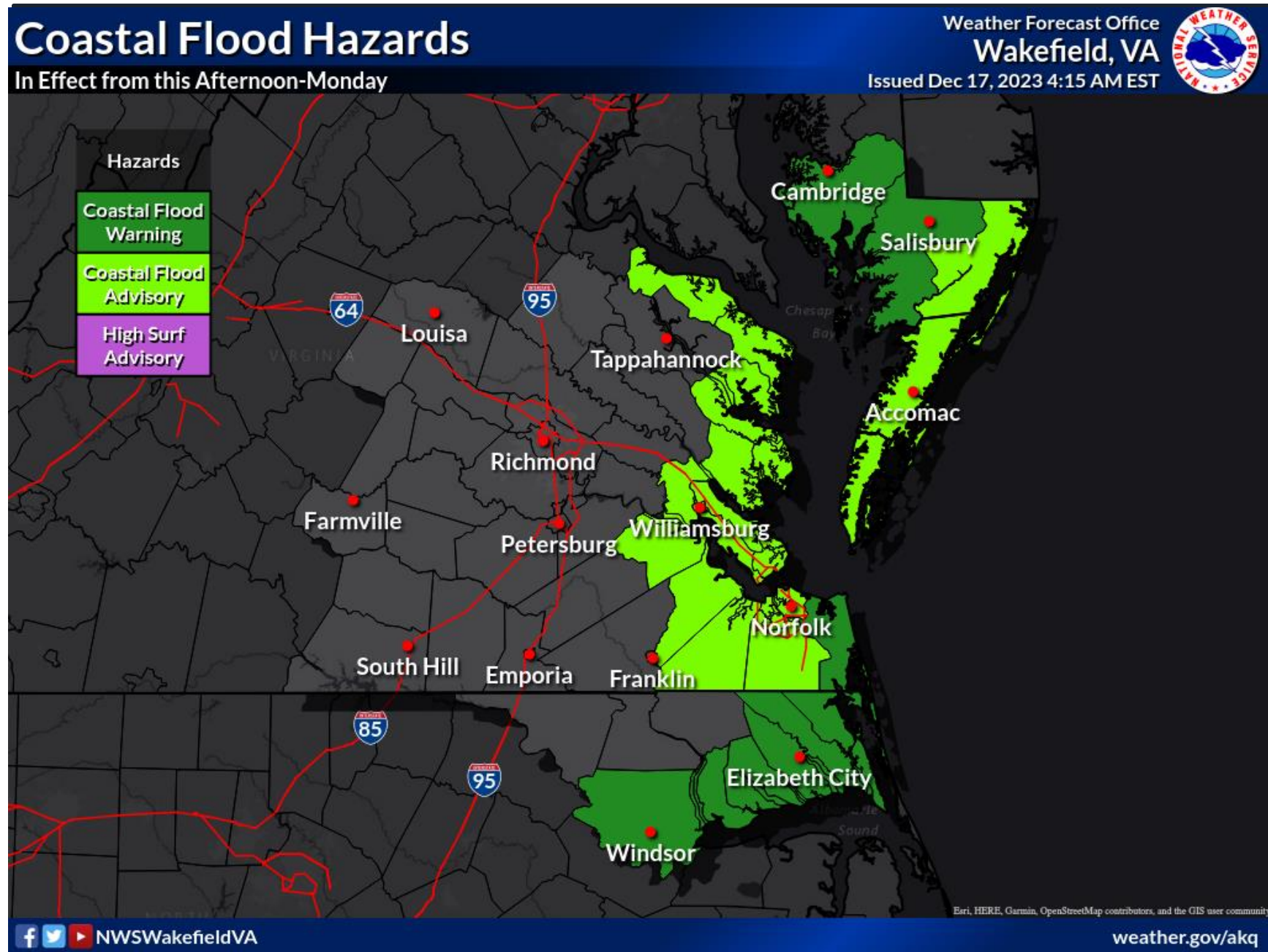
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Coastal Flood Hazard Overview

December 17, 2023
4:30 PM



- Coastal Flood Warnings remain in effect for areas along the Albemarle Sound and bay side of the MD Eastern Shore. High Surf Advisories are in effect along the Atlantic coast.
- Coastal Flood Advisories are in effect for the remaining coastal areas.
- Up to 2 feet of inundation above ground level is possible in flood prone areas.
- See www.weather.gov/akq for the latest information



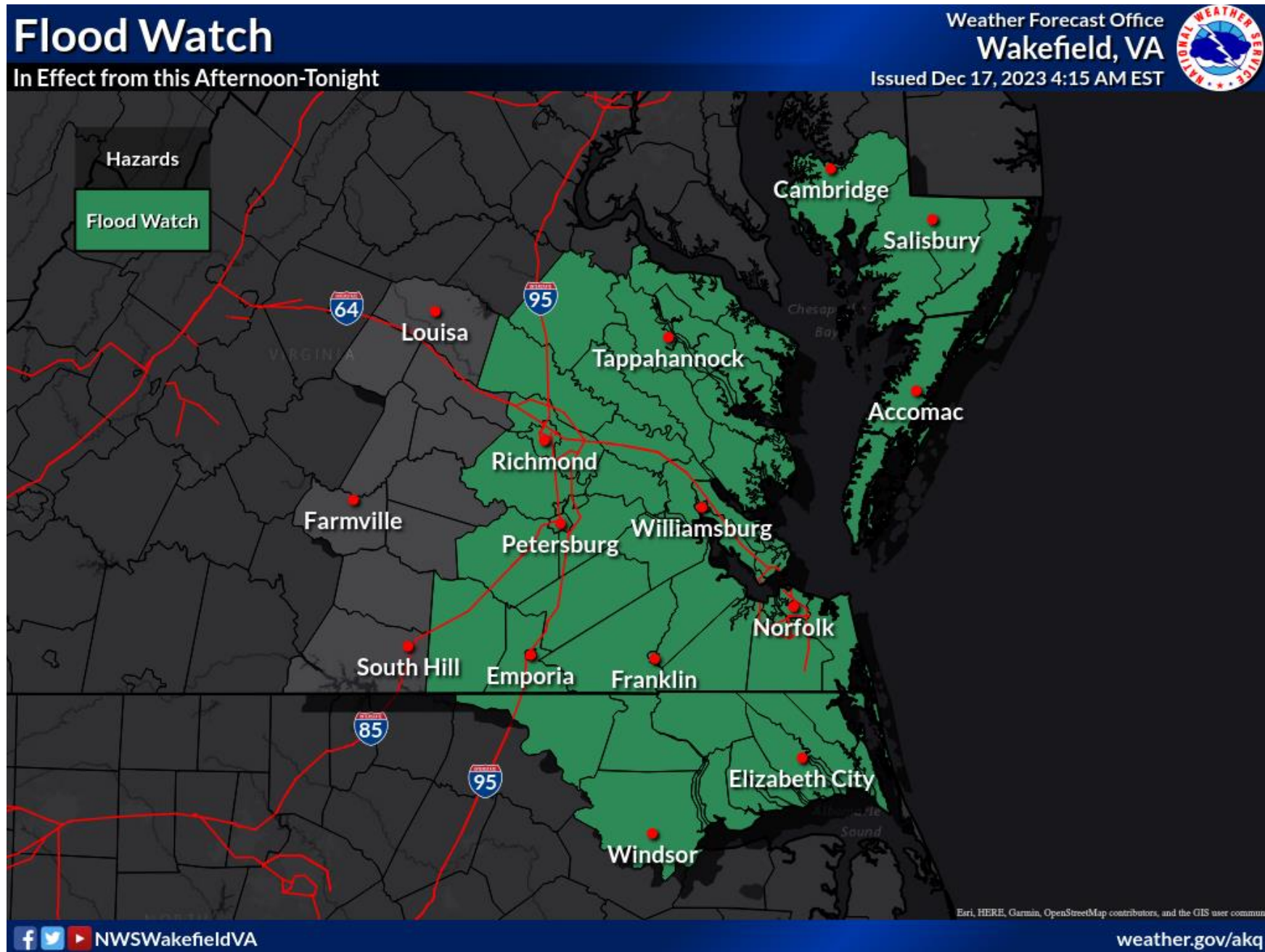
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Flood Watch

December 17, 2023
4:30 PM



- Widespread 2 to 4 inches of rain is expected with locally higher amounts possible.
- Rain will continue into Monday morning. Heaviest rain will likely be this evening-tonight.
- Periods of heavy rain may limit visibility, especially combined with 30-40 mph wind gusts. Heavy rain may also lead to localized flooding in urban/poor drainage areas.





Expected Rainfall Forecast

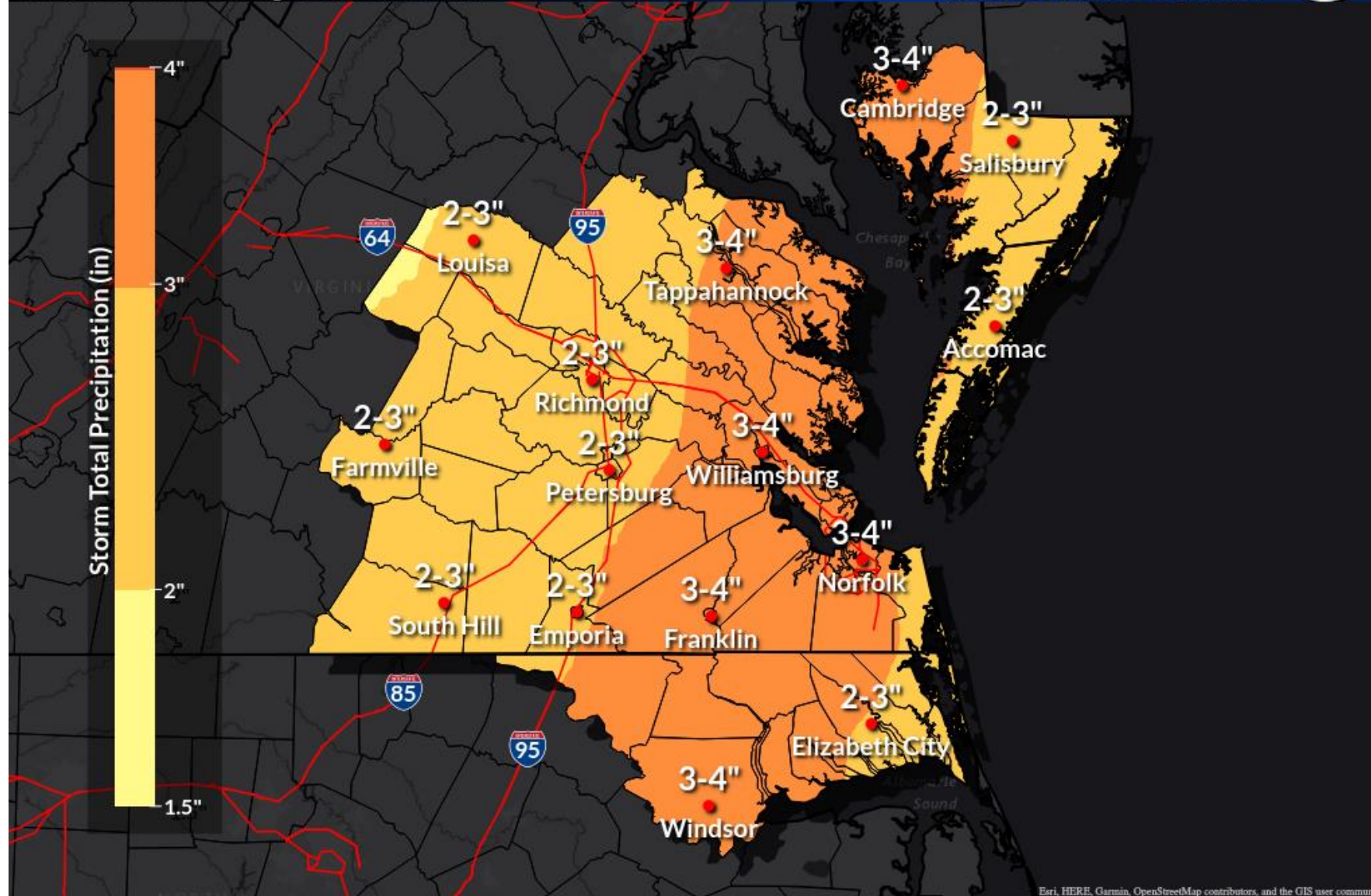
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4:30 PM

72-hour Precipitation Amount

Valid Sun 7:00PM through Wed 7:00PM EST

Weather Forecast Office
Wakefield, VA

Issued Dec 17, 2023 4:02 PM EST



- Widespread 2 to 3 inches of rain inland and 3 to 4 inches near the coast with locally higher amounts possible.
- Rain will continue into Monday morning. Heaviest rain will likely be Sunday evening/Sunday night.
- Periods of heavy rain may limit visibility, especially combined with 30-40 mph wind gusts. Heavy rain may also lead to localized flooding in vulnerable areas.

NWSWakefieldVA

weather.gov/akq



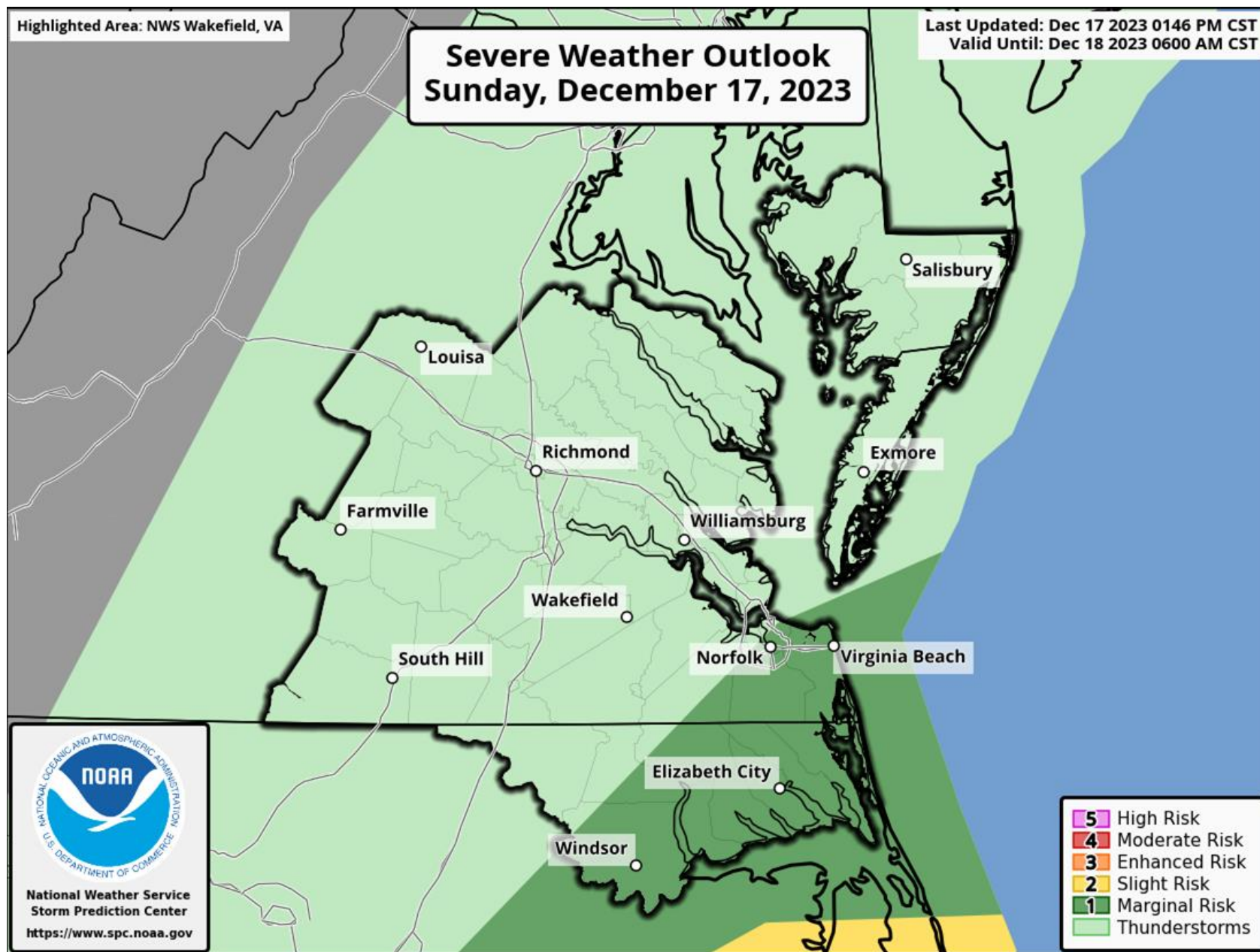
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Severe Threat - This Evening

December 17, 2023
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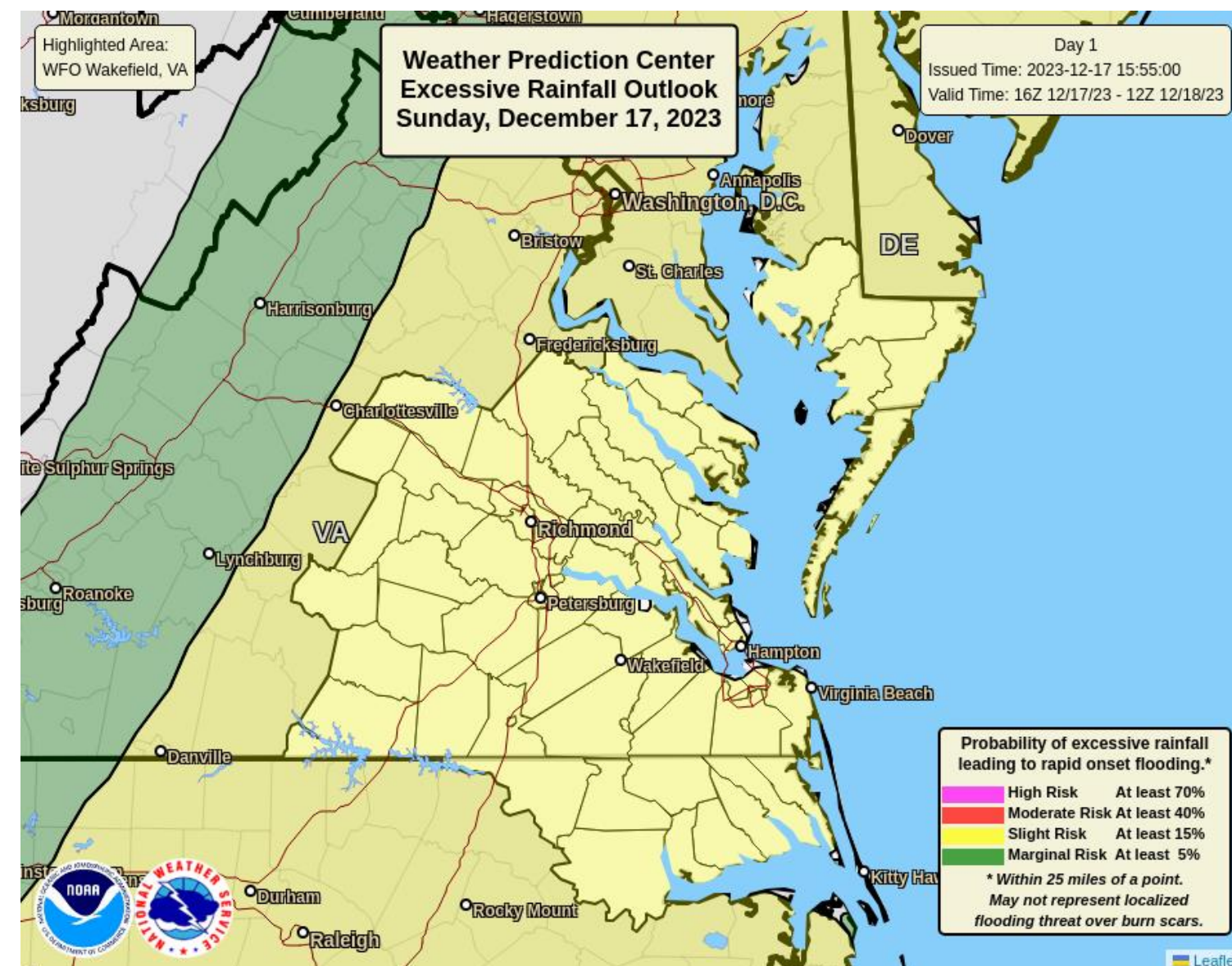
- There is a marginal risk for a few isolated severe thunderstorms across far southeast Virginia and northeast North Carolina late this evening.
- The main threat is damaging wind gusts to around 60 mph. However, cannot rule out an isolated tornado.





Flood Threat - Today/Tonight

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4:30 PM



- There is a slight risk for flash flooding across the entire area through tonight.
- Urban areas will be at greatest risk for flooding.

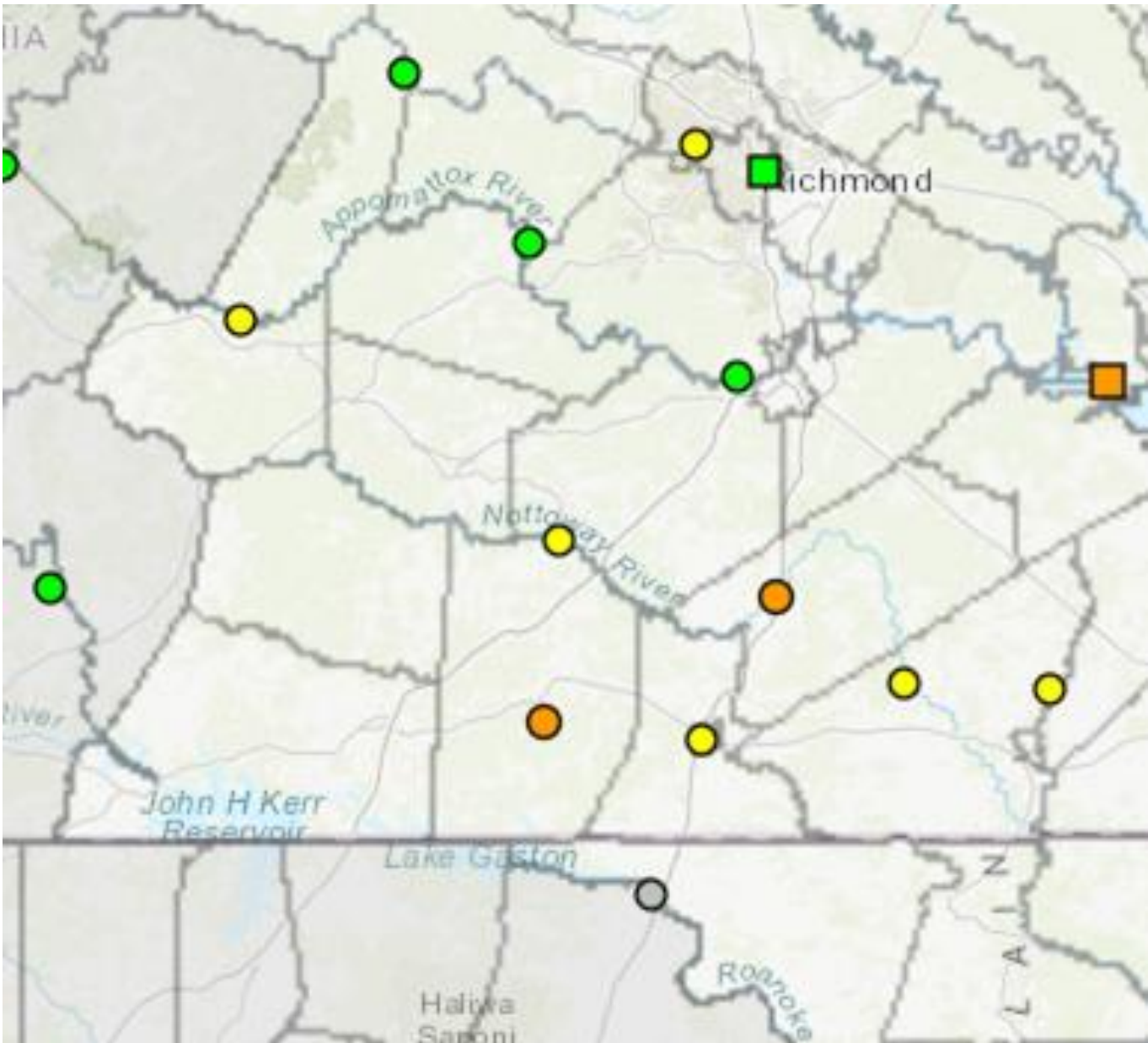
<u>MARGINAL</u>	<u>SLIGHT</u>	<u>MODERATE</u>	<u>HIGH</u>
Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected





Minor River Flooding Possible

December 17, 2023
4:30 PM



- River points highlighted in yellow and orange have the potential to see nuisance to minor flooding from the upcoming rainfall.
- Nuisance to minor flooding is also possible for portions of the Blackwater River and Chickahominy River (near Providence Forge).

Major Flooding
Moderate Flooding
Minor Flooding
Near Flood Stage
No Flooding
Forecasts Are Not Current
No Forecast Within Selected Timeframe
Out of Service





High Wind Potential

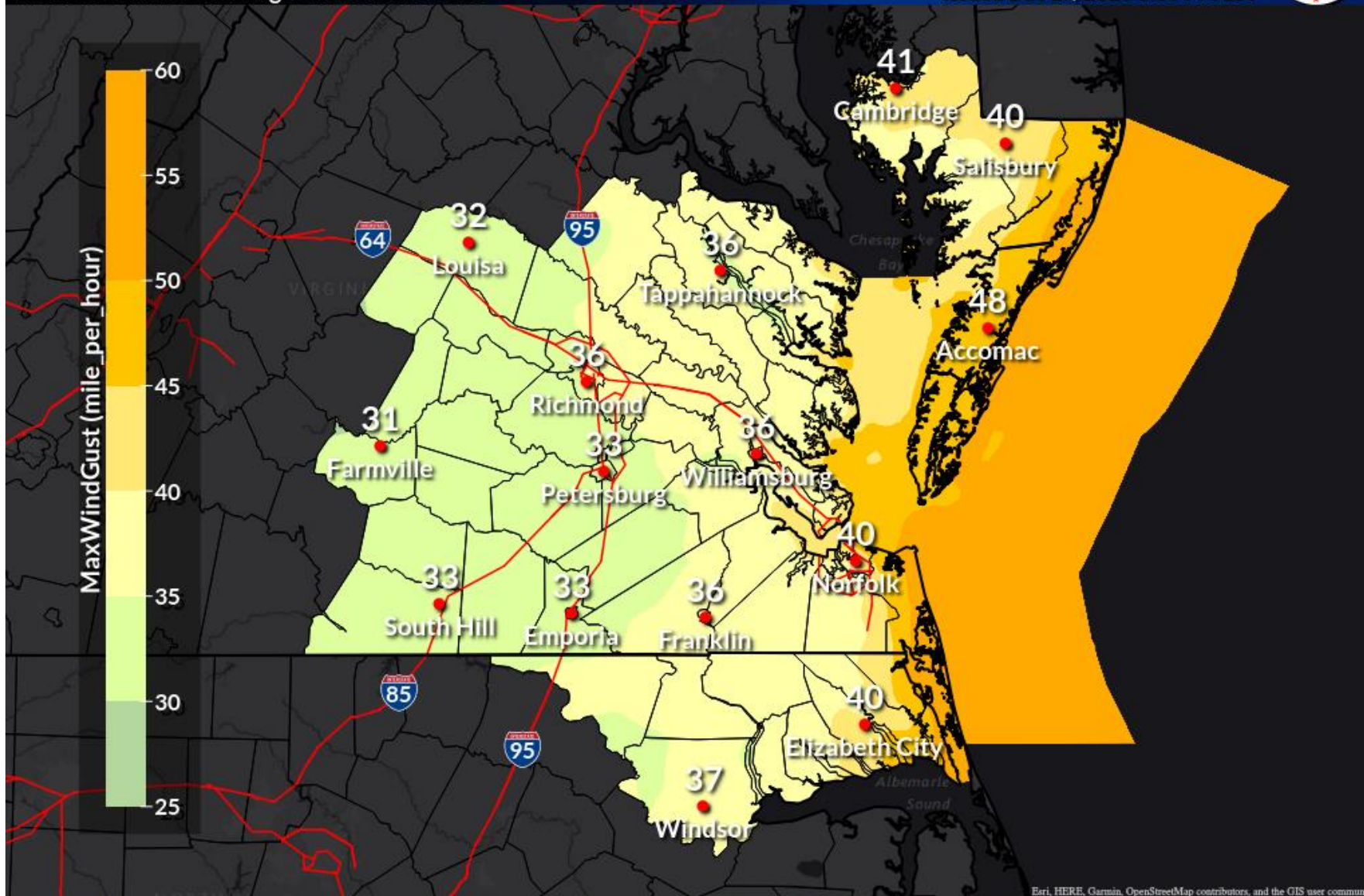
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Max Wind Gust Through 72 Hrs

Valid Sun 7:00AM through Wed 7:00PM EST

Weather Forecast Office
Wakefield, VA

Issued Dec 17, 2023 3:30 PM EST



f t NWSWakefieldVA

weather.gov/akq

- Gusty southeast winds are expected through Monday morning, becoming westerly and remaining gusty Monday afternoon.
- Highest wind gusts (45-55 mph) are expected along the coast this evening-early Monday morning. Wind Advisories are in effect for areas along the coast, and the western shore of the Chesapeake Bay.
- Downed tree limbs/power lines could result in isolated to scattered power outages



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Timing of Wind and Rain (wind in mph)

December 17, 2023
4:30 PM

	Wind Gust Forecast										Maximum
	12/17		12/18								
	Sun		Mon								
	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm		
Accomac	29↖	40↖	40↖	31↗	26↖	36↗	39↗	26↖	16↗	40	
Ahoski	29↖	21↖	16↖	17↘	26↖	32↗	28↖	21↗	14↗	32	
Bowling Green	12↗	18↖	21↓	23↓	28↖	32↖	29↖	23↖	17↗	32	
Cambridge	16↖	28↖	29↖	23↖	26↖	37↖	38↖	28↖	17↗	38	
Cape Charles	31↖	40↖	37↖	28↗	32↗	39↖	36↖	25↖	22↗	40	
Corolla	40↖	47↖	43↖	32↗	33↗	40↖	35↖	25↖	21↗	47	
Deltaville	23↖	31↖	23↖	17↗	26↖	36↖	32↖	22↖	17↗	36	
Edenton	31↖	28↖	18↖	16↖	26↖	32↖	28↖	21↖	15↗	32	
Elizabeth City	36↖	38↖	28↖	20↗	28↖	37↖	32↖	24↖	16↗	38	
Emporia	23↖	18↖	20↓	22↖	28↖	31↖	26↖	21↖	16↗	31	
Farmville	17↘	22↓	23↓	23↖	25↖	28↖	26↖	21↖	16↗	28	
Hampton / Newport News	30↖	33↖	24↖	17↗	28↖	36↖	32↖	23↖	18↗	36	
Louisa	12↘	18↓	22↓	23↖	26↖	30↖	28↖	22↖	17↗	30	
Norfolk / Portsmouth	31↖	35↖	25↖	18↗	26↖	36↖	32↖	22↖	16↗	36	
Ocean City	25↖	38↖	47↖	43↖	31↗	33↖	37↖	30↖	20↗	47	
Petersburg	21↖	21↖	21↓	22↖	28↖	31↖	26↖	22↖	17↗	31	
Richmond	18↖	21↖	21↓	24↖	30↖	33↖	30↖	24↖	20↗	33	
Salisbury	24↖	33↖	36↖	29↖	23↖	33↖	39↖	29↖	16↗	39	
South Hill	23↖	23↖	24↓	26↖	29↖	30↖	26↖	21↖	16↗	30	
Suffolk	28↖	25↖	17↖	15↖	25↖	33↖	31↖	23↖	16↗	33	
Tappahannock	15↖	21↖	17↖	16↓	24↖	30↖	26↖	21↖	15↗	30	
Virginia Beach	36↖	45↖	38↖	28↗	32↗	39↖	36↖	25↖	20↗	45	
Williamsburg	22↖	23↖	17↖	15↖	23↖	31↖	30↖	23↖	16↗	31	

*Table values in mph

**Created: 3 pm EST Sun 12/17/2023

	Rain Forecast					Total
	12/17		12/18			
	Sun		Mon			
	7pm	1am	7am	1pm	7pm	
Accomac	1.33	0.72	0.32	0	0	2.37
Ahoski	1.36	0.75	0.02	0	0	2.13
Bowling Green	1.90	0.41	0.02	0	0	2.33
Cambridge	1.51	1.43	0.21	0	0	3.15
Cape Charles	1.26	0.84	0.24	0	0	2.34
Corolla	0.65	0.47	0.36	0	0	1.48
Deltaville	1.67	1.13	0.16	0	0	2.96
Edenton	0.98	1.09	0.02	0	0	2.09
Elizabeth City	0.84	1.07	0.14	0	0	2.05
Emporia	1.42	0.40	0.01	0	0	1.83
Farmville	1.28	0.08	0	0	0	1.36
Hampton / Newport News	1.32	0.94	0.14	0	0	2.40
Louisa	1.49	0.20	0	0	0	1.69
Norfolk / Portsmouth	1.18	1.12	0.18	0	0	2.48
Ocean City	0.92	0.71	0.41	0	0	2.04
Petersburg	1.59	0.40	0.01	0	0	2.00
Richmond	1.62	0.41	0.01	0	0	2.04
Salisbury	1.36	0.97	0.27	0	0	2.60
South Hill	1.30	0.09	0	0	0	1.39
Suffolk	1.31	0.89	0.11	0	0	2.31
Tappahannock	1.76	0.85	0.08	0	0	2.69
Virginia Beach	1.09	0.72	0.28	0	0	2.09
Williamsburg	1.43	1.01	0.11	0	0	2.55

*Table values in inches

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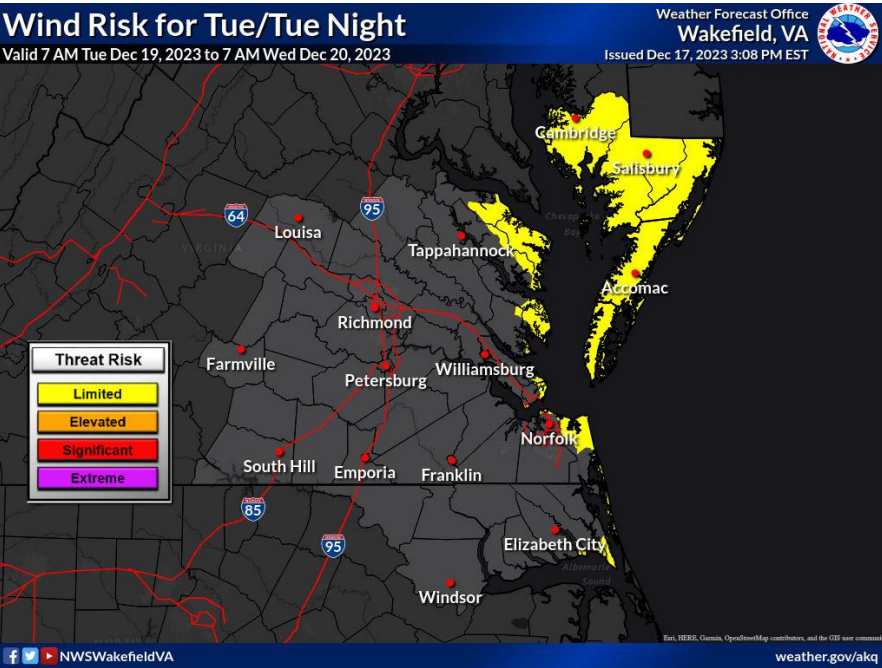
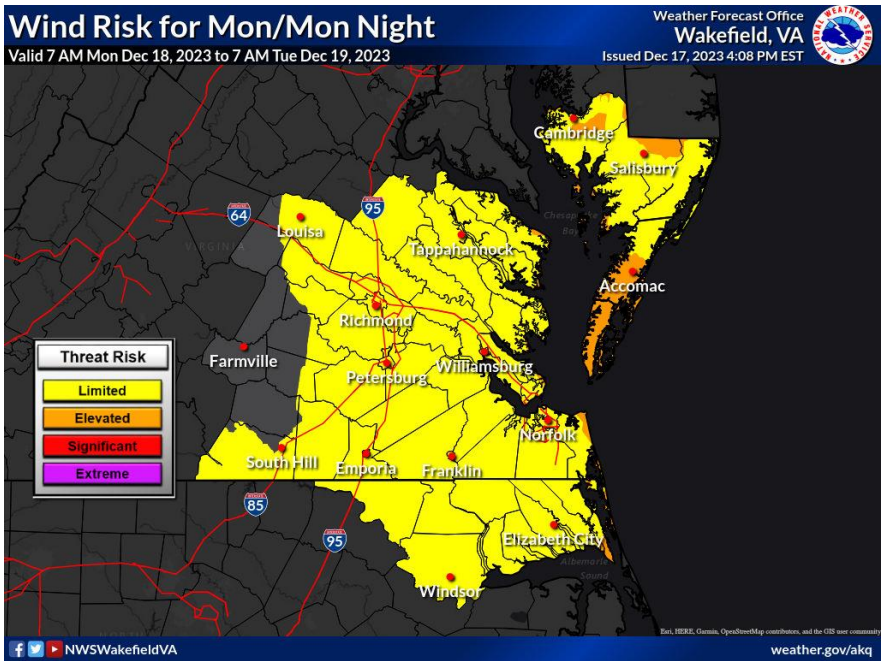
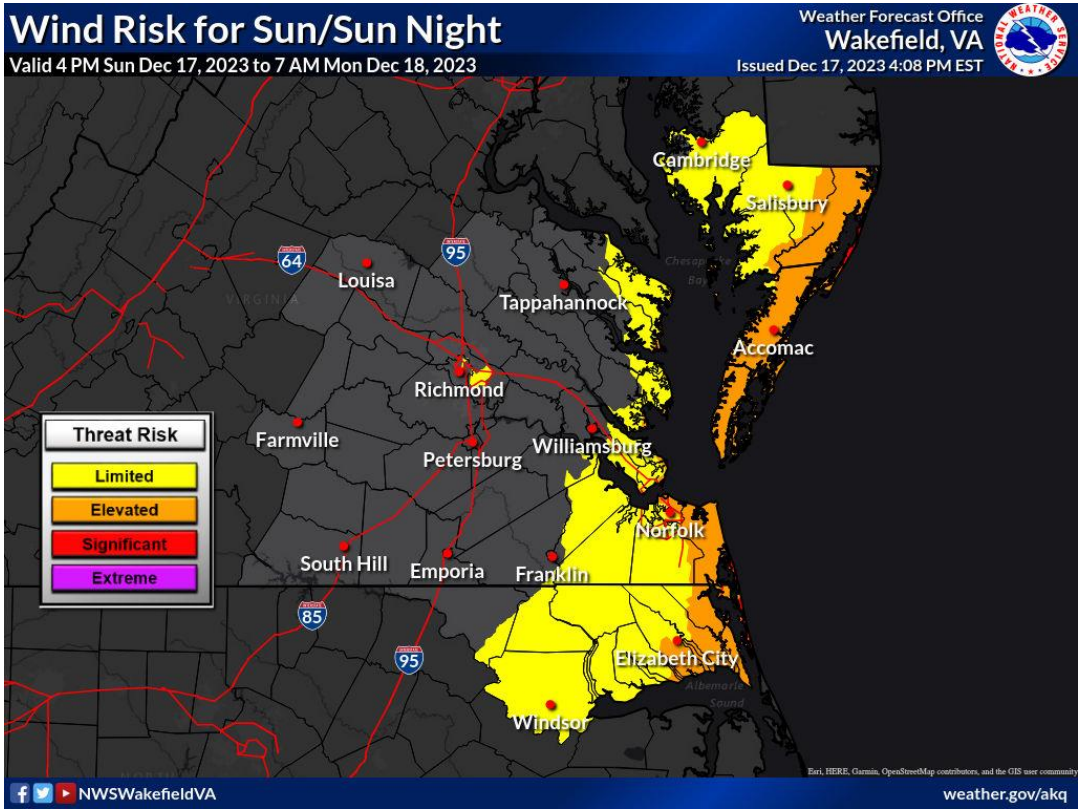
***Values are accumulations over the period beginning at the time shown.





High Wind Potential - Today to Tue

December 17, 2023
4:30 PM



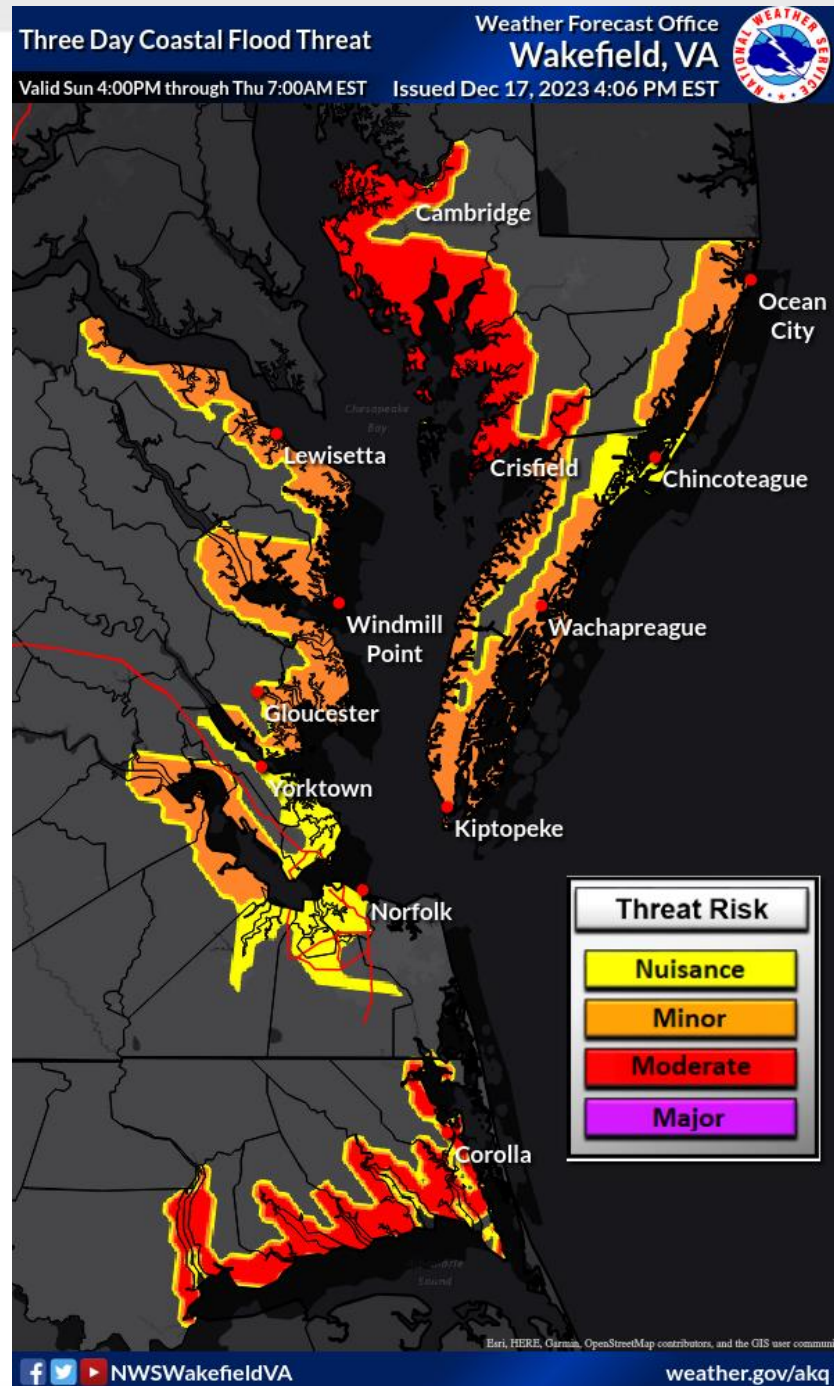
Limited	Breezy conditions with 30 to 40 mph wind gusts could blow around unsecured items and result in hazardous driving conditions for high-profile vehicles.
Elevated	Windy conditions with 40 to 50 mph wind gusts could damage light outdoor items, cause isolated power outages and result in hazardous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





Tidal Flooding Overview

December 17, 2023
4:30 PM



- Nuisance to minor tidal flooding is possible in most areas during the high tide cycles this evening and again Monday morning.
- Moderate tidal flooding (inundation of 1-2 ft AGL in vulnerable areas) is possible during the Monday morning high tide cycle in the red highlighted area from Lewisetta, VA-Cambridge, MD).
- Minor to moderate tidal flooding is also possible on the north side of the Albemarle Sound.

[Coastal Flood Webpage](#)



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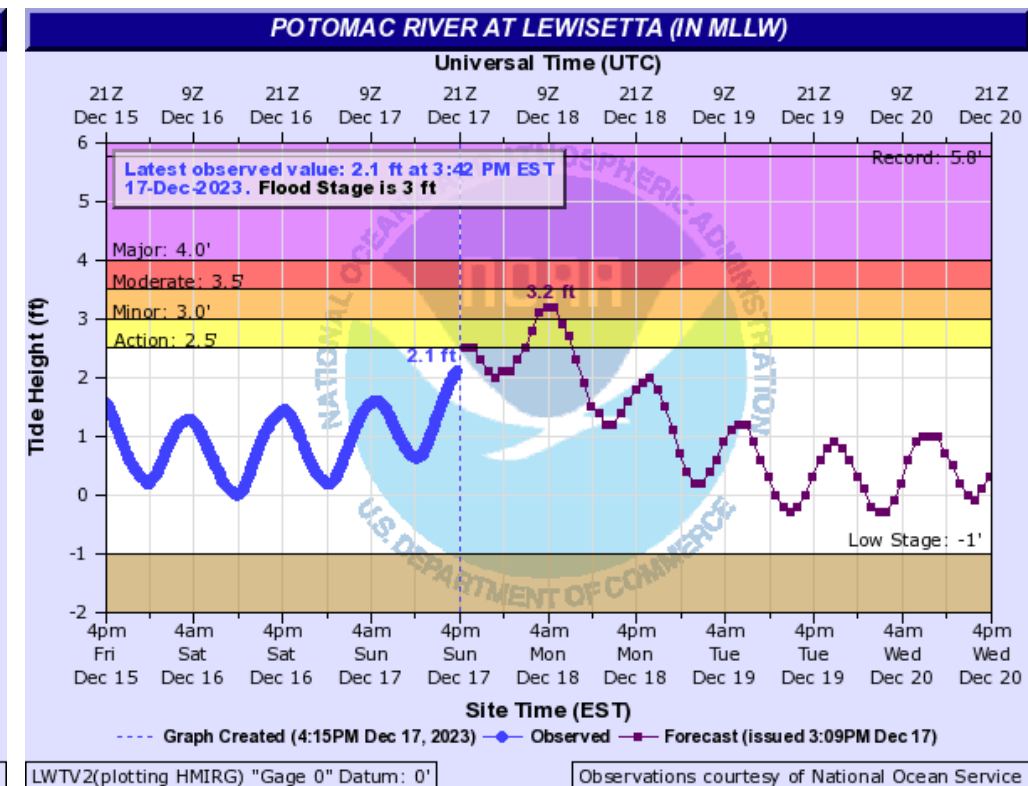
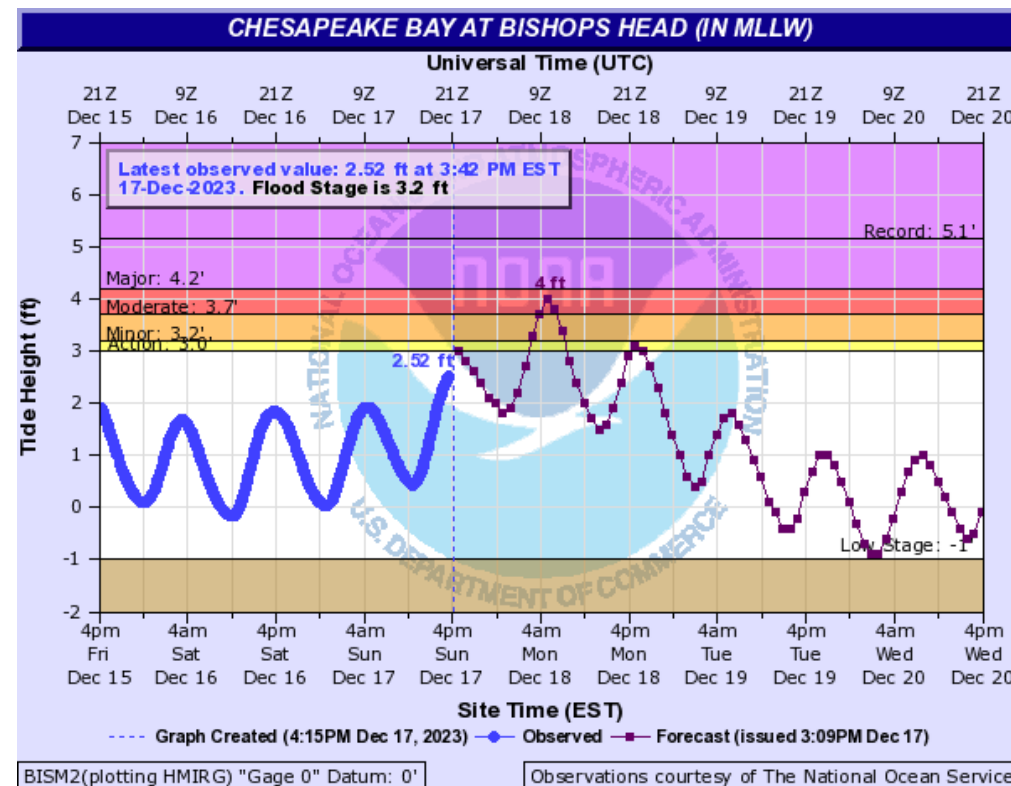
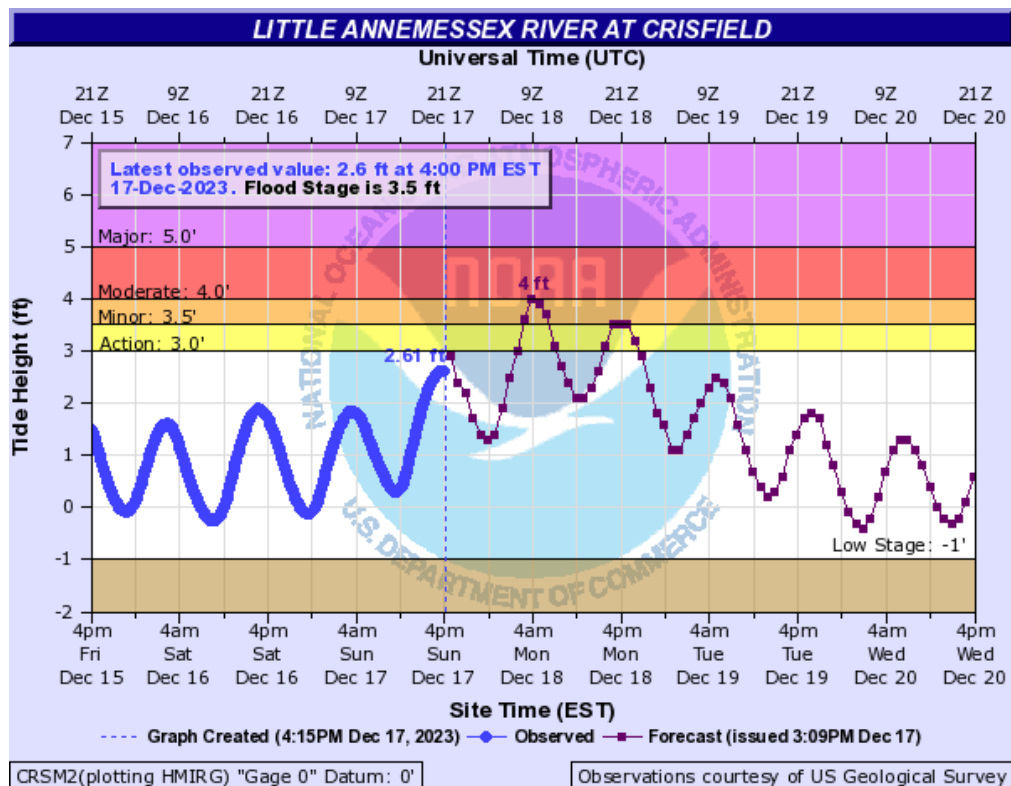
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Tidal Overview - Upper Bay

December 17, 2023
4:30 PM

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



Summary of Tidal Trends

- Minor to moderate tidal flooding is possible early-mid Monday morning. This corresponds to inundation of 1-2 feet above ground level in vulnerable areas.
- Widespread flooding of vulnerable areas may result in an elevated threat of property damage.

[Coastal Flood Webpage](#)

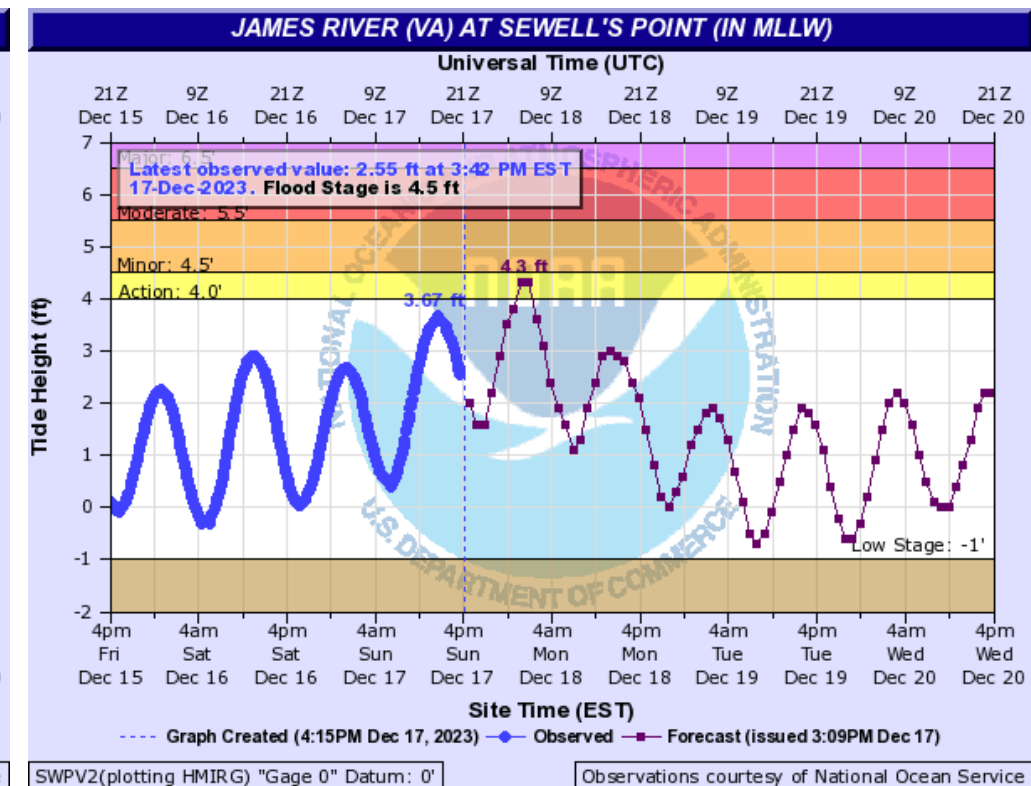
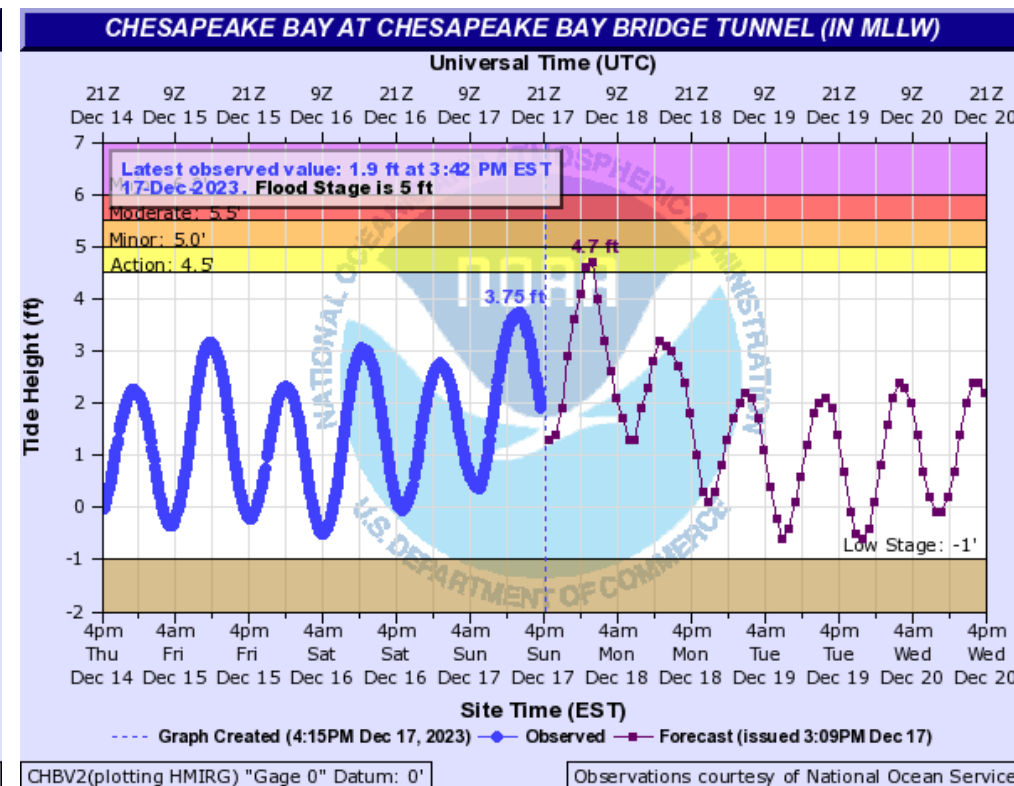
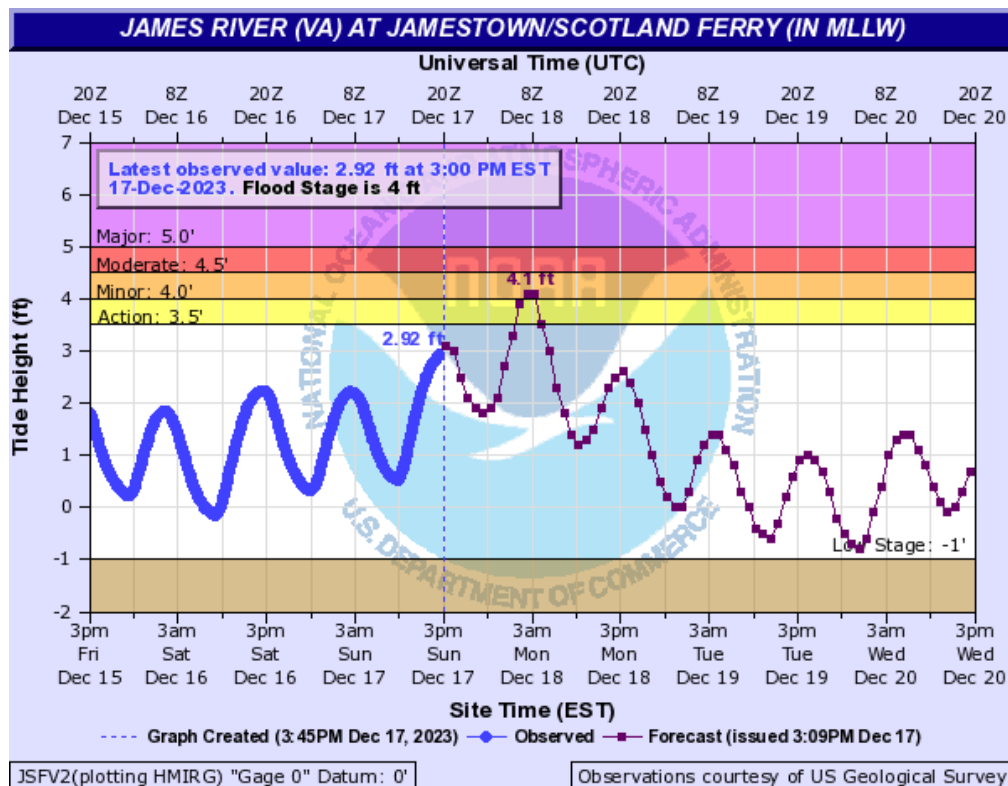




Tidal Overview - Lower Bay/James

December 17, 2023
4:30 PM

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



Summary of Tidal Trends

- Nuisance to minor tidal flooding is possible this evening and again early Monday morning. This corresponds to inundation of up to 1 foot above ground level in vulnerable areas.
- Shallow flooding in the most vulnerable locations near the waterfront and shoreline resulting in a low threat of property damage.

[Coastal Flood Webpage](#)

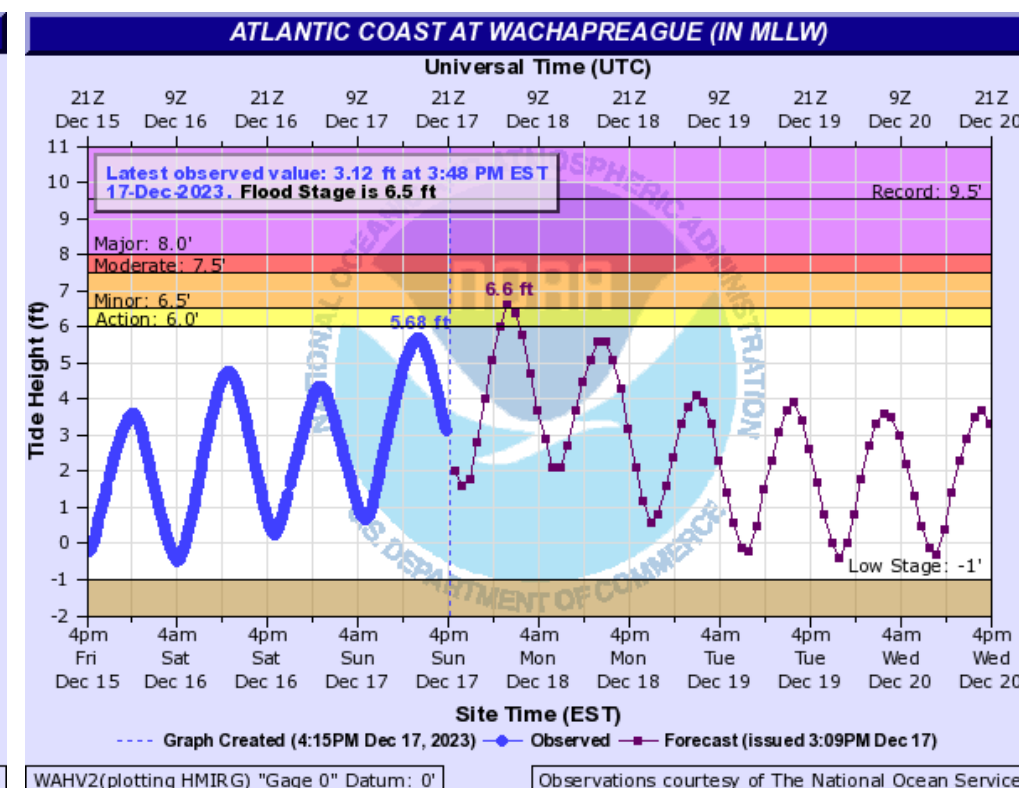
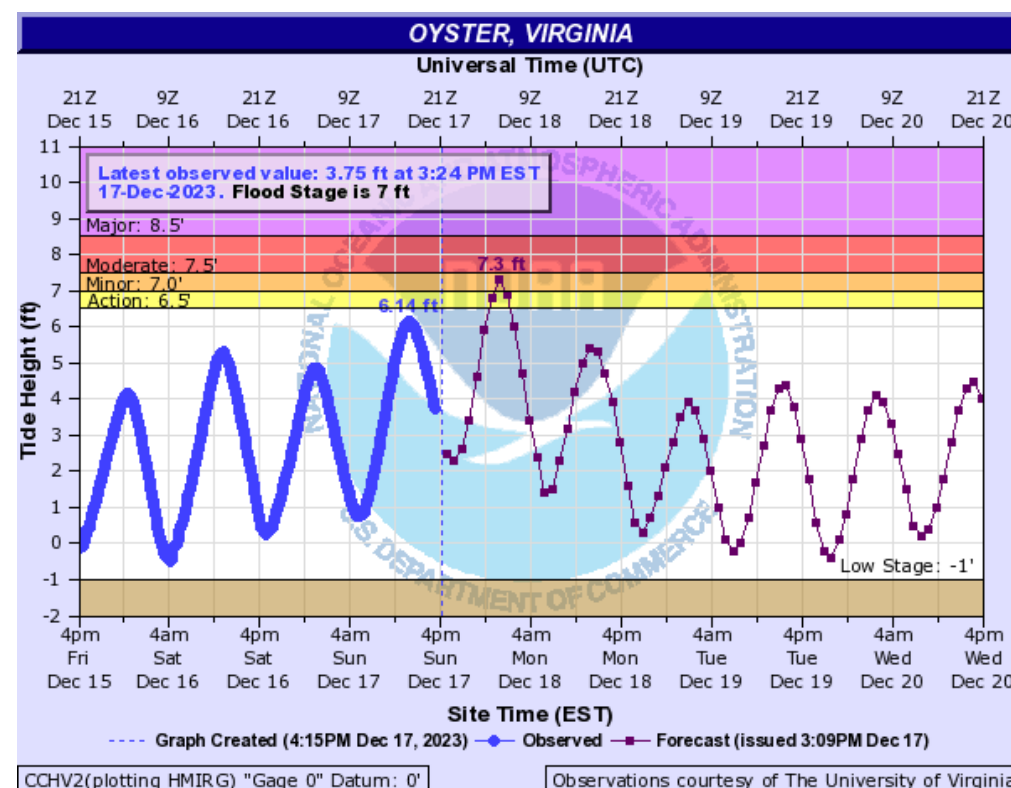
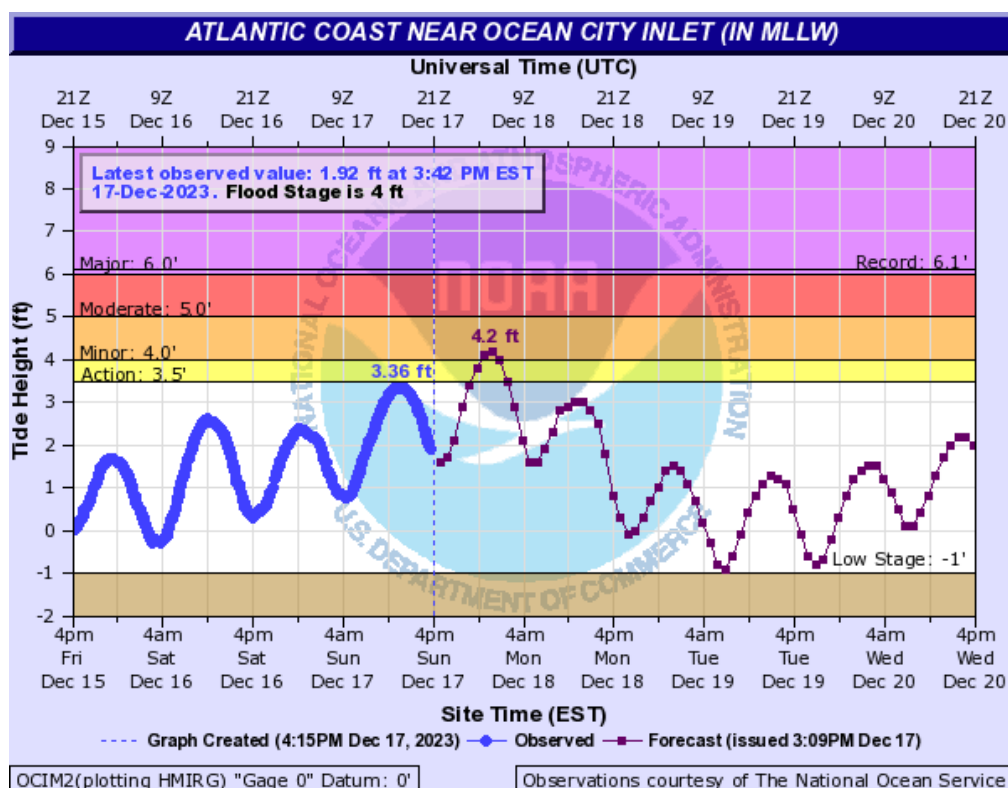




Tidal Overview - Ocean

December 17, 2023
4:30 PM

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



Summary of Tidal Trends

- Nuisance to minor tidal flooding is possible this evening and again early Monday morning. This corresponds to inundation of up to 1 foot above ground level in vulnerable areas.
- Shallow flooding in the most vulnerable locations near the waterfront and shoreline resulting in a low threat of property damage.

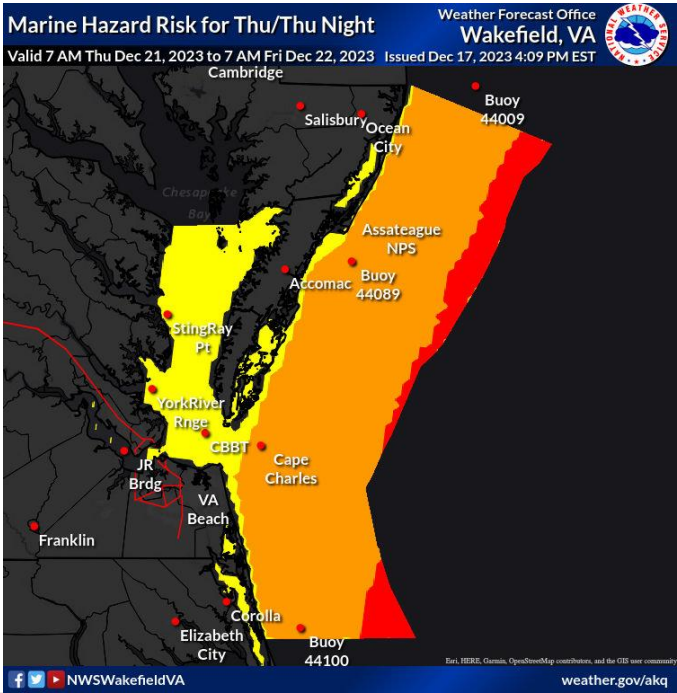
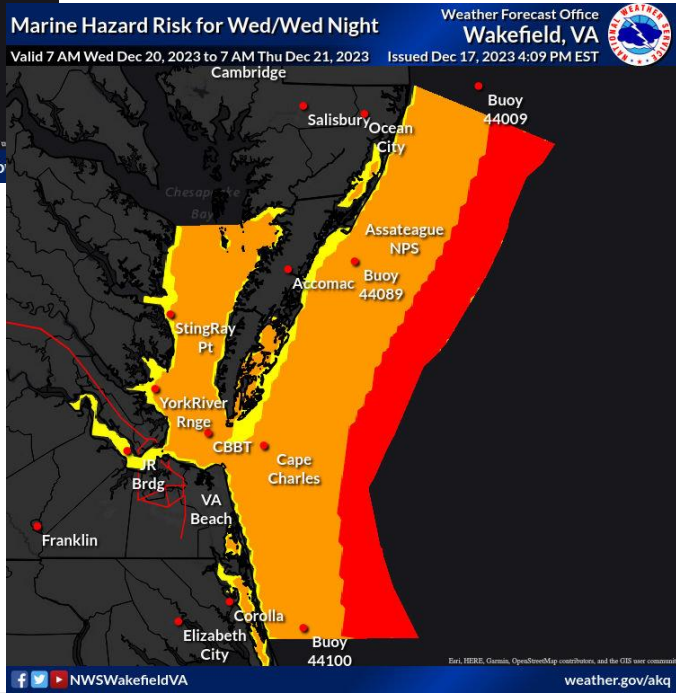
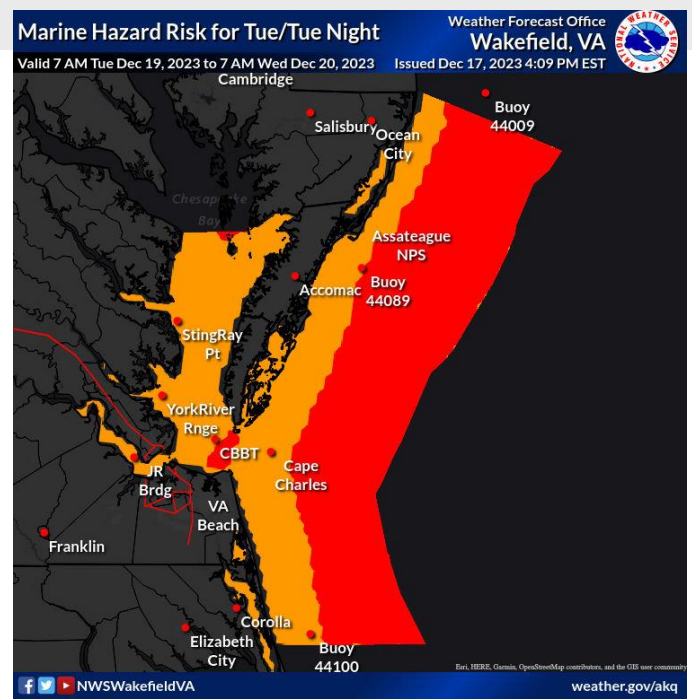
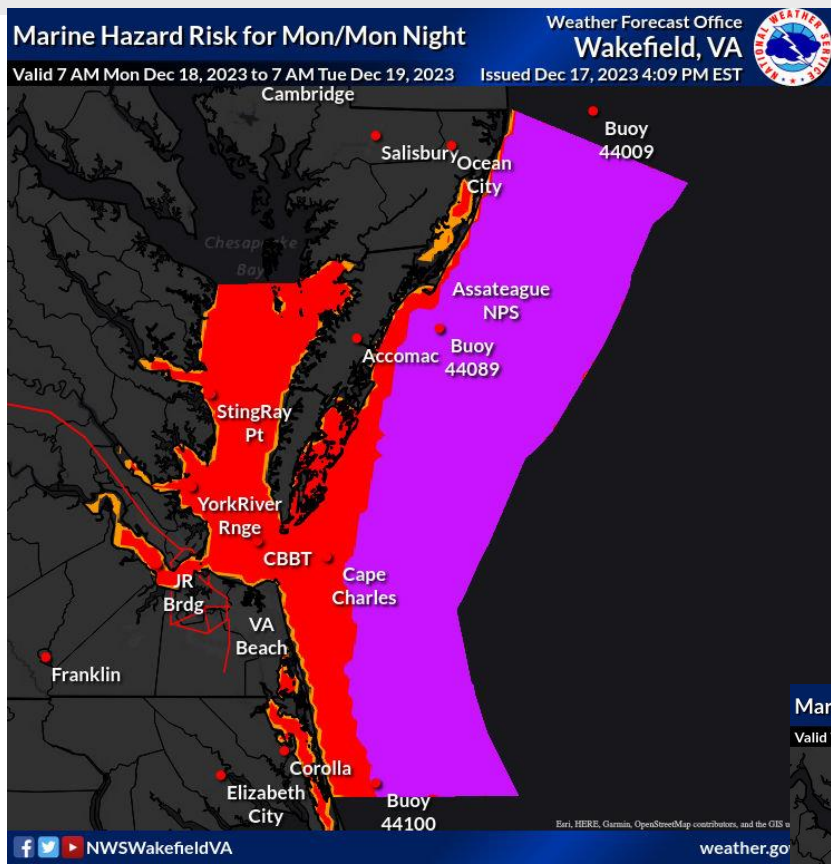
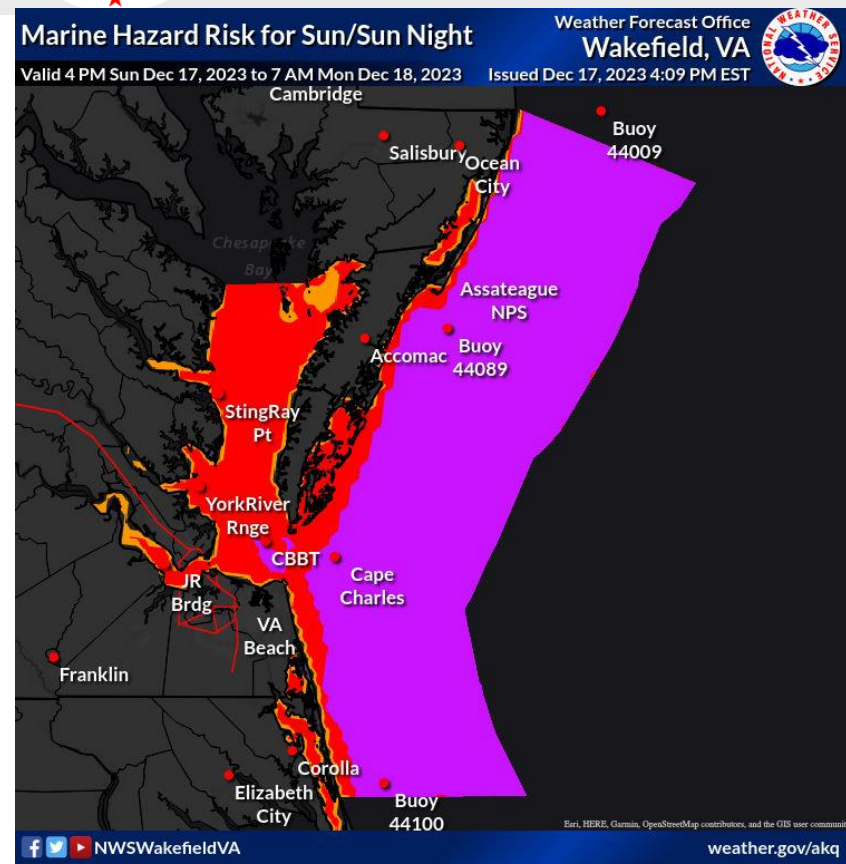
[Coastal Flood Webpage](#)





Marine Threat Potential - Next 5 Days

December 17, 2023
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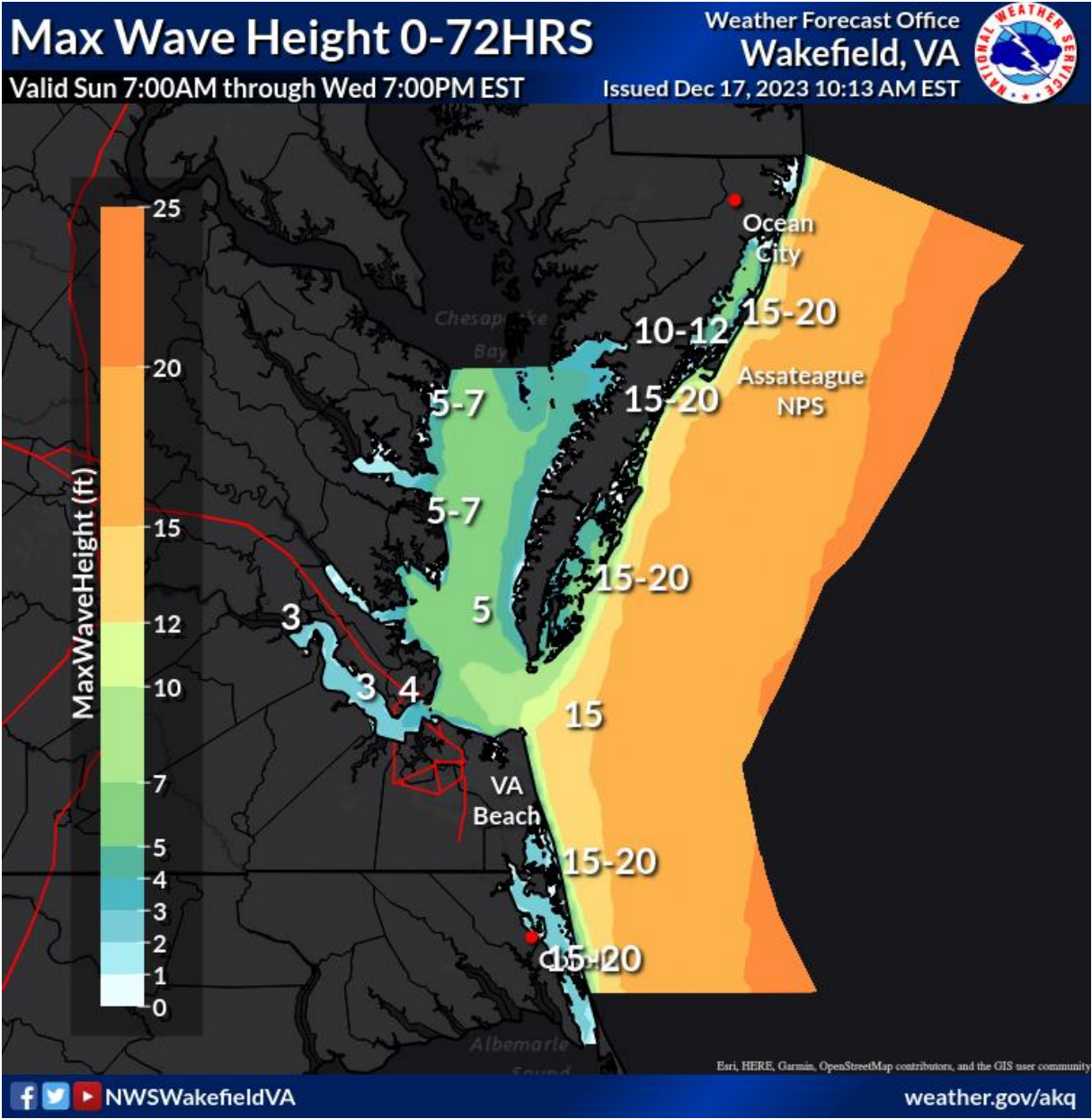
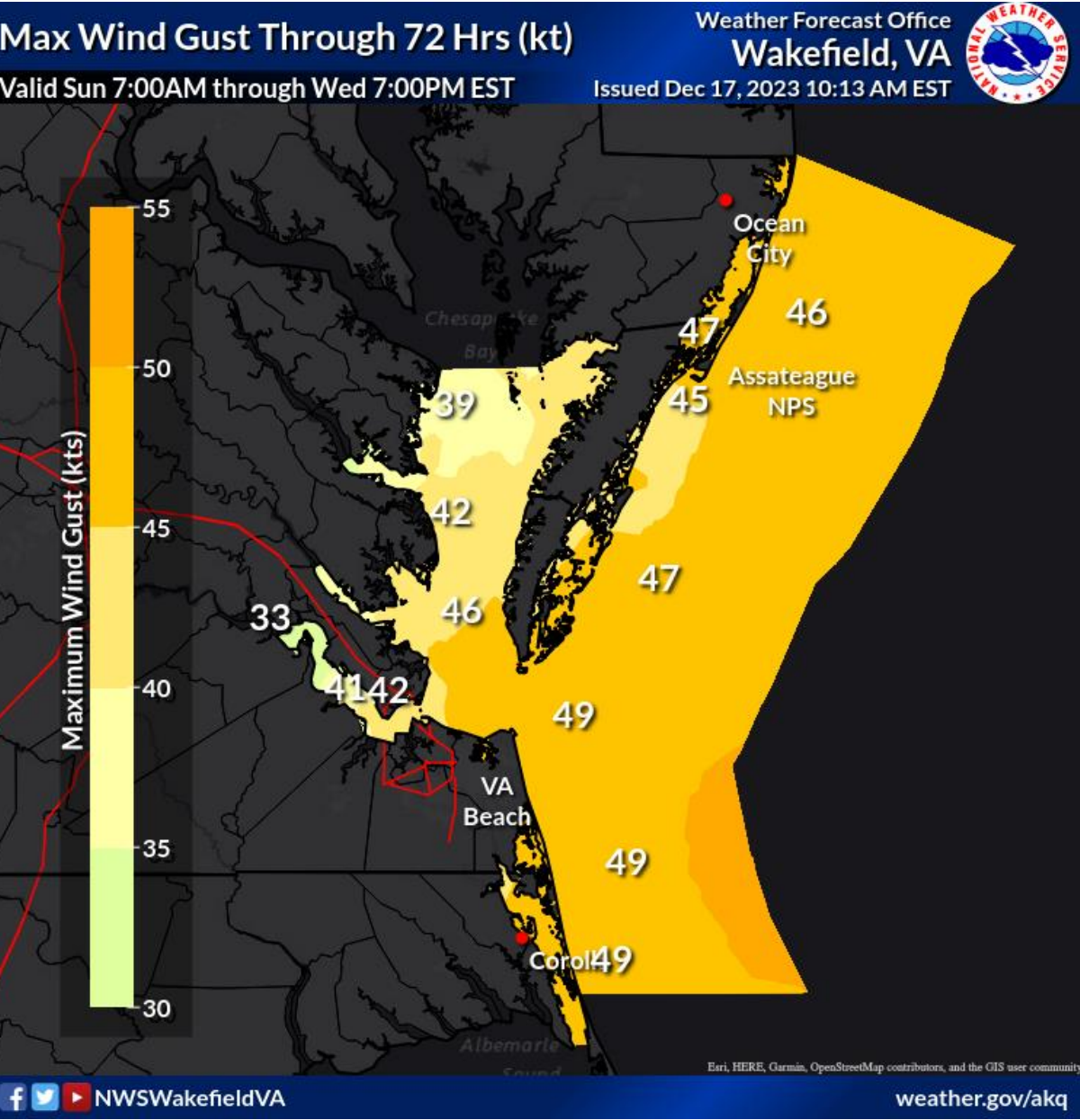
Limited	Wind Gusts \geq 20 knots (15 kt Bay & rivers) and/or Waves \geq 4 feet (2 ft Bay & rivers).
Elevated	Wind Gusts \geq 25 knots (20 kt Bay & rivers) and/or Waves \geq 5 feet (\geq 4 ft Bay & rivers).
Significant	Wind Gusts \geq 34 knots and/or Waves \geq 8 feet (\geq 5 ft Bay & rivers).
Extreme	Wind Gusts \geq 48 knots and/or Waves \geq 12 feet (\geq 8 ft Bay & rivers).





Marine Wind and Waves

December 17, 2023
4:30 PM



Key Points:

- Southeast winds will quickly increase this evening. Gusts to 40 to 50 kt are expected late afternoon-most of tonight.
- Dangerous seas of 12-18 feet are expected from this evening-most of Monday.
- Winds become W at 25-30 kt with gusts to 35-40 kt on Monday.

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



Regional Marine Forecasts (wind in kt)

December 17, 2023
4:30 PM

Wind Gust Forecast

	12/17 Sun		12/18 Mon								Maximum
	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	9pm	
CBBT	31↔	39↔	36↔	26↗	29→	36→	32→	24→	22→	23→	39
Cape Henry	31↔	40↔	38↔	28↗	31→	37→	33→	24→	22→	24→	40
Chesapeake Light	32↔	41↔	42↔	33↗	28→	37→	35→	26→	23→	25→	42
Chincoteague Shoal	26↔	35↔	41↔	36↗	26↗	31→	34→	29→	21→	19→	41
Duck, NC	33↔	40↔	38↔	29↗	28→	35→	30→	23→	20→	20→	40
Fenwick Shoal	18↔	31↔	40↔	37↗	26↗	23↗	31→	28→	20→	17→	40
HRBT	29↔	36↔	27↔	19↗	27→	35→	30→	23→	20→	20→	36
JRB	29↔	35↔	26↔	19↗	27→	35→	30→	23→	20→	20→	35
New Point Comfort	24↔	34↔	30↔	23↗	28→	35→	31→	22→	19→	21→	35
Parramore Banks	27↔	36↔	41↔	33↗	25↗	33→	34→	24→	19→	20→	41
Rappahannock Light	23↔	32↔	31↔	24↗	27→	34→	32→	22→	18→	21→	34
Tangier	22↔	31↔	31↔	22↗	27→	35→	34→	23→	17→	20→	35
Thimble Shoal	29↔	36↔	31↔	24↗	29→	35→	31→	24→	21→	22→	36

*Table values in kt

**Created: 3 pm EST Sun 12/17/2023

Wave Height Forecast

	12/17 Sun		12/18 Mon								Maximum
	6pm	9pm	12am	3am	6am	9am	12pm	3pm	6pm	9pm	
CBBT	7.0	7.0	7.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0	7.0
Cape Henry	9.0	12.0	11.0	10.0	10.0	9.0	9.0	8.0	7.0	7.0	12.0
Chesapeake Light	11.0	14.0	14.0	14.0	13.0	12.0	11.0	10.0	9.0	9.0	14.0
Chincoteague Shoal	8.0	12.0	14.0	14.0	13.0	13.0	12.0	11.0	10.0	9.0	14.0
Duck, NC	11.0	12.0	11.0	11.0	10.0	10.0	9.0	8.0	7.0	7.0	12.0
Fenwick Shoal	8.0	12.0	15.0	16.0	15.0	15.0	14.0	13.0	13.0	12.0	16.0
HRBT	4.0	4.0	3.0	2.0	3.0	3.0	3.0	3.0	2.0	2.0	4.0
JRB	3.0	4.0	2.0	2.0	3.0	3.0	3.0	3.0	2.0	2.0	4.0
New Point Comfort	5.0	5.0	5.0	4.0	3.0	3.0	3.0	3.0	2.0	2.0	5.0
Parramore Banks	9.0	12.0	14.0	13.0	12.0	12.0	11.0	10.0	9.0	9.0	14.0
Rappahannock Light	4.0	4.0	4.0	4.0	4.0	5.0	4.0	4.0	3.0	3.0	5.0
Tangier	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	3.0	3.0	4.0
Thimble Shoal	6.0	6.0	7.0	6.0	5.0	5.0	4.0	4.0	3.0	3.0	7.0

*Table values in feet

**Created: 3 pm EST Sun 12/17/2023

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

**Peak wind gusts will likely reach 50 kt this evening
into early Monday morning**





Key Messages

December 17, 2023

4:30 PM

- Moderate to heavy rain is expected to continue through Monday morning with a widespread 2-4" (locally higher) expected. This may lead to localized flooding, especially in urban areas and areas with poor drainage.
- Strong southeast winds expected through Monday. Strongest wind gusts will be this evening with 45-55 mph gusts expected near the coast and 25-40 mph gusts expected inland. Wind advisories remain in effect for areas near the bay/coast. Localized power outages are possible.
- Moderate coastal flooding is forecast in the middle/upper Chesapeake Bay as well as the north side of the Albemarle Sound with nuisance to minor flooding elsewhere. Highest tide would be Monday morning (water levels peak tonight from Edenton-Elizabeth City).
- Marine: Gale Warnings are in effect across all marine zones this afternoon into early Monday afternoon. Strong southeast winds will gust 40-50 kt this evening-tonight. Winds become west on Monday with 35-40 kt gusts expected. Seas build to 12-18 ft.





Contact and Next Briefing Information

December 17, 2023
4:30 PM

For NWS Wakefield, Virginia



Briefing Webpage

→ [NWS Wakefield Briefing](#)



Next Briefing

→ This is the last briefing for this event



Disclaimer

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



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