

Weekend Storm Briefing

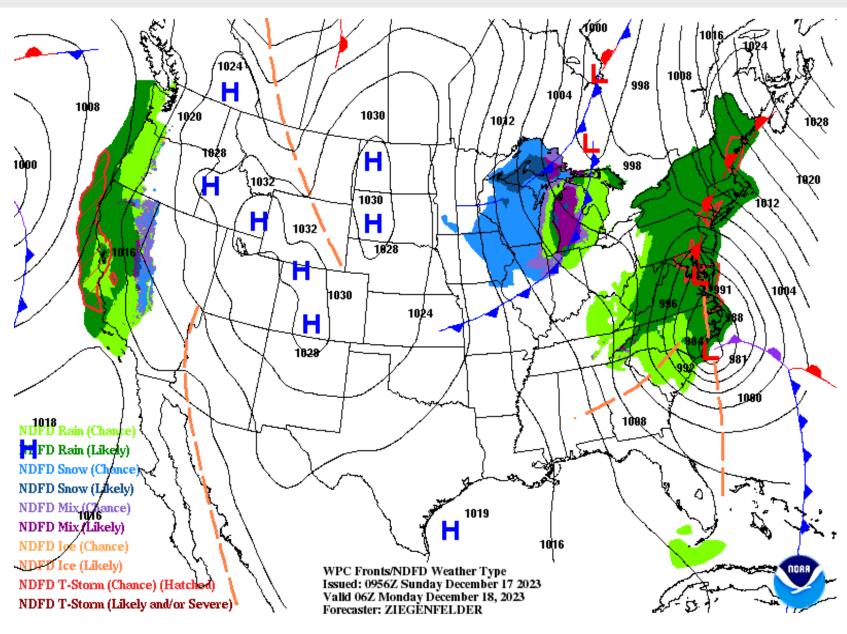
Prepared by National Weather Service Wakefield, VA

Decision Support Briefing #4

→ As of 9:00 AM EST Sunday, December 17, 2023

NEW Important Updates

- → Coastal Flood Warnings in effect for the north side of the Albemarle Sound and bay side of the Lower Maryland Eastern Shore with Coastal Flood Advisories for the rest of the coastline.
- → Wind Advisories are now in effect from Elizabeth City eastward in NE NC and up the coast.



Disclaimer: Information may become outdated after briefing time.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





Key Messages

- Moderate to heavy rain is expected later today 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 this afternoon 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.
- Potential for moderate coastal flooding in the middle/upper Chesapeake Bay as well as the north side of the Albemarle Sound and nuisance to minor flooding elsewhere. Highest tide would be Monday morning (water levels likely 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.





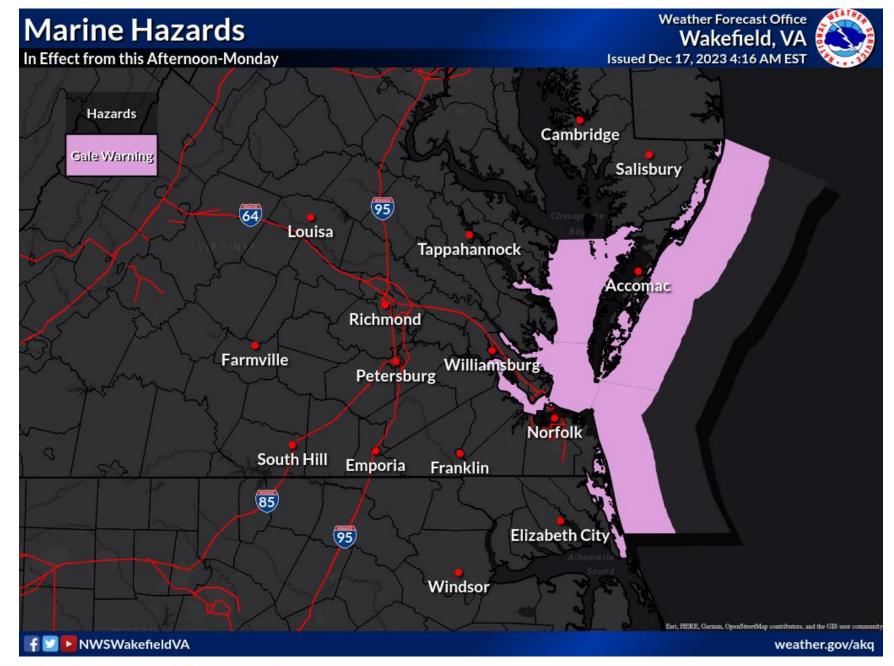
Summary of Greatest Impacts

Hazard	Impacts	Location	Timing				
Heavy Rain	Rainfall of 2-4" (locally higher) may lead to localized flooding, especially in urban areas	Entire forecast area	Later today through Monday morning				
High Wind	Gusts of 45 to 55 mph may result in localized power outages	Near/along the coast	This afternoon into 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	This evening 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.	Tonight through Monday morning				
Marine	Strong SE winds with gusts of 40-50 kt and seas 12-18 ft	All waters coastal and nearshore waters	This afternoon into Monday morning. Highest winds this evening.				





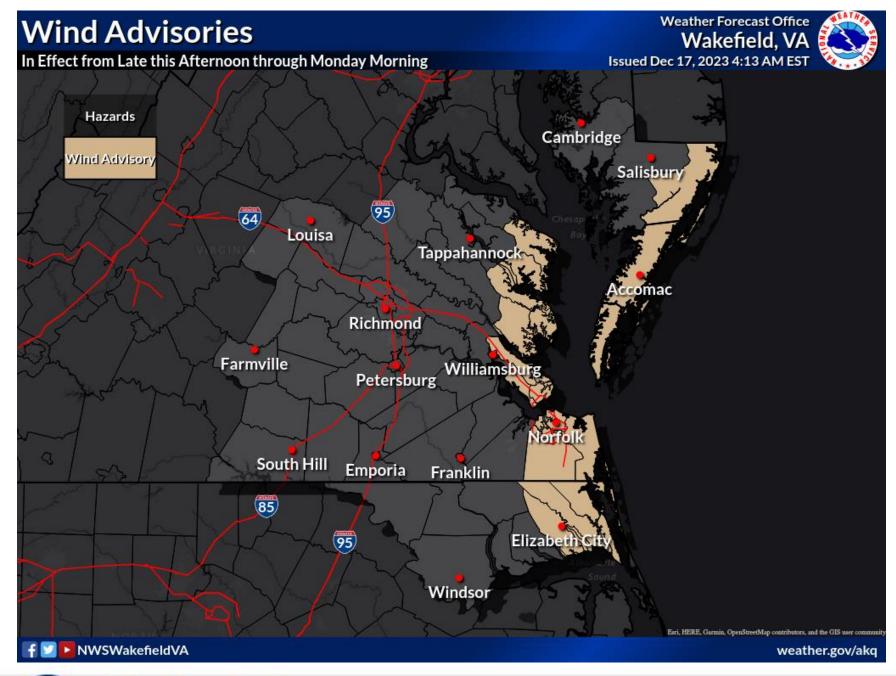
Marine Wind Hazard Overview



- 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 <u>www.weather.gov/akq</u> for the latest information



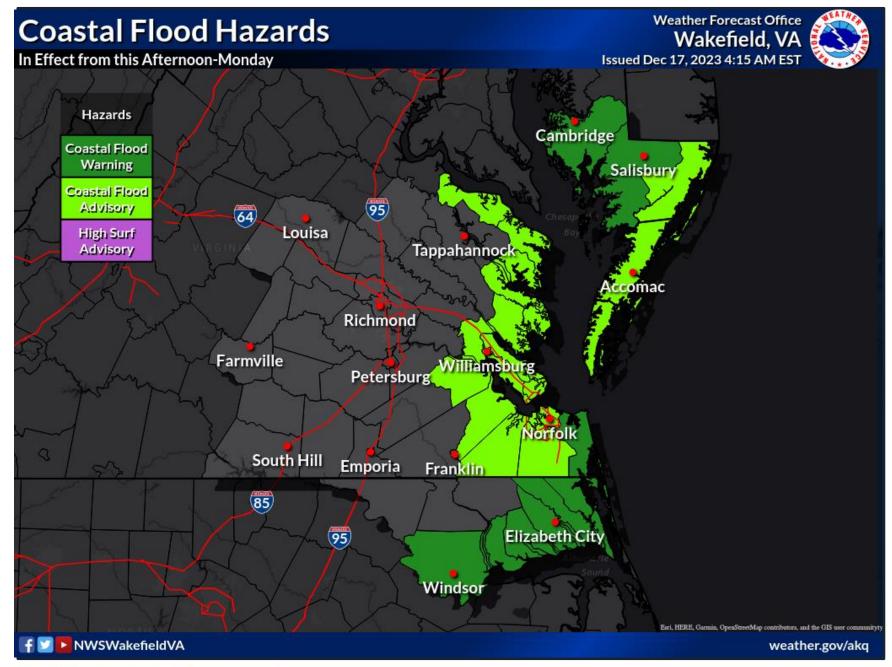
Land Wind Hazard Overview



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



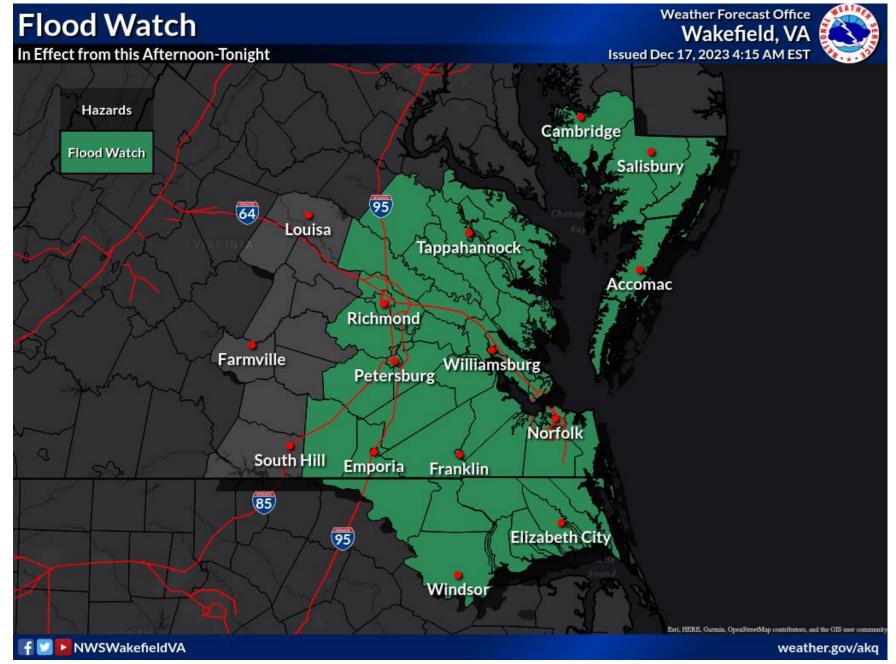
Coastal Flood Hazard Overview



- Coastal Flood Warnings have been issued 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 <u>www.weather.gov/akq</u> for the latest information



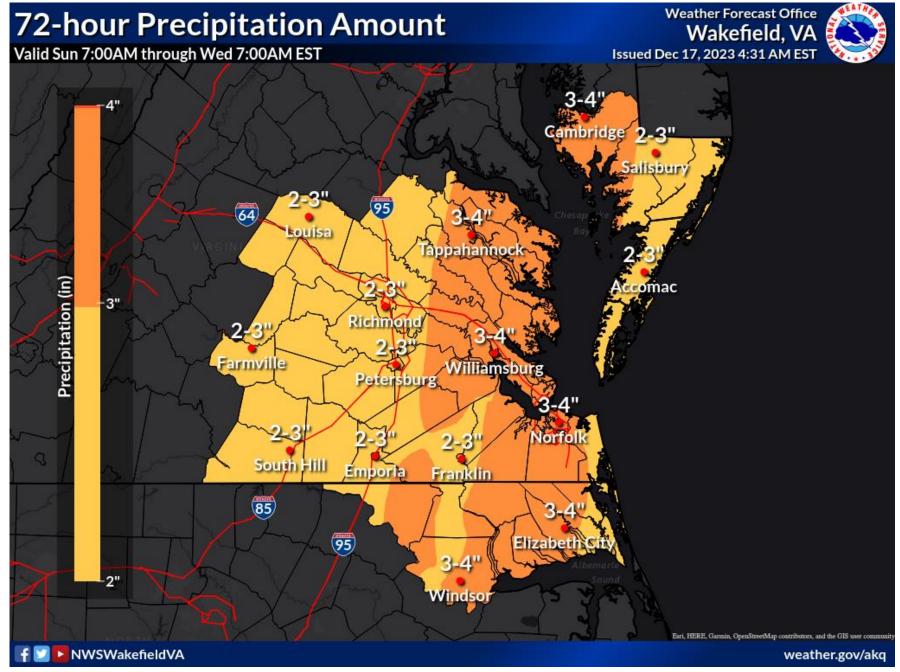
Flood Watch



- Widespread 2 to 4 inches of rain is expected with locally higher amounts possible.
- Rain will move in today and 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.



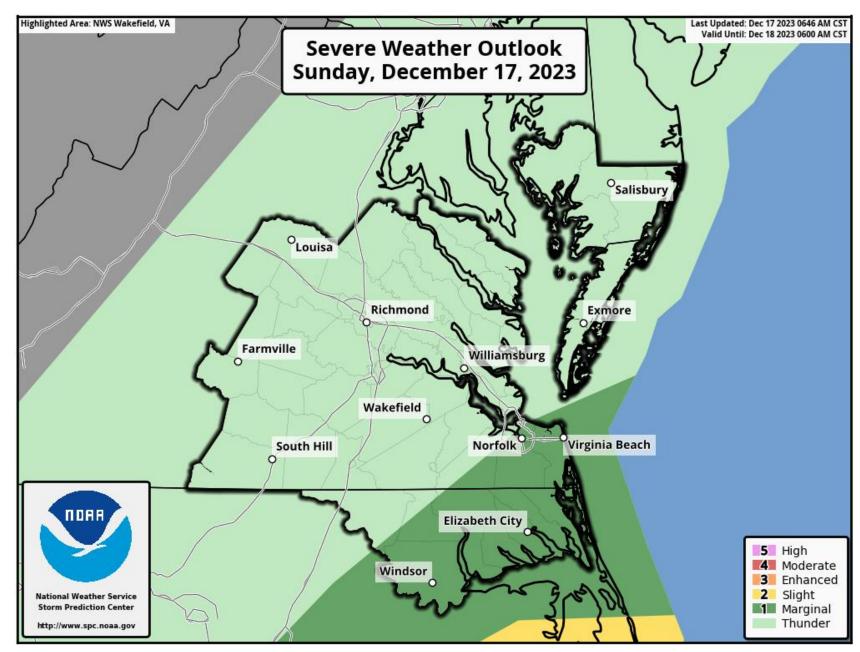
Expected Rainfall Forecast



- Widespread 2 to 3 inches of rain inland and 3 to 4 inches near the coast with locally higher amounts possible.
- Rain will move in this morning and 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.



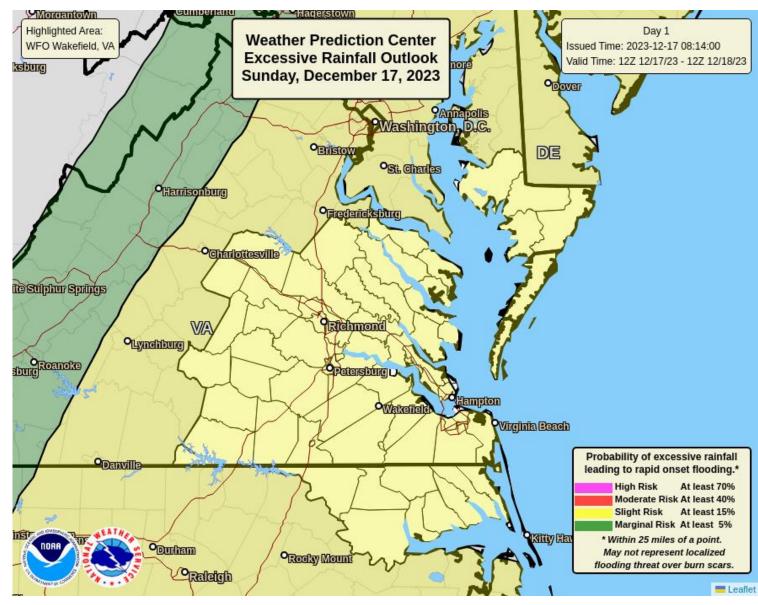
Severe Threat - This Evening



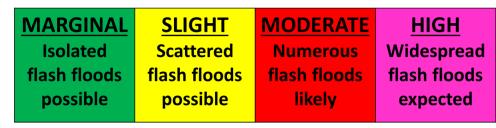
- There is a marginal risk for a few isolated severe thunderstorms across far southeast Virginia and northeast North Carolina late this evening.
- The main threat is damaging wind gusts to around 60 mph. However, cannot rule out an isolated tornado.



Flood Threat - Today/Tonight

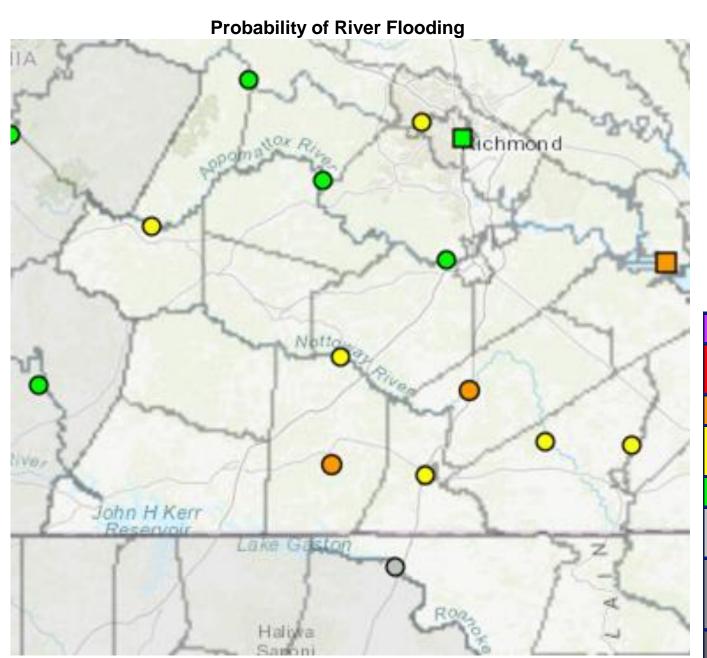


- There is a slight risk for flash flooding across the entire area today into tonight.
- Urban areas will be at greatest risk for flooding.

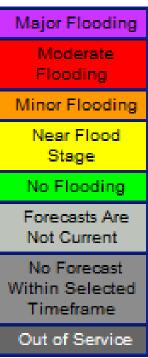




Minor River Flooding Possible

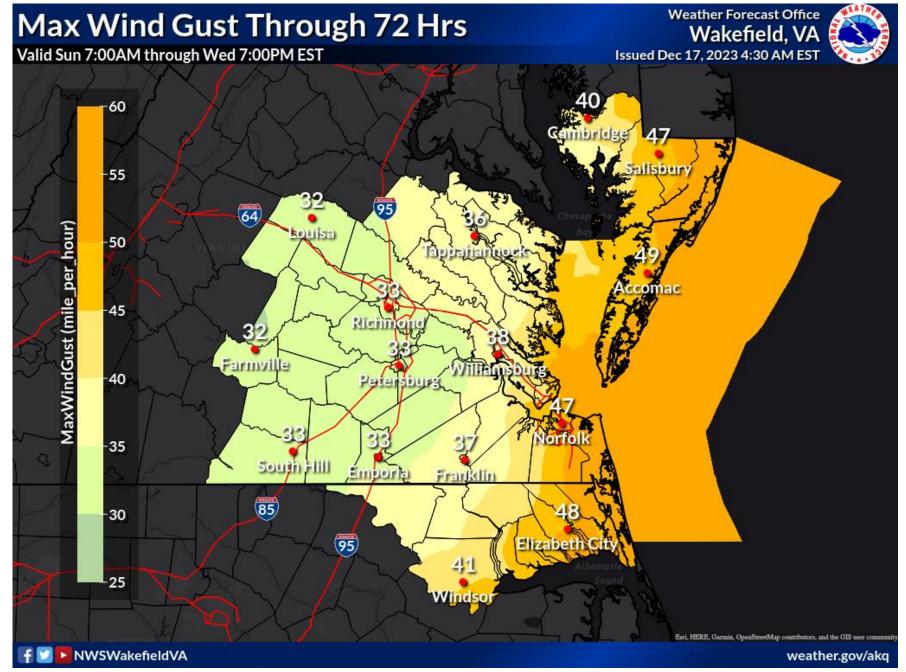


- River points highlighted in yellow and orange have the potential to see nuisance to minor flooding from the upcoming rainfall.
- Nuisance to minor flooding is also possible for portions of the Blackwater River and Chickahominy River (near Providence Forge).





High Wind Potential



- Gusty southeast winds are expected this afternoon through Monday morning, becoming westerly and remaining gusty Monday.
- Highest wind gusts (45-55 mph) are expected along the coast this evening-early Monday morning.
 Wind Advisories have been issued in 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



Timing of Wind and Rain (wind in mph)

Wind Gust Forecast														
	12/17													
			Su		_									
A							12am							Maximum
Accomac	_						465							46
Ahoski							241							35
Bowling Green	3	7		_	_		22							31
Cambridge	_	13		_			35ቚ							39
Cape Charles	-				_		44							45
Corolla	17	22	29 ★	35 ←	45	51	45	361	33	37→	35→	29	22	51
Deltaville	8	12	18	21	29	37 ♠	31	20 1	23→	32	32❤	24→	17	37
Edenton	10	15	22	28 ←	37 ≤	40 %	28	20	28❤	32❤	30→	24	16	40
Elizabeth City	12	17	25	31	41	46 %	37	25 1	29	35❤	33➡	26➡	18	46
Emporia	7-	12	16+	214	28	24	21♣	22	28	31*	30❤	24➡	17→	31
Farmville	7	9	13	15	21⊯	18	22♣	28	25	25	30❤	25➡	21➡	30
Hampton / Newport News	12	15	21	24	32	38 ™	30	211	26	33❤	33➡	26➡	18	38
Louisa	6	7	12	12	16*	16	24♣	25	25	28	28*	24➡	18→	28
Norfolk / Portsmouth	10	16	23	28 ←	37 ←	43 %	33	231	26	35❤	33➡	26➡	18	43
Ocean City	15	17	20	21	26	39 ≮	48 %	46	35 ♠	36	40→	35➡	22➡	48
Petersburg	7-	9	15	184	25	24	21	24	28	31*	30❤	24➡	18	31
Richmond	7	9*	15	18*	24	22🕊	22₺	25	30⁴	31*	30❤	24➡	18	31
Salisbury	9-	14	21	21	25	37 ∽	44	32	25	33♣	40❤	32➡	20→	44
South Hill	7	12	16*	21#	24#	22	224	25	30	31*	30❤	24➡	18	31
Suffolk	6	13	21	24	32 ←	38ጜ	28	21	25➡	31 →	31→	25♣	17	38
Tappahannock	6	9	14	16	21	28 ←	23	17	23	31*	30→	23➡	15	31
Virginia Beach	15	20	25	31	40	48 %	43	311	31	37→	36→	28→	21*	48
Williamsburg	7-	13	18	22	26 ←	33	26	18	23	32	32❤	25→	18	33

^{*}Table values in mph

Rain Forecast												
		12/17	,									
	_	Sun	7	1	T-4-I							
A				1am 0.61			/pm 0	Total 2.52				
Accomac		_		0.51			0.01					
Ahoski								2.93				
Bowling Green				0.53			0	2.63				
Cambridge				0.91			0	3.64				
Cape Charles		_		0.78			0	2.83				
Corolla				0.63			0	2.73				
Deltaville	0.03	0.65	1.73	0.62	0.11	0	0	3.14				
Edenton	0.28	0.93	1.52	0.68	0.04	0	0.01	3.46				
Elizabeth City	0.15	0.86	1.19	0.88	0.06	0	0.01	3.15				
Emporia	0.24	1.04	1.23	0.30	0.03	0	0	2.84				
Farmville	0.15	0.84	0.99	0.16	0.02	0	0	2.16				
Hampton / Newport News	0.06	0.82	1.60	0.90	0.10	0	0	3.48				
Louisa				0.39			0	2.40				
Norfolk / Portsmouth	0.07	0.85	1.42	1.08	0.10	0	0	3.52				
Ocean City	0.01	0.31	1.00	0.61	0.26	0.01	0	2.20				
Petersburg	0.12	0.84	1.30	0.39	0.06	0	0	2.71				
Richmond	0.08	0.77	1.34	0.45	0.07	0	0	2.71				
Salisbury	0.01	0.34	1.28	0.75	0.19	0.01	0	2.58				
South Hill	0.25	0.96	0.92	0.21	0.02	0	0	2.36				
Suffolk	0.13	0.87	1.50	0.76	0.07	0	0	3.33				
Tappahannock	0.02	0.58	2.05	0.53	0.11	0	0	3.29				
Virginia Beach	0.04	0.81	1.23	0.74	0.09	0	0	2.91				
Williamsburg	0.05	0.77	1.57	0.57	0.09	0	0	3.05				

^{*}Table values in inches



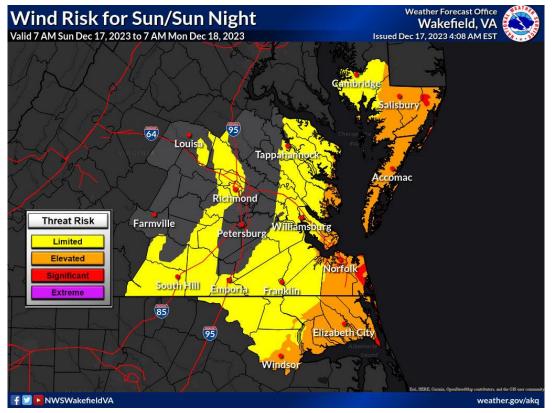
^{**}Created: 6 am EST Sun 12/17/2023

^{**}Created: 6 am EST Sun 12/17/2023

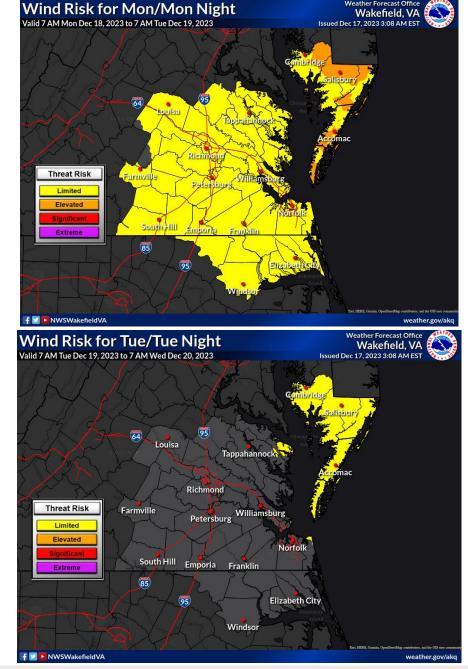
^{***}Values are accumulations over the period beginning at the time shown.



High Wind Potential - Today to Tue

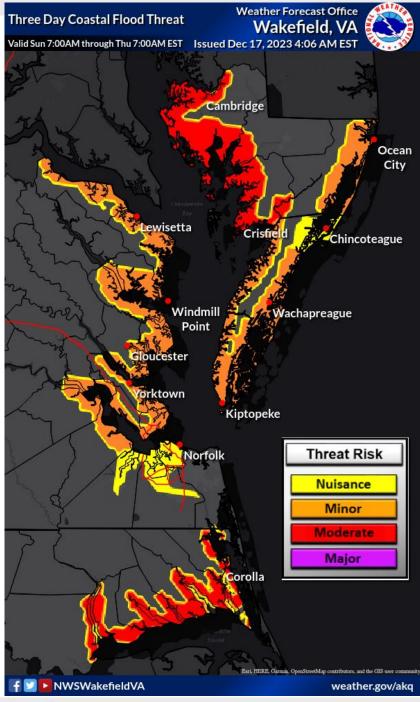


Limited	Breezy conditions with 30 to 40 mph wind gusts could blow around unsecured items and result in hazardous driving conditions for high-profile vehicles.
Elevated	Windy conditions with 40 to 50 mph wind gusts could damage light outdoor items, cause isolated power outages and result in hazardous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



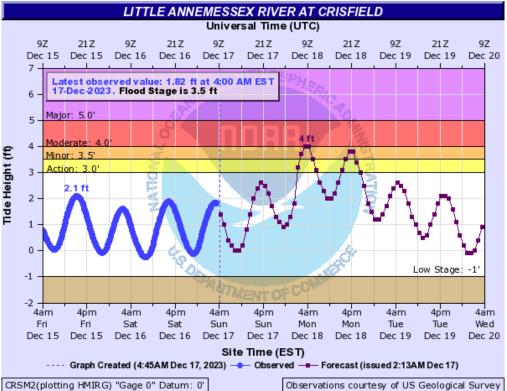
- Nuisance to minor tidal flooding is possible in most areas during the high tide cycles this evening and again Monday morning.
- Moderate tidal flooding (inundation of 1-2 ft AGL in vulnerable areas) is possible during the Monday morning high tide cycle in the red highlighted area from Lewisetta, VA-Cambridge,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

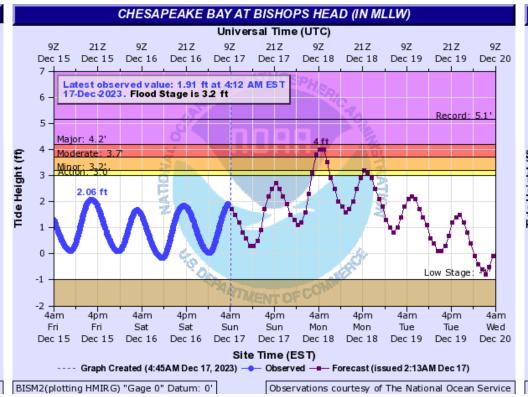


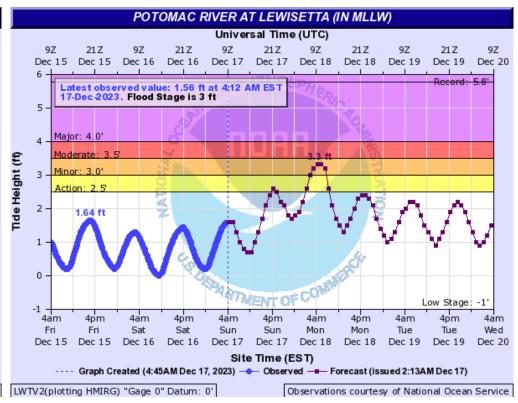


Tidal Overview - Upper Bay

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







Summary of Tidal Trends

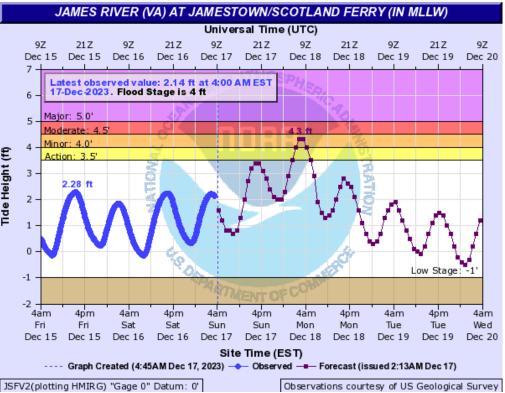
- Minor to moderate tidal flooding is possible early-mid Monday morning. This corresponds to inundation of 1-2 feet above ground level in vulnerable areas.
- Widespread flooding of vulnerable areas may result in an elevated threat of property damage.

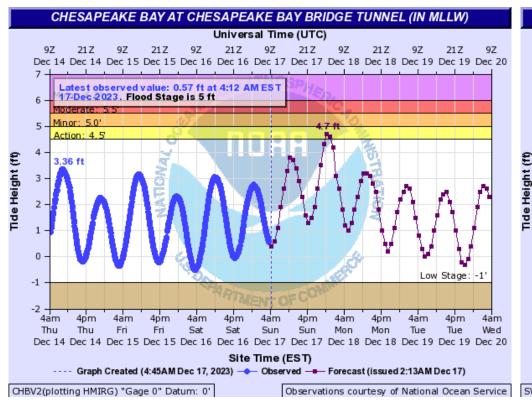


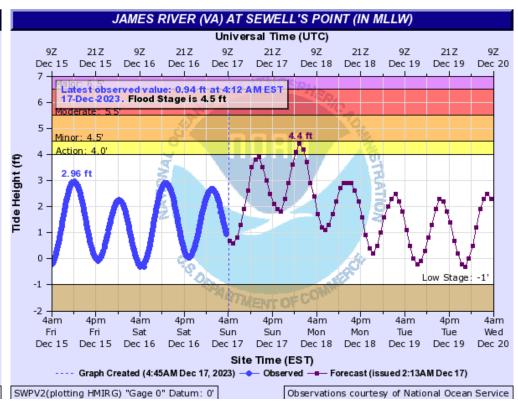


Tidal Overview - Lower Bay/James

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







Summary of Tidal Trends

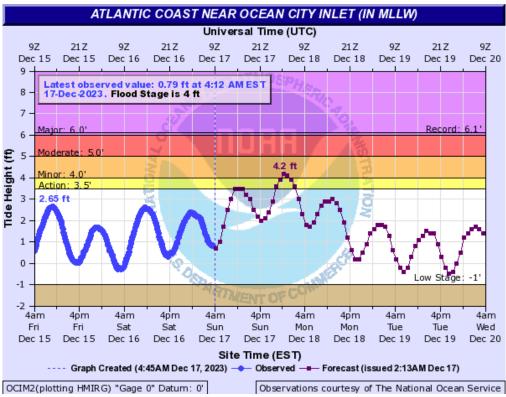
- Nuisance to minor tidal flooding is possible this evening and again early Monday morning. This corresponds to inundation of up to 1 foot above ground level in vulnerable areas.
- Shallow flooding in the most vulnerable locations near the waterfront and shoreline resulting in a low threat of property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

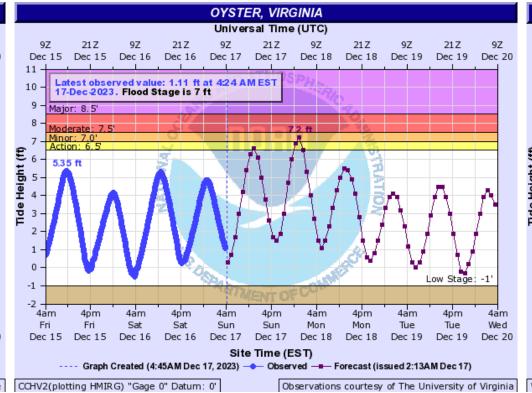


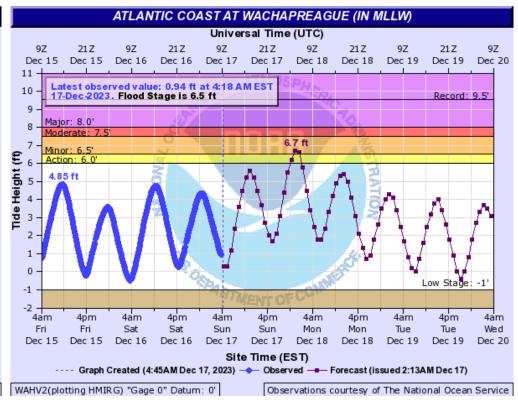


Tidal Overview - Ocean

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







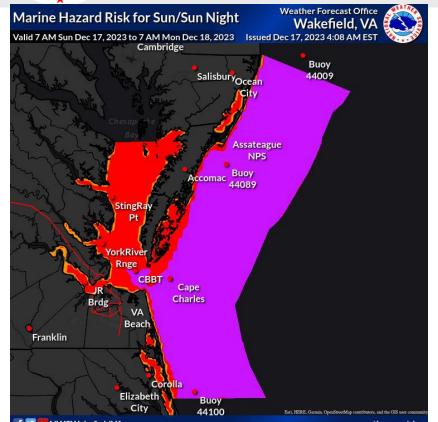
Summary of Tidal Trends

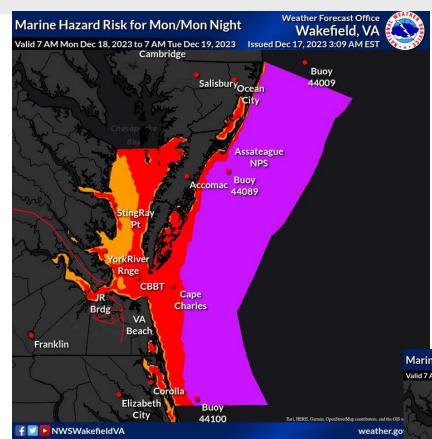
- Nuisance to minor tidal flooding is possible this evening and again early Monday morning. This corresponds to inundation of up to 1 foot above ground level in vulnerable areas.
- Shallow flooding in the most vulnerable locations near the waterfront and shoreline resulting in a low threat of property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

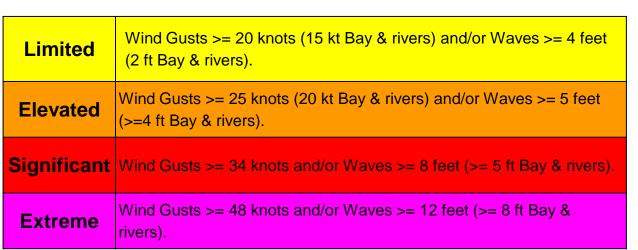


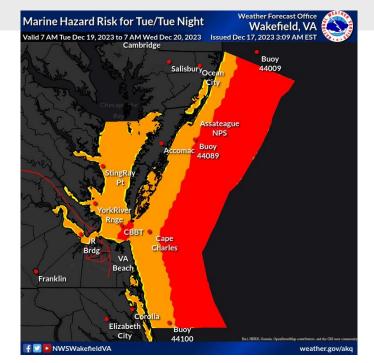


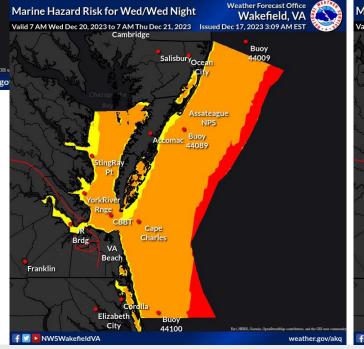
Marine Threat Potential - Next 5 Days











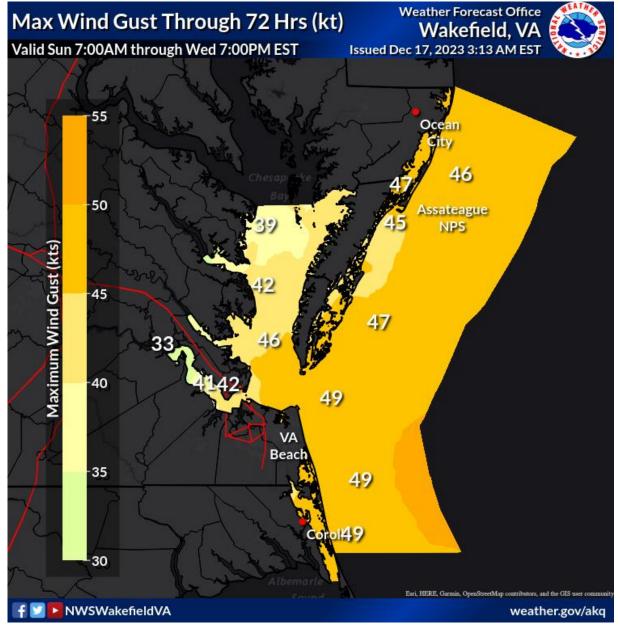


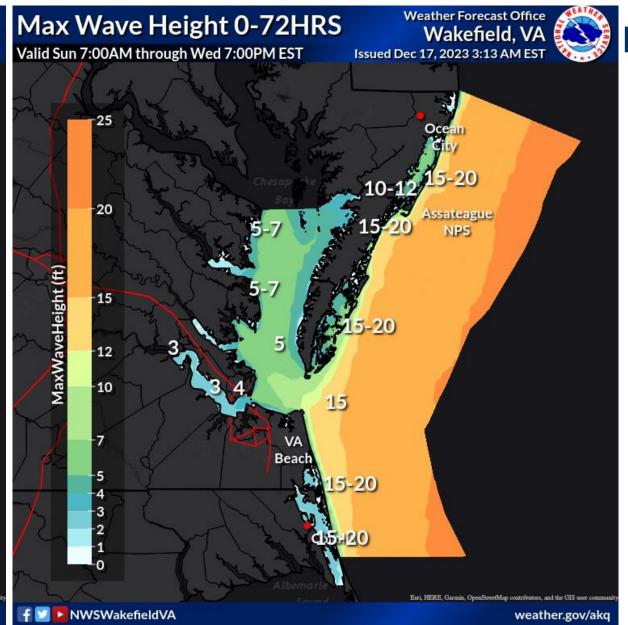


National Weather Service Wakefield, VA



Marine Wind and Waves





Key Points:

- Southeast winds will quickly increase later today. 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)

Wind Gu	st Fored	ast
---------	----------	-----

	12/17													
	_		Su		_	_		_						
	6am	9am	12pm	3pm	6pm	9pm	12am	3am	6pm	Maximum				
CBBT	16	19*	21	26	34 ←	42 %	38록	261	28*	34❤	34➡	26♣	21	42
Cape Henry	16	19	23	28 ←	36 ∽	44 %	40◀	30	29	34❤	34➡	26➡	21-	44
Chesapeake Light	16+	18	23	28	35 ★	44 %	43	35 ♦	30≯	35❖	35→	28 →	23-	44
Chincoteague Shoal	15	15	19*	21	28 ←	38 ™	43ጜ	37	28 ♠	32	35➡	29→	21→	43
Duck, NC	16≠	19	24	30 ←	39 ™	44 %	41	321	29.	32➡	31 →	25♣	19	44
Fenwick Shoal	17	17	19*	21	25	37 ≤	45 %	41	34🕏	31🗪	38❤	33→	24➡	45
HRBT	14	16	20	25	33 ←	38 ™	30ጜ	20♠	24	32❤	32➡	26♣	20→	38
JRB	14	15	19*	24	32 ←	38 ∽	28	197	26➡	32*	32→	27 →	21-	38
New Point Comfort	14	16	20	24	31 ←	39 ≮	34	22🕏	25	31*	31 →	25→	20→	39
			19*											41
Rappahannock Light	13	14	16*	19*	26 ←	35 ∽	34	24🛊	25	31*	33❤	25→	17 →	35
Tangier	14	16	18	19	25	34 ∽	34	24	25	33*	34❤	24→	17→	34
Thimble Shoal	16+	184	21	26	34	41←	36ጜ	25	26	33❤	33➡	25→	21	41

^{*}Table values in kt

Wave Height Forecast

wave neight rolecast															
			12/	17			12/18								
			Su	ın			Mon								
	6am	9am	12pm	3pm	6pm	9pm	12am 3am 6am 9am 12pm 3pm 6pm								Maximum
CBBT	2.0	3.0	4.0	6.0	7.0	7.0	8.0	7.0	6.0	6.0	5.0	5.0	5.0		8.0
Cape Henry	2.0	3.0	4.0	6.0	9.0	12.0	13.0	12.0	11.0	9.0	9.0	8.0	7.0		13.0
Chesapeake Light	3.0	4.0	6.0	8.0	12.0	16.0	17.0	16.0	14.0	12.0	11.0	10.0	9.0		17.0
Chincoteague Shoal	3.0	3.0	4.0	6.0	9.0	14.0	15.0	15.0	14.0	13.0	12.0	11.0	10.0		15.0
Duck, NC	3.0	4.0	6.0	8.0	10.0	13.0	13.0	12.0	11.0	10.0	9.0	8.0	7.0		13.0
Fenwick Shoal	3.0	4.0	4.0	5.0	8.0	12.0	15.0	15.0	15.0	15.0	14.0	13.0	13.0		15.0
HRBT	2.0	3.0	3.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	2.0		4.0
JRB	1.0	2.0	2.0	2.0	3.0	3.0	3.0	2.0	3.0	3.0	3.0	3.0	2.0		3.0
New Point Comfort	2.0	3.0	3.0	4.0	5.0	6.0	6.0	5.0	3.0	3.0	3.0	3.0	2.0		6.0
Parramore Banks	3.0	4.0	4.0	6.0	9.0	14.0	15.0	14.0	13.0	12.0	11.0	10.0	9.0		15.0
Rappahannock Light	2.0	2.0	2.0	3.0	4.0	5.0	5.0	4.0	4.0	5.0	4.0	4.0	3.0		5.0
Tangier	2.0	2.0	2.0	3.0	3.0	4.0	4.0	3.0	4.0	4.0	4.0	4.0	3.0		4.0
Thimble Shoal	2.0	3.0	3.0	4.0	6.0	6.0	7.0	6.0	5.0	5.0	4.0	4.0	3.0		7.0
AT-bla malmas in face															

^{*}Table values in feet

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



^{**}Created: 6 am EST Sun 12/17/2023

^{**}Created: 6 am EST Sun 12/17/2023

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



Key Messages

- Moderate to heavy rain is expected later today 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 this afternoon 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.
- Potential for moderate coastal flooding in the middle/upper Chesapeake Bay as well as the north side of the Albemarle Sound and nuisance to minor flooding elsewhere. Highest tide would be Monday morning (water levels likely 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

For NWS Wakefield, Virginia



→ NWS Wakefield Briefing



- → By 6:00 PM EST, Sunday, December 17
- → Method: Email



Disclaimer

- → Information contained in this briefing is time-sensitive
- → See <u>www.weather.gov/akg</u> for the latest information



Web

→ weather.gov/wakefield

Phone

→ (757) 899-4200

Email

→ akq-report@noaa.gov

Facebook

→ www.facebook.com/NWSWakefieldVA

Twitter

→ @NWSWakefieldVA

