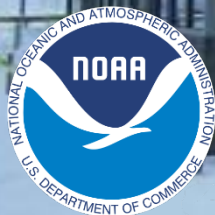


2022-23 Winter Outlook & NWS Tools for You

National
Weather
Service



NWS Baltimore/Washington

Outline



- What is normal?
- This winter's outlook
- Tools to help you





What is a “Normal” Winter (1991-2020 average)

DCA	Nov	Dec	Jan	Feb	Mar
Temperature (High/Low)	58°/42°	49°/35°	45°/30°	48°/32°	57°/39°
Snowfall 13.7” total	0.1”	1.7”	4.9”	5.0”	2.0”

IAD	Nov	Dec	Jan	Feb	Mar
Temperature	57°/36°	47°/29°	43°/25°	46°/27°	55°/34°
Snowfall 21” total	0.3	2.8	6.9	7.0	3.9 _{Apr 0.1}



Temperature the Past 3 Winters at Reagan National Airport

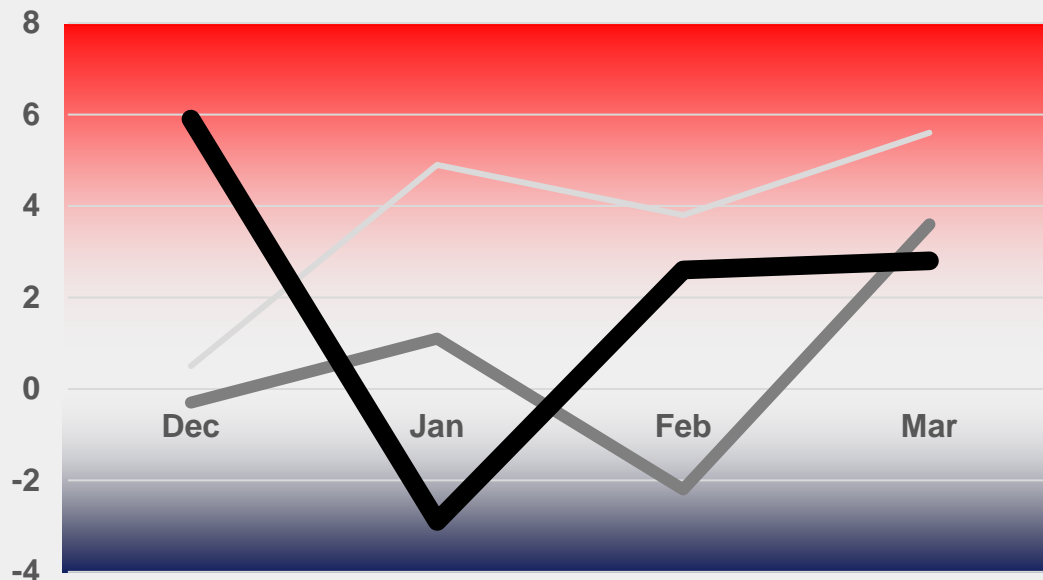


**'21-'22, a return to
mild...except January**

'20-'21 Near normal

'19-'20 Top 10 warmest

Departure from Normal (in degrees)

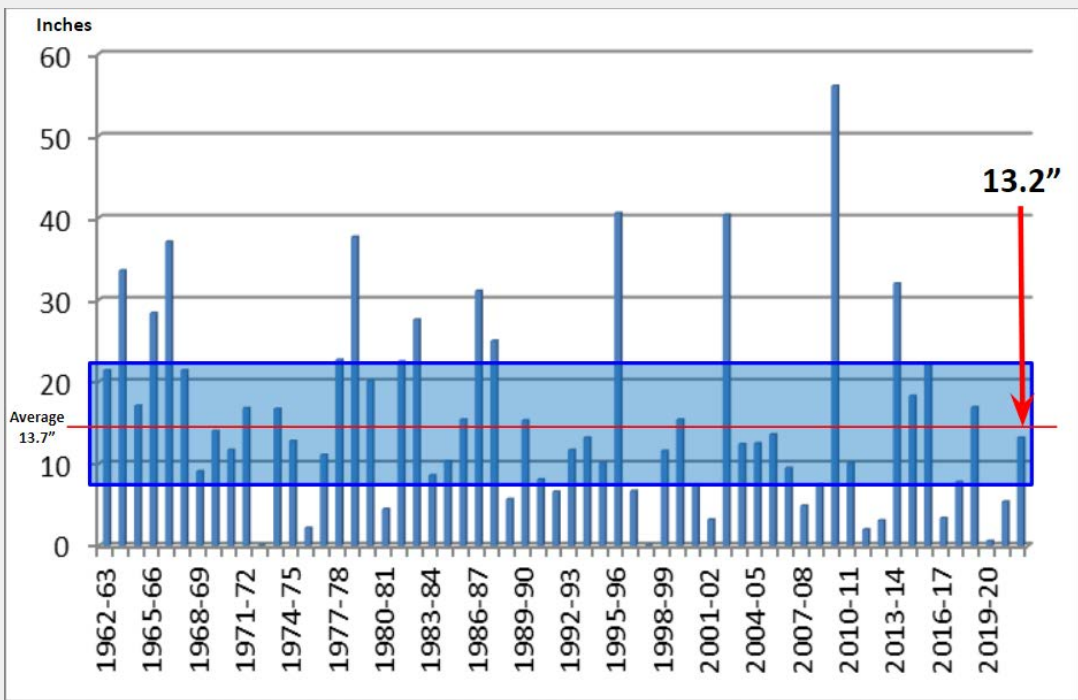


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DCA Winter Snowfalls



Single Digit Snowfall Years

- 1900 – 1950** 25% of winters
- 1950 – 2000** 25% of winters
- 2000 – 2020** 50% of winters

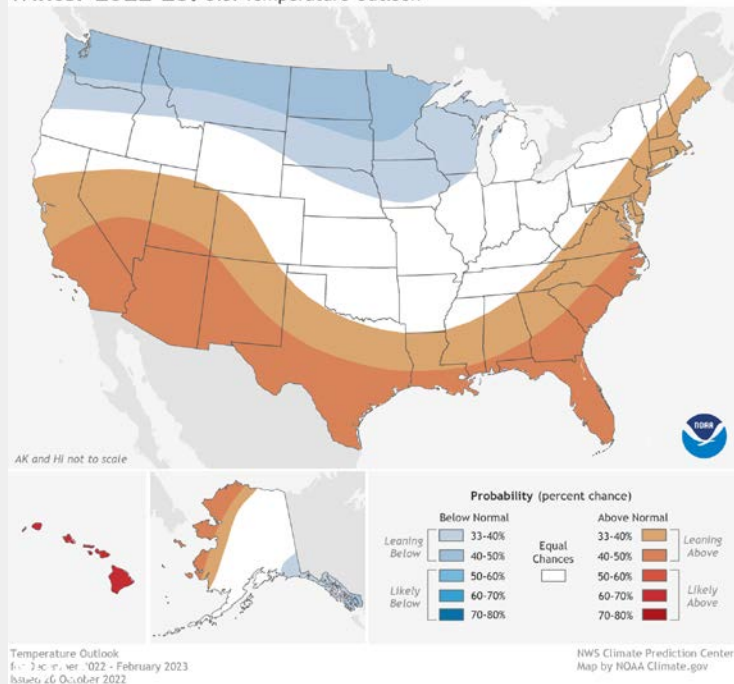
However, the “big snowfall” winters also persist



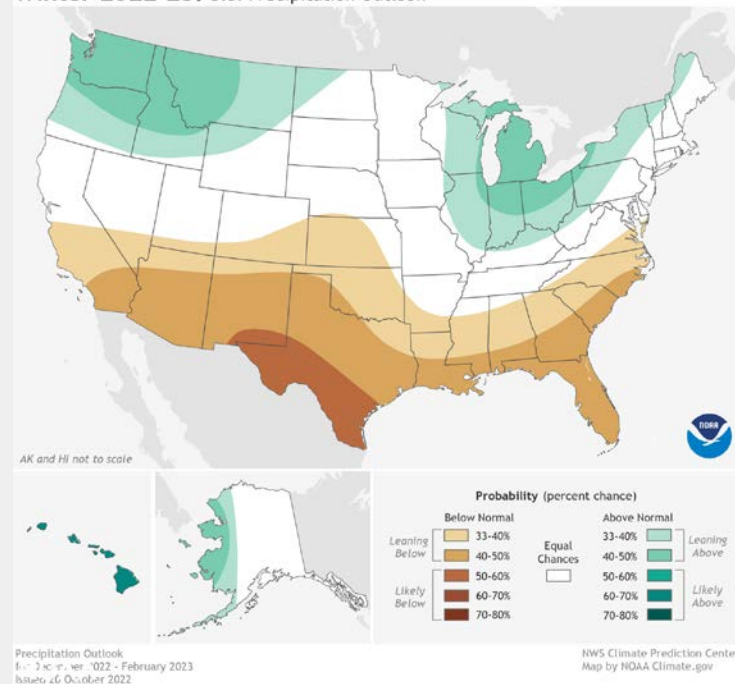


Winter Outlook - Temperature & Precipitation

Winter 2022-23: U.S. Temperature Outlook



Winter 2022-23: U.S. Precipitation Outlook





Winter Outlook - Mid Atlantic Region

■ El Niño/La Niña Cycle

■ La Niña

- More storm tracks to our west, can result in more freezing rain.
- Need to be ready for the big storm.

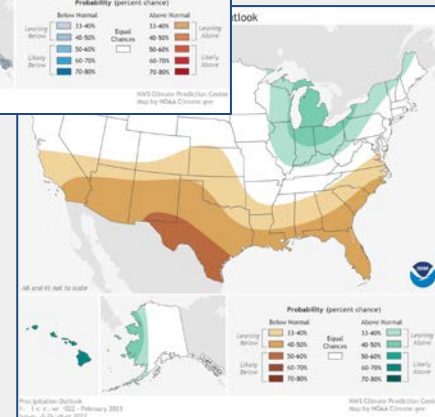
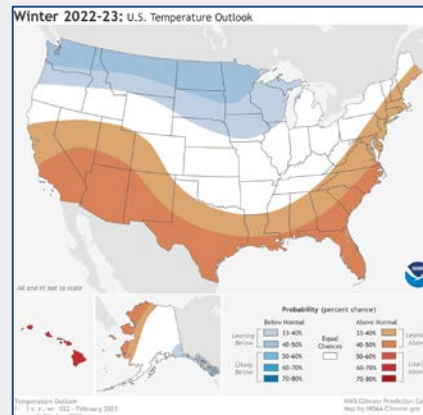
■ Mid-Atlantic Outlook:

■ Temperature

- Lesser chance of long-lasting cold
- Fewer arctic outbreaks

■ Precipitation

- No strong signal on more/less precipitation at this time





NWS Winter Tools - weather.gov/lwx/winter



Still can be snow in the forecast.
Check webpage, and monitor our partner emails for notifications.



Winter Storm **Watch**

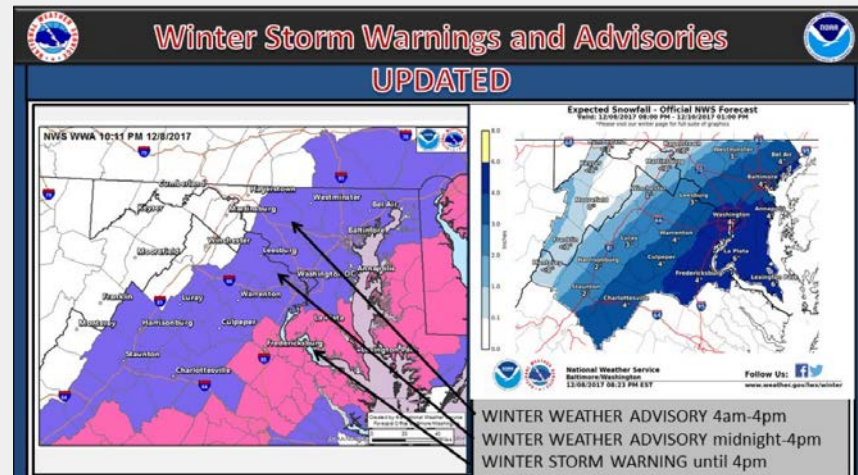
- Possibility of 5+” snow
- ~1-3 days in advance



Winter Storm **Warning** (Blizzard, Ice Storm)

Winter Weather **Advisory**

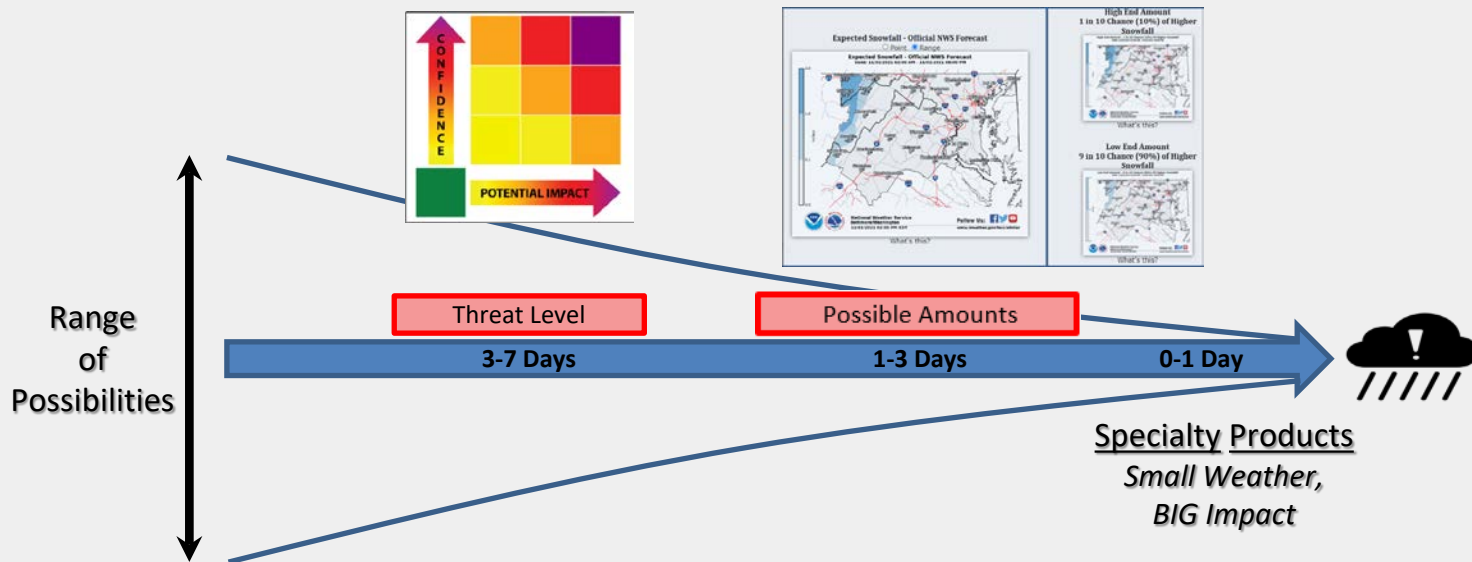
- Expectation (5”+ Warning; 1-4” Advisory)
- ~12-24 hours in advance





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As event nears, “Range of Possibilities” shrinks & forecast detail increases.

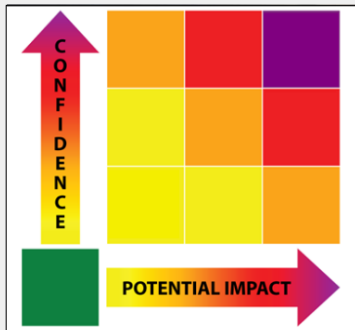
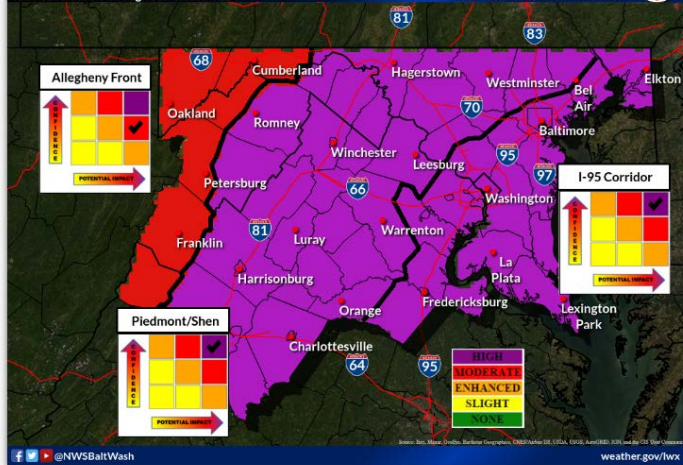




NWS Winter Tools - weather.gov/lwx/winter



Day 5 Winter Storm Threat Weather Forecast Office Baltimore MD/Washington, DC
Valid Sat 8:00AM through Sun 8:00AM EDT
Issued Tue Oct 19, 2021 9:50 AM EDT



3-7 Days Out

Winter Storm Threat

High	High threat of high impact winter storm. Potential impacts include significant travel delays, closures, and threats to life and property. Plan ahead to minimize impact on you and your family.
Moderate	Moderate winter storm threat. Potential impacts include significant travel delays and closures. Plan ahead to minimize impact on you and your family.
Enhanced	Enhanced winter storm threat. Primary threat is disruption to travel.
Slight	Slight winter storm threat. If threat materializes, may cause travel disruptions.
None	No significant winter storm threat is currently expected. However, light wintry precipitation may still be possible.



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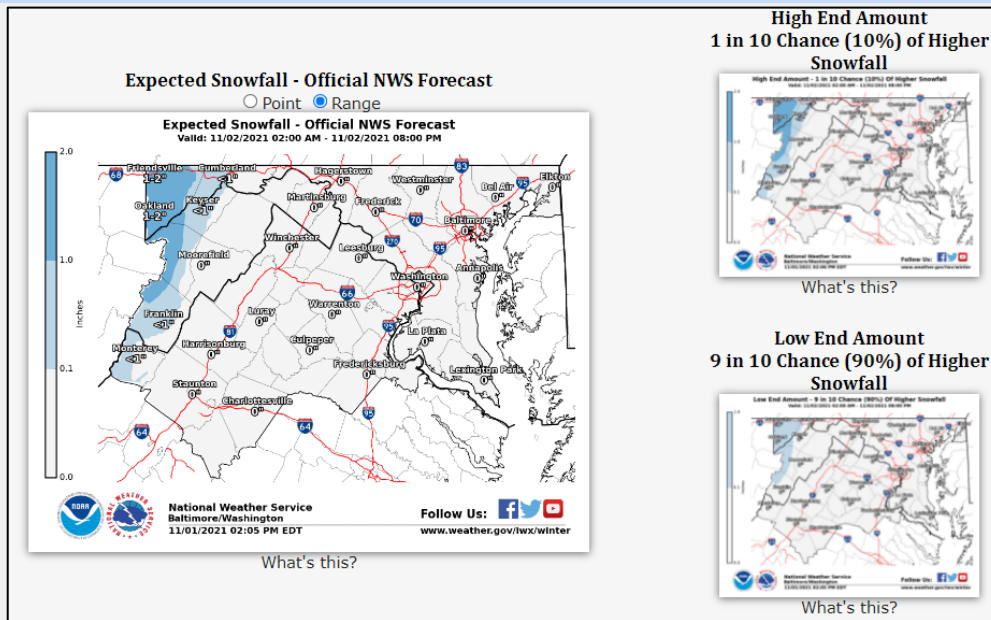
NWS Winter Tools - weather.gov/lwx/winter

0-3 Days Out Range of Possible Accumulations

Current Snowfall Expectation

What our forecasters expect now.

Based on the latest, constantly- evolving models



High-End Potential

How much/little could it be, given what some models still show

Low-End Potential

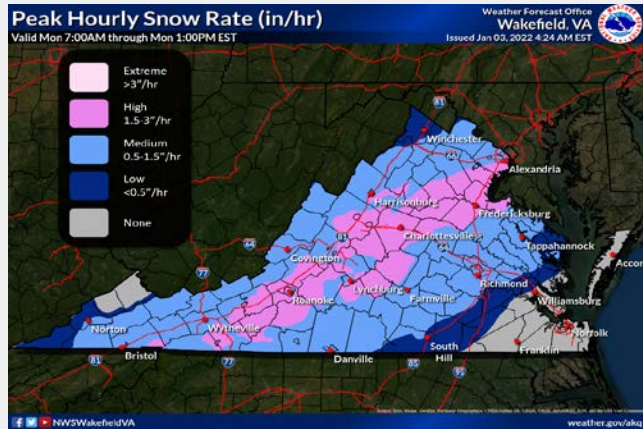




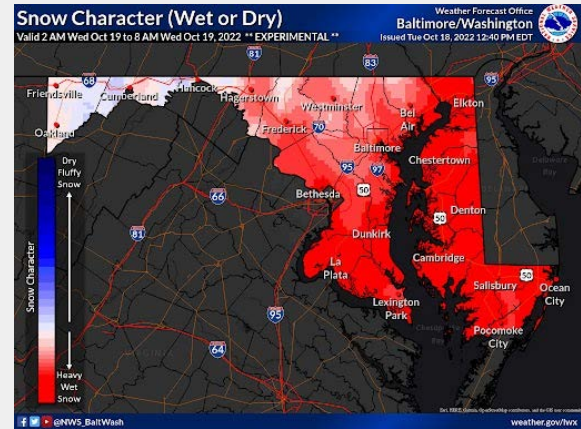
Advancements for this Winter

- 6 hourly
- Utilized in our briefings this winter

Peak Snow Rates



Wet / Dry Snow



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0-1 Day Out

Potential Winter Commuting Hazard Statement

Recipe for a Traffic Disaster

- 1" or less of snow
- During urban rush hour
- Sub-freezing road temperatures

Together, these often created gridlock.

Potential Winter Commuting Hazard Statement (~24hrs in advance)
if we see a chance of these coming together



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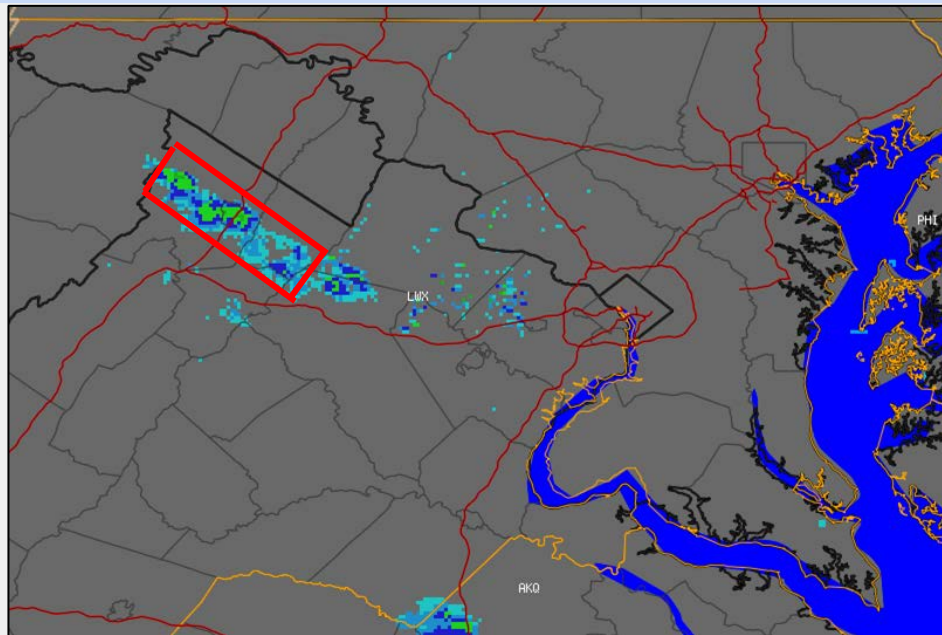
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0-1 Day Out

Snow Squall Warning



When they occur over highways,
they often cause multi-vehicle crashes



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Social Media

 @NWS_BaltWash

 @NWSBaltWash



NWS Baltimore-Washington @NWS_BaltWash

Make use of today's quiet weather to prepare for Wednesday's winter storm. A Winter Storm Warning is in effect where we are most confident of heavier snow. A Watch remains in effect where heavy snow is possible but not yet certain. Keep up-to-date at weather.gov/lwx

First Widespread Winter Storm of the Season

When: Wednesday & Wednesday night

What: Heavy snow, changing to Ice & Rain near and east of I-95

Expected Snowfall - Official NWS Forecast

Issued at 12/15/2020 4:44 AM

<http://www.weather.gov/lwx>

National Weather Service Baltimore/Washington @NWS_BaltWash

- Message of the Moment
- Public-facing for easy sharing



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weather.gov/lwx



NWS Services for Government Partners

“Heads Up” Email

- Threats before Watches & Warnings
- Email addresses to christopher.strong@noaa.gov to be added

iNWS alerts

- For Watches & Warnings (text and/or email)
- Register at: inws.ncep.noaa.gov

Monday/Thursday 10:30 A.M. 7 day Weather Threat Webinar

- 5 min look at threats for next 7 days
- Briefing time is 10:30 am
- Email addresses to christopher.strong@noaa.gov to be added





Summary: weather.gov/washington/winter

- **The NWS – DPW/DOT/SHA partnerships have helped develop current ways to communicate snow forecasts:**
 - Days 3-7 Winter Storm Threat Level
 - Days 0-3 “Range of Possible” Snow Accumulations
 - Days 0-1 Potential Winter Commuting Hazard Statement & Snow Squall Warning...upcoming max rate & wet/dry
- **Existing framework**
 - **Watch** / **Warning** or **Advisory**
- **NWS winter outlook 2022-23**
 - Fewer arctic outbreaks, but we will get them.
 - Higher likelihood of freezing rain & mixed precipitation
 - Be ready for the big storm

Chris Strong
Warning Coordination Meteorologist
NWS Baltimore/Washington
christopher.strong@noaa.gov



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