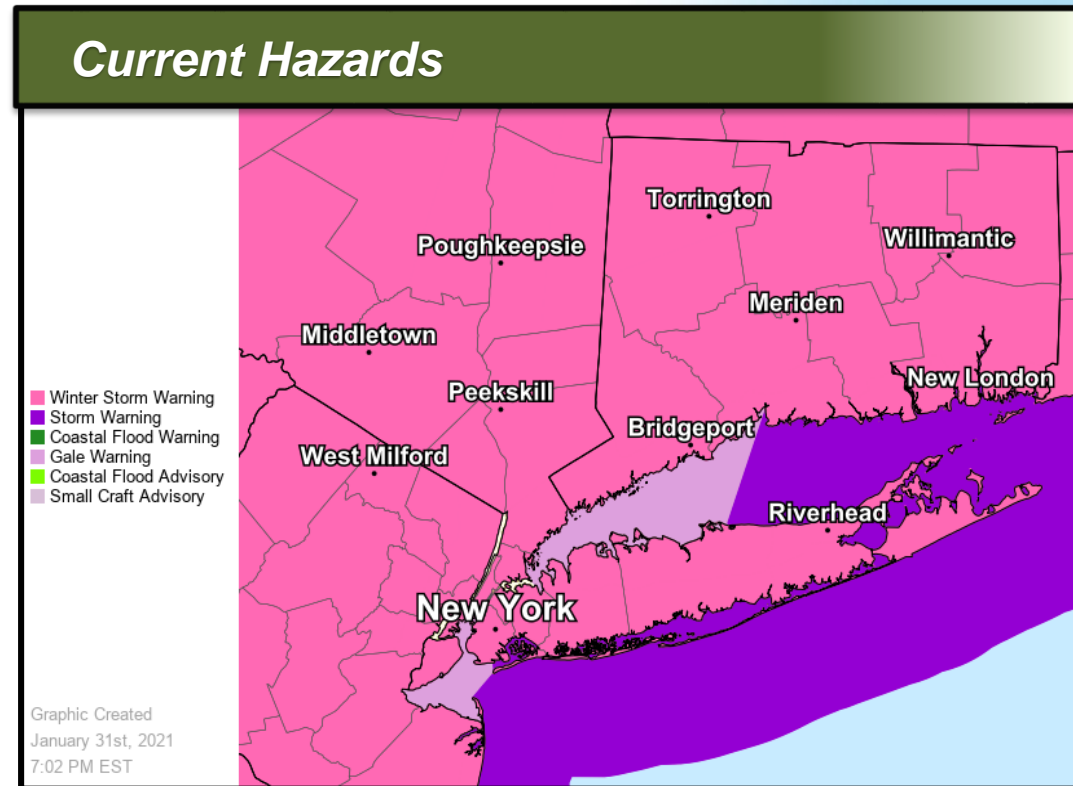


Major Winter Storm






Decision Support Briefing #4 As of: 400 PM Jan 31, 2021

What Has Changed?

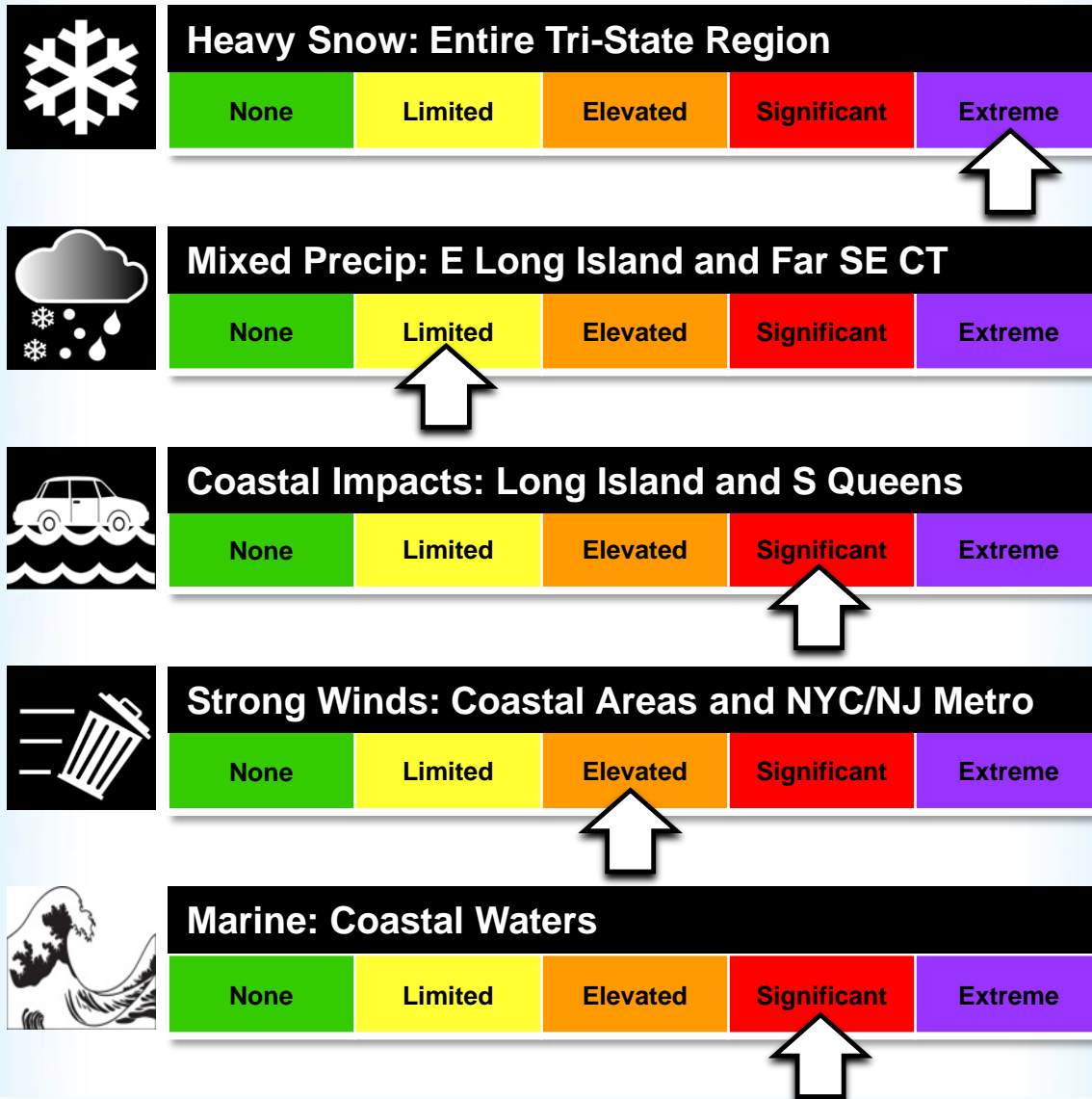
- ✓ *Winter Storm Warnings Expanded to Eastern Long Island*
- ✓ *Increased Snowfall Totals*
- ✓ *Earlier Onset of Steady Snow Tonight and Heavy Snow on Monday*



Main Points

Hazard	Impacts	Location	Timing
Heavy Snow 14-22" W LI/NYC 18-24" North/West 	<ul style="list-style-type: none"> • Snowfall rates of 2-4 inches/hr • Near blizzard conditions • Difficult to impossible travel 	Much of the Tri-State Region	<ul style="list-style-type: none"> • Snow develops this evening • Heavy snow daytime Monday • Periods of light/moderate snow Mon Night into Tue
Heavy Snow/ Mixed Precip 6-14" E LI/SE CT 	<ul style="list-style-type: none"> • Heavy Snow • Difficult Travel 	E Long Island and Far SE CT	<ul style="list-style-type: none"> • Snow develops late this eve • Heavy Snow Mon AM/early PM • Starts to mix with sleet/rain Mon afternoon • Periods of light rain/snow/sleet Mon night/Tue
Coastal Impacts 2-3 ft Inundation above ground level (AGL) 	<ul style="list-style-type: none"> • Moderate to locally Major coastal flood impacts • Areas of dune erosion and localized overwashes 	Greatest Impacts along Long Island S shore/ E bays Dune Impacts: Oceanfront	Times of high tide Monday Into Monday Night
Strong Winds 35-40G55mph Twin Forks 25-30G40-45 NYC/NJ metro & rest of coast 	<ul style="list-style-type: none"> • Scattered downed tree limbs and power lines • Near blizzard conditions daytime Monday 	Coastal Areas, including NYC/NJ metro	Monday into Monday Night
Marine Gale to Storm conditions 	<ul style="list-style-type: none"> • Seas 13-18 ft on the Ocean • Seas 6-9 ft central/eastern Long Island Sound 	Coastal Waters out 20 nm	Monday into Monday Night

Summary of Greatest Impacts

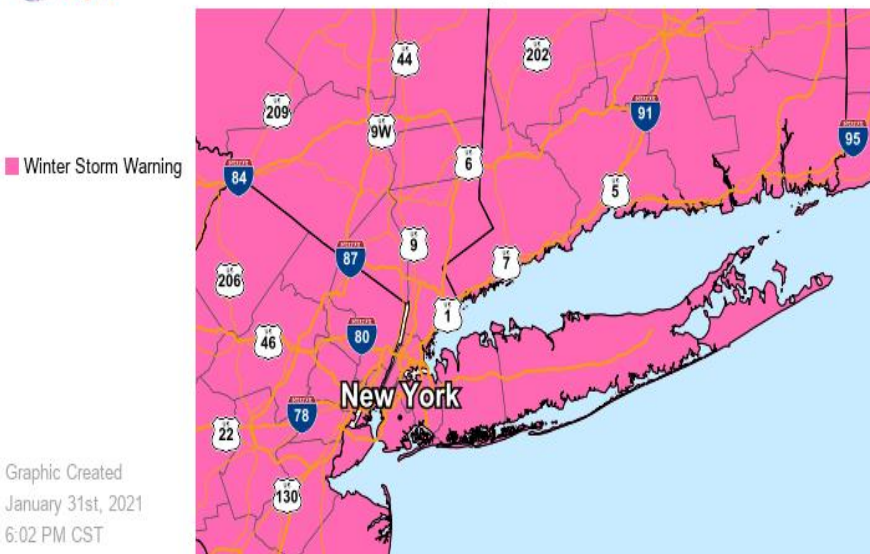


Heavy Snow

Winter Storm Warnings Remain in Effect Tonight through Monday Night



Winter Watches Warnings and Advisories



Hazards:

- ✓ **Much of the Region** – 16-24” expected
 - ✓ Snowfall rates: 2-4”/hr daytime Mon
 - ✓ 5-7” of snow expected by daybreak Mon morning commute for NYC/NJ metro
 - ✓ Temperatures: Upper 20s/lower 30s NYC/coast, lower/mid 20s inland
- ✓ **E Long Island and Far SE CT** – 6-12” of snow expected, mixing with rain/sleet Mon afternoon into Tue

Impacts:

- ✓ Difficult to Impossible travel Monday and Monday night
- ✓ Scattered downed tree limbs and power outages possible
- ✓ Blowing/drifting snow; near blizzard conditions expected

Timing:

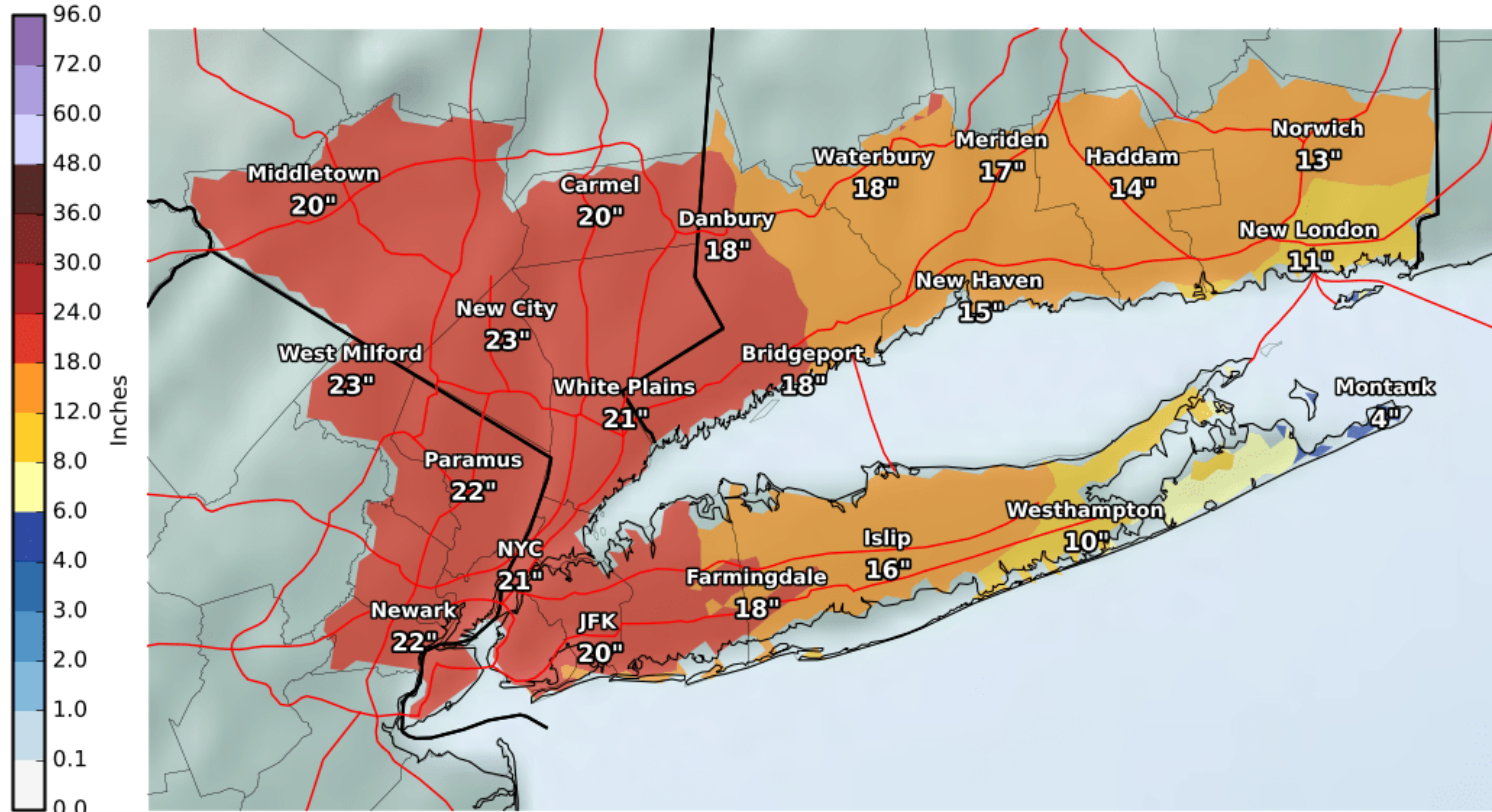
- ✓ Snow develops this evening into tonight
- ✓ Heavy snow daytime Monday
- ✓ Periods of light/moderate snow Mon night into Tue

Forecast Challenges:

- ✓ Location/duration of heavy snow banding?
- ✓ How far NW and for how long do rain/sleet mix in along the coast, especially across E Long Island and Far SE CT?

Most Likely Snowfall – Official Forecast

Expected Snowfall - Official NWS Forecast
Valid: 01/31/2021 07:00 PM - 02/02/2021 07:00 PM

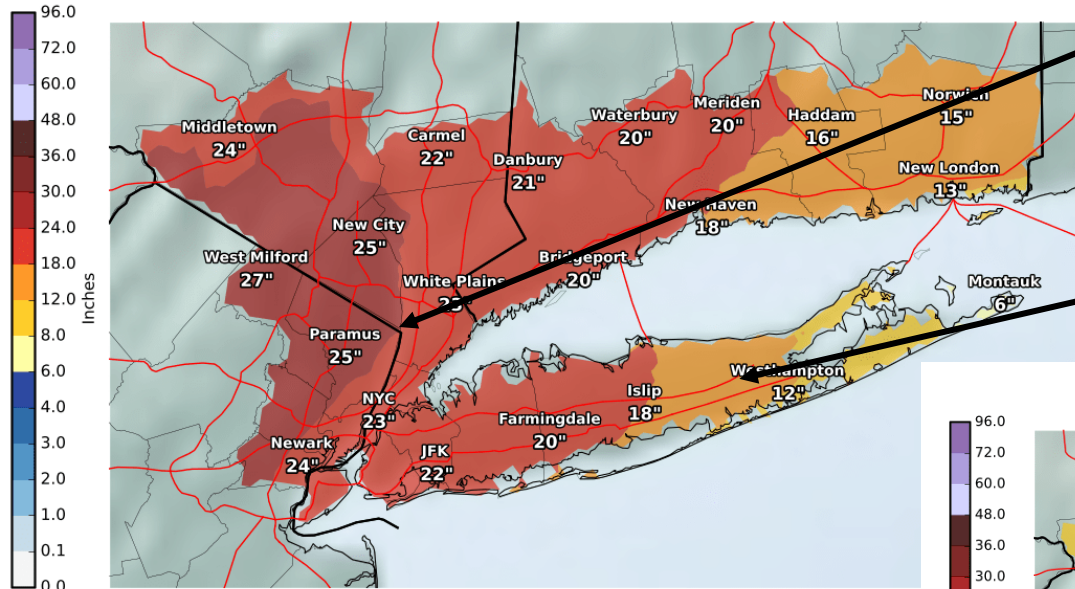


National Weather Service
New York NY
01/31/2021 03:23 PM EST

Follow Us:
[weather.gov/nyc/winter](https://www.weather.gov/nyc/winter)

Probabilistic Snowfall Forecast

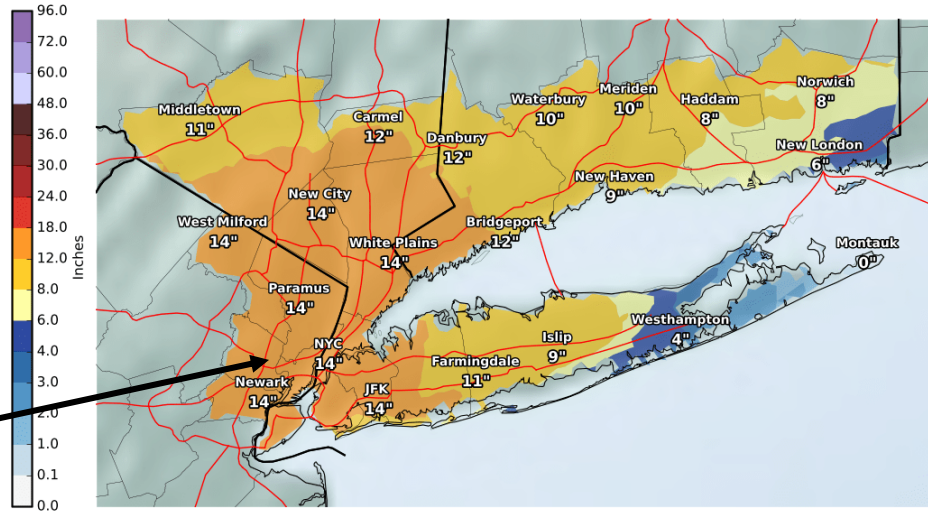
High End Amount - 1 in 10 Chance (10%) Of Higher Snowfall
Valid: 01/31/2021 07:00 PM - 02/02/2021 07:00 PM



Snow amounts could be this high in spots where heavy snow banding is most persistent.

Or...If there is no/less mixing with rain/sleet across E LI and Far SE CT

Low End Amount - 9 in 10 Chance (90%) Of Higher Snowfall
Valid: 01/31/2021 07:00 PM - 02/02/2021 07:00 PM



Expect at least this much snow



National Weather Service
New York NY
01/31/2021 03:23 PM EST

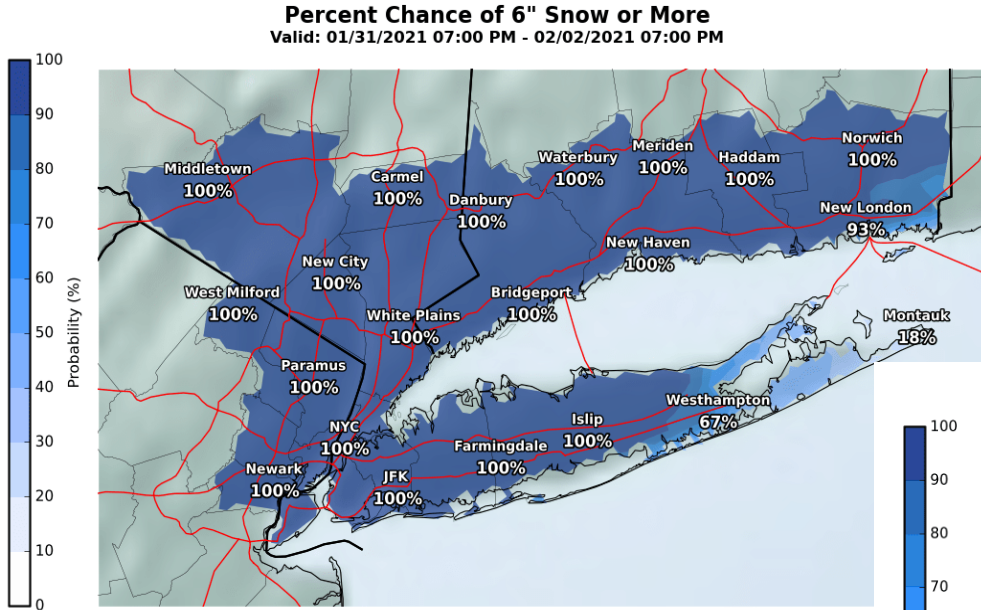
Follow Us:
weather.gov/



National Weather Service
New York NY
01/31/2021 03:23 PM EST

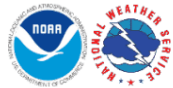
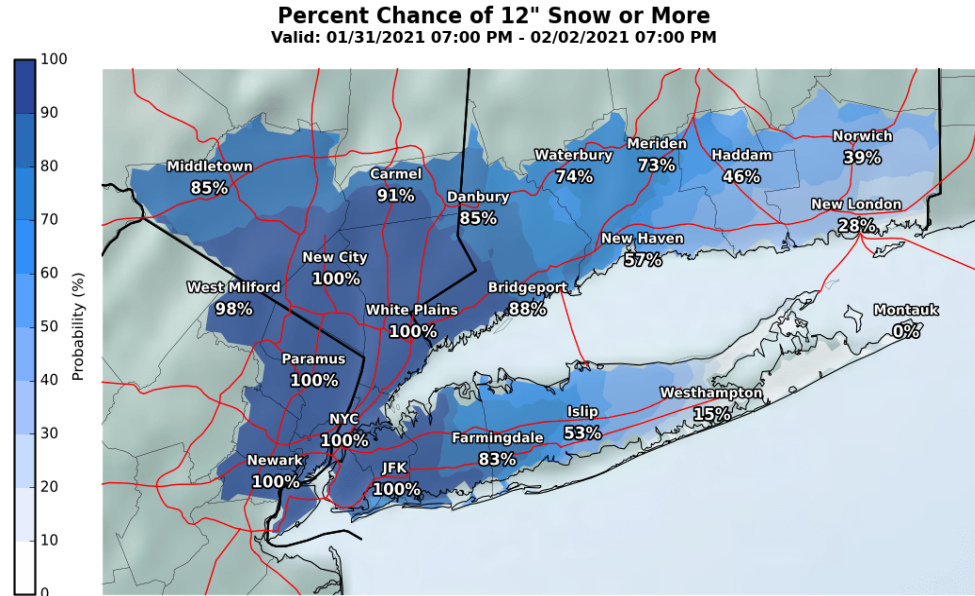
Follow Us: [weather.gov/nyc/winter](https://www.weather.gov/nyc/winter)

Probabilistic Snowfall Forecast



National Weather Service
New York NY
01/31/2021 03:24 PM EST

Follow Us: weather.gov/nyc



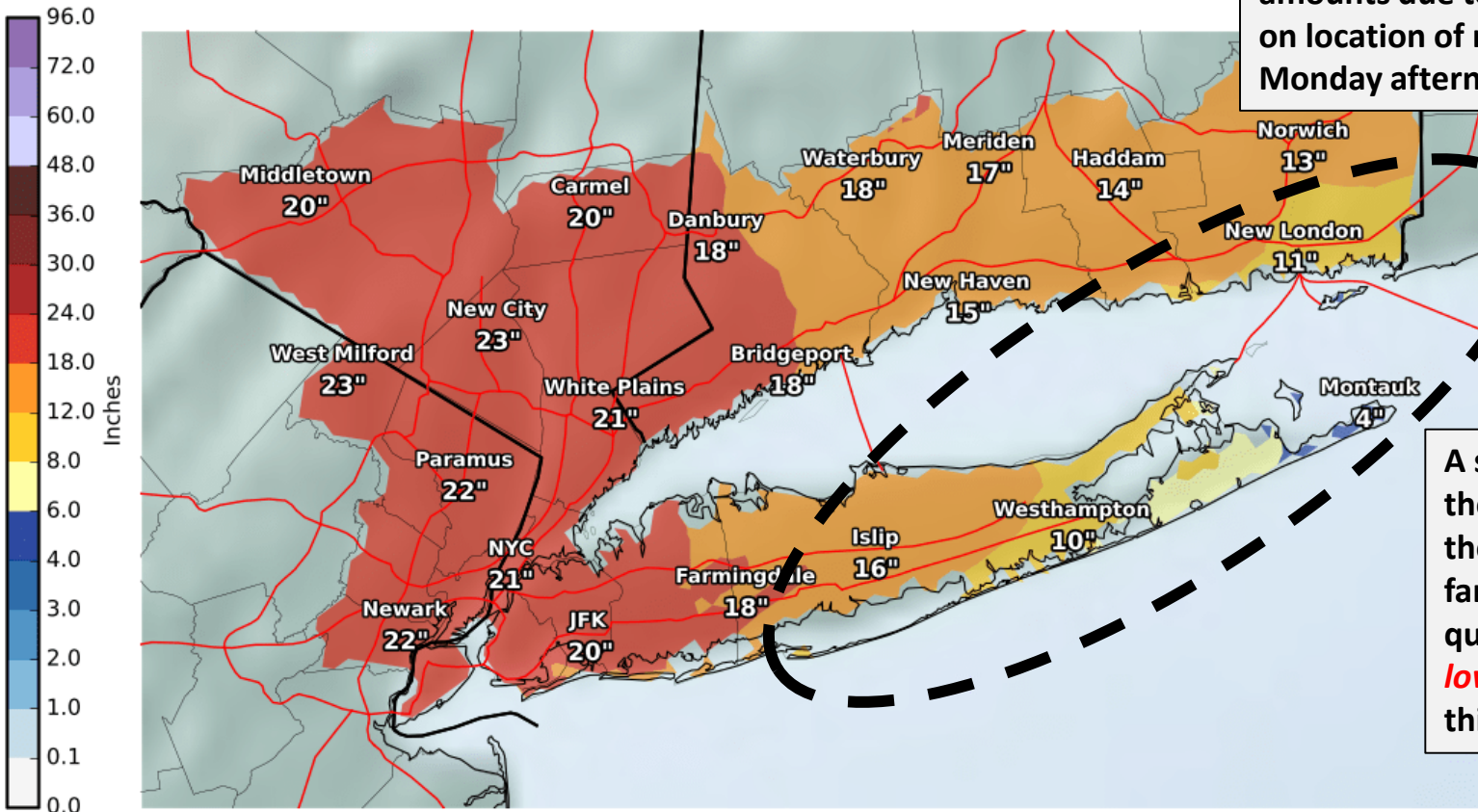
National Weather Service
New York NY
01/31/2021 03:24 PM EST

Follow Us: weather.gov/nyc/winter

Rain/Snow Line Timing/Location Uncertainty

Expected Snowfall - Official NWS Forecast
Valid: 01/31/2021 07:00 PM - 02/02/2021 07:00 PM

Greatest uncertainty in snowfall amounts due to low predictability on location of rain/snow line Monday afternoon/night



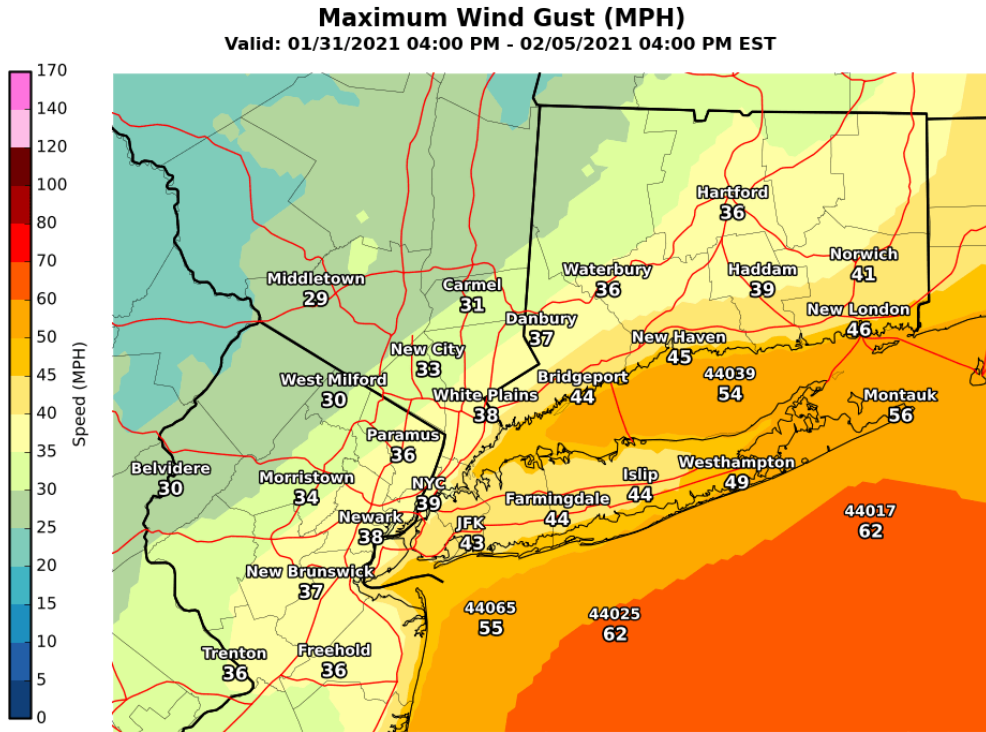
A storm track *closer* to the coast would move the rain/snow line farther west and more quickly, resulting in *lower* snowfall totals in this area.



National Weather Service
New York NY
01/31/2021 03:23 PM EST

Follow Us:
weather.gov/nyc/winter

Strong Winds



Hazards: Peak Winds

- ✓ **Eastern Long Island**
 - ✓ NE winds 30-40 mph with gusts 50-55 mph
- ✓ **NYC & Remainder of Coast**
 - ✓ NE winds 20-30 mph with gusts 40-45 mph
- ✓ **Interior**
 - ✓ NE 15-20 mph with gusts 30-35 mph

Impacts:

- ✓ Scattered downed tree limbs and power lines
- ✓ Near blizzard conditions especially closer to the coast

Timing:

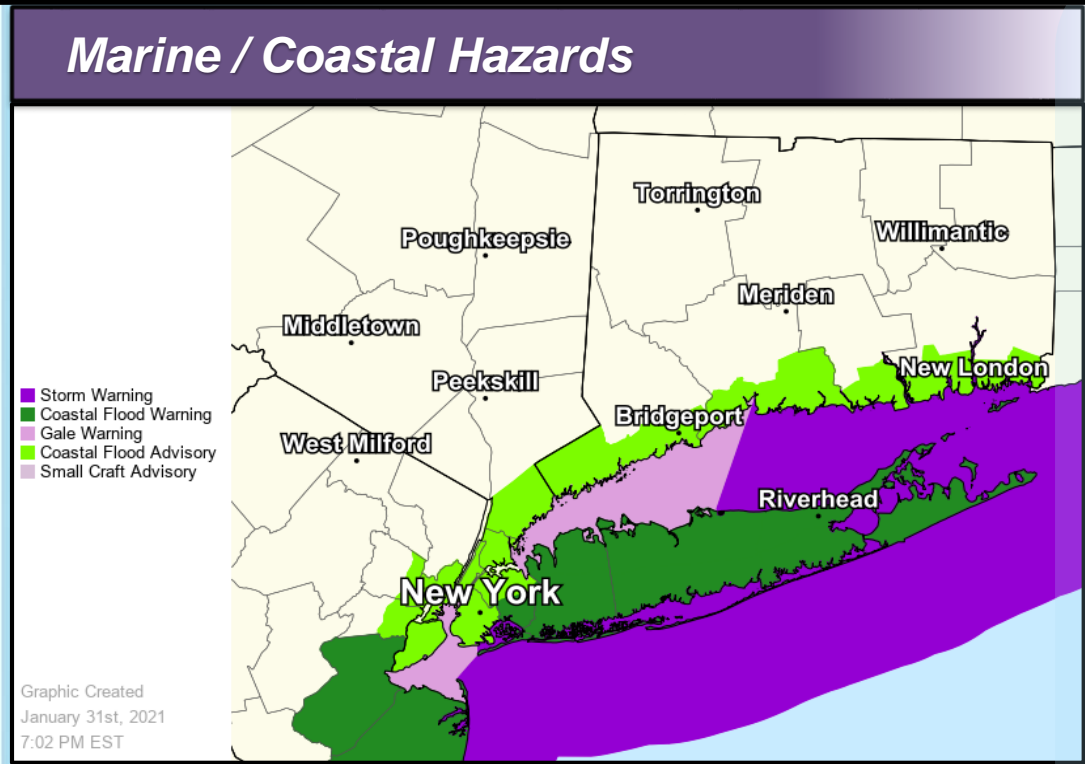
- ✓ Duration: Monday into Monday Night
- ✓ Peak Winds: 3-7 PM Monday



National Weather Service
New York NY
01/31/2021 04:07 PM EST

Follow Us:
weather.gov/nyc

Coastal Flooding – Coastal Flood Warnings Remain in Effect for Mon and Mon Night High Tides



- ### Coastal Flood Hazards and Impacts:
- ✓ Minor to moderate impacts daytime Mon
 - ✓ Greatest threat of moderate inundation (2 ft above ground) along south shores of Nassau/Queens
 - ✓ Widespread Minor to Moderate Mon Night; Locally MAJOR impacts possible
 - ✓ **Greatest threat of moderate to locally major (3 ft above ground) along the Long Island south shore and eastern bays**
 - ✓ Several waterfront road closures and potential property damage
 - ✓ Floating chunks of snow/ice could exacerbate flood problems

- ### Shoreline Hazards and Impacts:
- ✓ Breaking waves 5-10 ft oceanfront, 3-6 ft Long Island Sound shoreline and Twin Forks
 - ✓ Widespread ocean beach erosion/flooding
Areas of dune erosion and isolated washovers along oceanfront Mon into Tue high tide cycles

- ### Timing:
- ✓ Flooding will likely start well before times of high tide Mon Night tide and may continue well after
 - ✓ Additional minor to moderate flooding likely during Tue high tide cycles. Highest threat of moderate flooding for the Long Island south shore bays

Please go to the NWS New York, NY Coastal Flooding Page for the latest coastal flood forecast and the tools to visualize the coastal impacts.
<https://www.weather.gov/okx/coastalflood>



Coastal Flooding –Inundation Areas

Greatest threat areas for Moderate inundation (2-2 ½ ft AGL) during Mon/Mon Night high tides.
(Likely inundation areas of inundation are shaded in orange. Potential areas of inundation are shaded in Red)



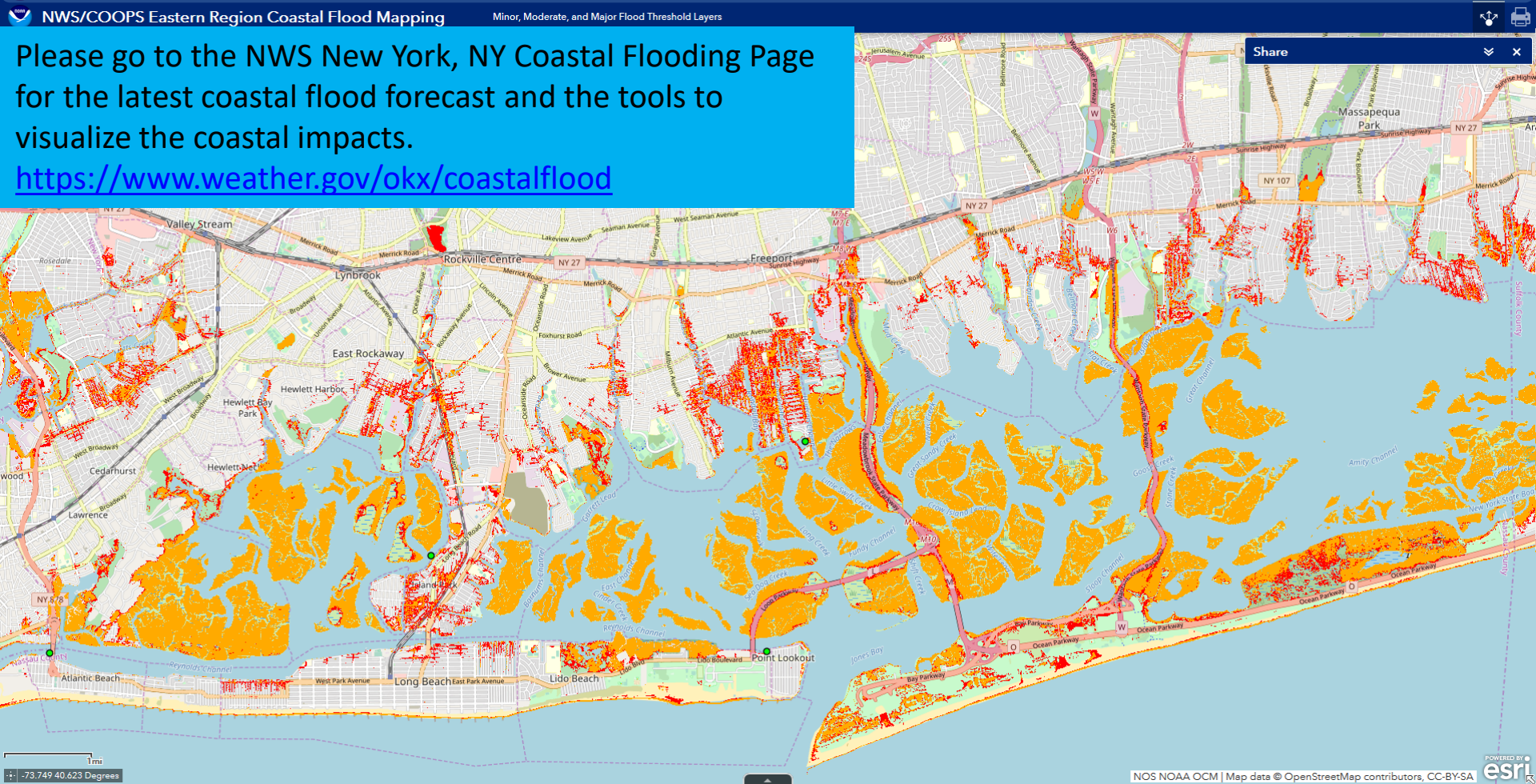
Please go to the NWS New York, NY Coastal Flooding Page for the latest coastal flood forecast and the tools to visualize the coastal impacts.
<https://www.weather.gov/okx/coastalflood>

Coastal Flooding – Inundation Areas

Greatest threat areas for Moderate to possibly Major inundation (2-3 ft AGL) Mon/Mon Night high tides.
(Likely inundation areas of inundation are shaded in orange. Potential areas of inundation are shaded in Red)

NWS/COOPS Eastern Region Coastal Flood Mapping
Minor, Moderate, and Major Flood Threshold Layers

Please go to the NWS New York, NY Coastal Flooding Page for the latest coastal flood forecast and the tools to visualize the coastal impacts.
<https://www.weather.gov/okx/coastalflood>

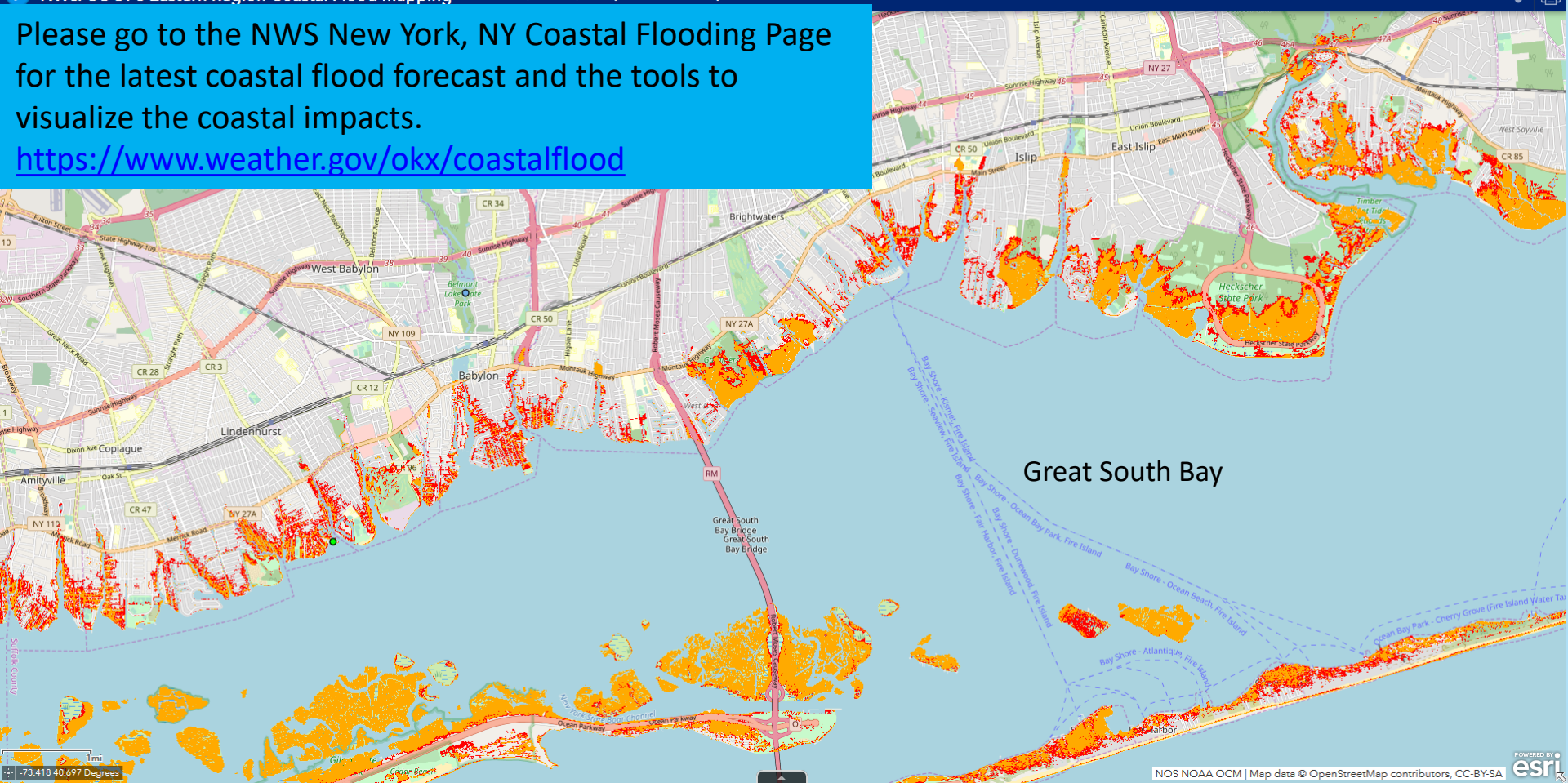


Coastal Flooding – Inundation Areas

Greatest threat areas for Moderate to possibly Major inundation (2-3 ft AGL) Mon/Mon Night high tides.
(Likely inundation areas of inundation are shaded in orange. Potential areas of inundation are shaded in Red)

NWS/COOPS Eastern Region Coastal Flood Mapping Minor, Moderate, and Major Flood Threshold Layers

Please go to the NWS New York, NY Coastal Flooding Page for the latest coastal flood forecast and the tools to visualize the coastal impacts.
<https://www.weather.gov/okx/coastalflood>

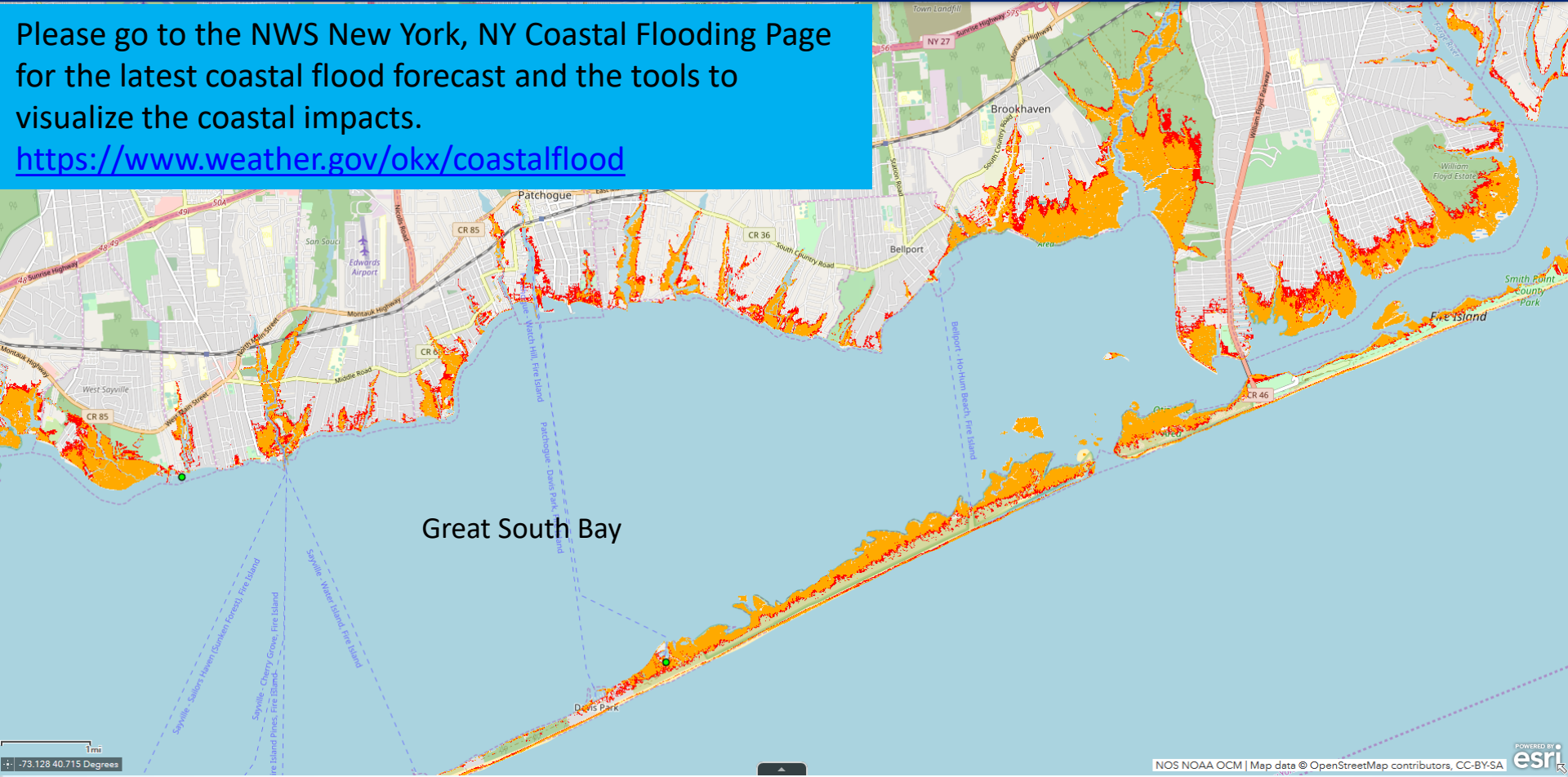


Coastal Flooding – Inundation Areas

Greatest threat areas for Moderate inundation (2-2 1/2 ft AGL) Mon/Mon Night high tides.

(Likely inundation areas of inundation are shaded in orange. Potential areas of inundation are shaded in Red)

Please go to the NWS New York, NY Coastal Flooding Page for the latest coastal flood forecast and the tools to visualize the coastal impacts.
<https://www.weather.gov/okx/coastalflood>



Coastal Flooding – Inundation Areas

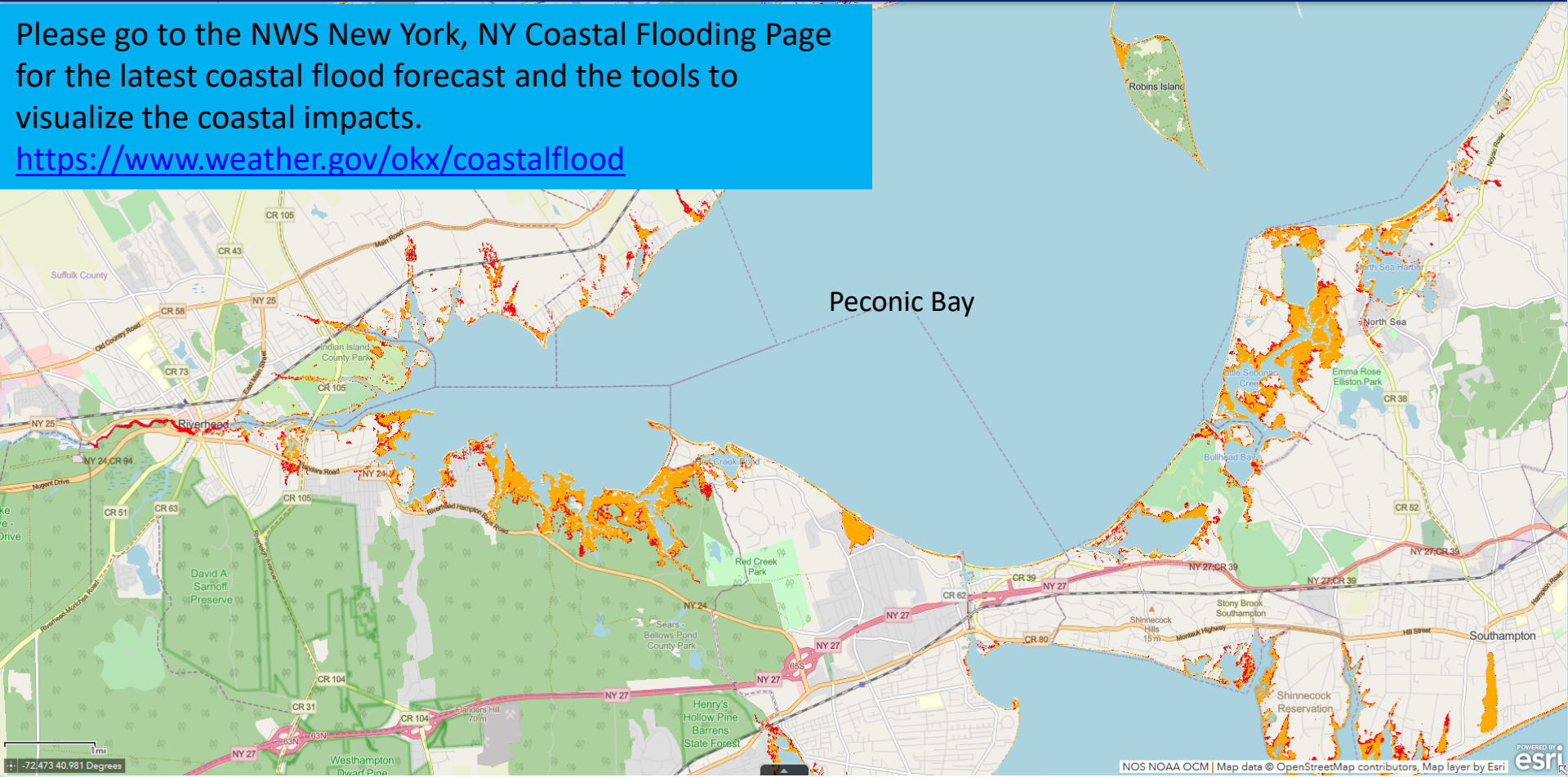
Greatest threat areas for Moderate to possibly Major inundation (2-3 ft AGL) Mon/Mon Night high tides.
(Likely inundation areas of inundation are shaded in orange. Potential areas of inundation are shaded in Red)

NWS/COOPS Eastern Region Coastal Flood Mapping

Minor, Moderate, and Major Flood Threshold Layers



Please go to the NWS New York, NY Coastal Flooding Page for the latest coastal flood forecast and the tools to visualize the coastal impacts.
<https://www.weather.gov/okx/coastalflood>



Event Summary

- ✓ **Winter Storm Warnings in effect Tonight into Tuesday AM**
 - ✓ Heavy Snow (16-24") expected for Much of the Region
 - ✓ 2-4"/hr snowfall rates Monday/Monday Eve
 - ✓ Near blizzard conditions expected especially closer to the coast
 - ✓ Lower snowfall totals of 6-12" expected for SE CT and E Long Island

- ✓ **Strong Winds for the City/Coast**
 - ✓ 20-40 mph with gusts 40-55 mph Monday into Monday Evening

- ✓ **Coastal Flood Warnings remain in effect for Long Island and S Queens for Mon into Mon Night high tides**
 - ✓ Minor to locally moderate coastal flooding with Mon AM/early PM high tides
 - ✓ Widespread Minor to Moderate and locally Major coastal flood potential with Mon Night high tide

- ✓ **Gale Warning for the ocean Tonight, Storm Warnings Monday into Monday Night for much of the coastal waters**

Contact and Next Briefing Information



Next Briefing
When: *Around 6 AM Mon*
Method: *E-mail*



Web:
<http://www.weather.gov/okx/>



Facebook:
<http://www.facebook.com/NWSNewYorkNY>



Twitter:
<http://www.twitter.com/NWSNewYorkNY>



YouTube:
<https://www.youtube.com/user/NWSNewYorkNY>

Disclaimer: *The information contained within this briefing is time-sensitive. Do not use after 6 AM Monday (02/01/21).*