

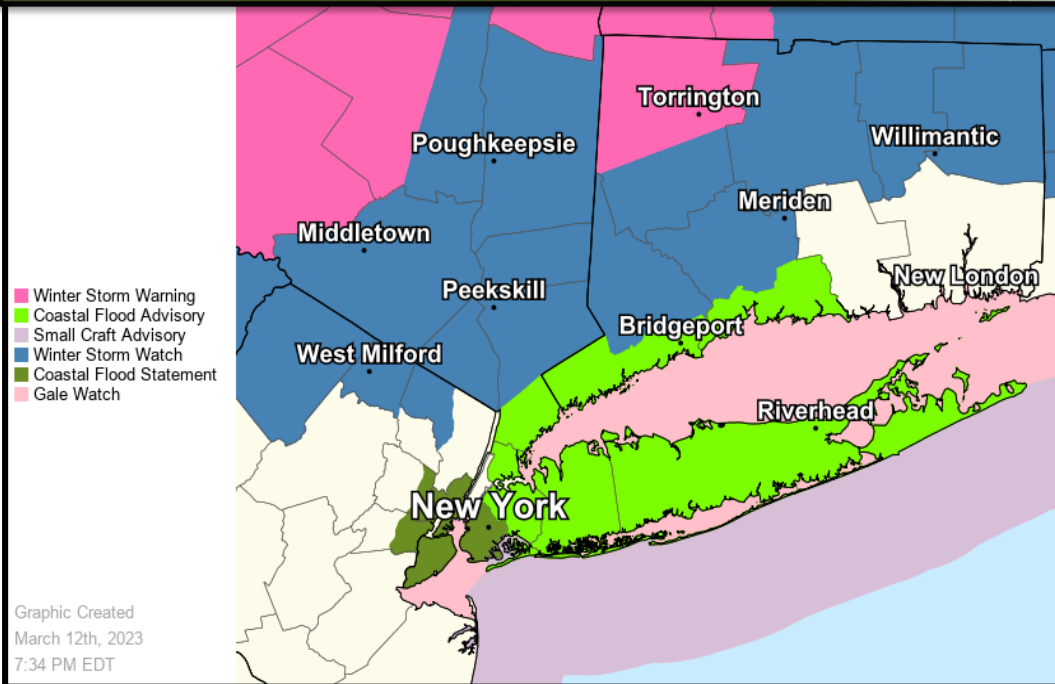
Nor'easter Monday Night into Tuesday Night...

PPT Briefing #1






What's Changed?

- Winter Storm Watches expanded to Rockland and N Westchester in NY, W. Bergen in NJ and N. New Haven counties in CT.
- Potential increasing for accumulating snow on Tuesday for city/coast.
- Coastal flood advisories issued for much of the coast for the Monday Night high tides.

Current Hazards



Main Points – Nor'Easter

Hazard	Impacts	Location	Timing
Heavy Snow 5-10" likely, locally 1ft+ possible above 750ft Winter Storm Watch 	<ul style="list-style-type: none"> Snowfall Rates of 1-2"/hr likely Mon Night into Tue AM Scattered to numerous downed tree limbs and powerlines Difficult travel 	Interior portions of Lower Hud, NE NJ and SW CT. Highest impact across elevations above 500 ft.	<ul style="list-style-type: none"> Rain changing to snow aft midnight Periods of heavy snow Monday Night into Tue Snow tapering late Tue Eve
Heavy Rain to Snow 2-2 1/2" likely, locally 3" possible 	<ul style="list-style-type: none"> Rainfall of 1" in 6hr, 2" in 12hr Mon Night into Tue AM. Scattered areas of minor urban and small stream flooding likely Rain changes to snow Tue. Light to mod snow accum possible. 	NYC/NJ metro and coast	<ul style="list-style-type: none"> Heavy rain Mon Eve/Night Rain changes to snow Tue from NW to SE. Snow taper off Tue Night.
Strong Winds 20-35G40-50mph City/Coast, higher gusts possible twin forks 	<ul style="list-style-type: none"> Few to scattered downed tree limbs and power lines. Power outages possible. 	Coastal Areas, including NYC/NJ metro Highest winds for E LI/ SE CT	<ul style="list-style-type: none"> Easterly gusts to 40 mph Mon Night/Tue AM, except 50 mph SE CT and E LI. W/NW gusts 40-50 Tue aft into Wed areawide.
Coastal Impacts 1 to locally 2 ft flooding above ground level (AGL) 	<ul style="list-style-type: none"> Minor to locally moderate coastal flood impacts Scattered dune erosion 	Moderate coastal flood threat along Peconic, Gardiners Bay, W LI Sound, and W Great South Bay	<ul style="list-style-type: none"> Times of high tide Monday Night
Marine Gale conditions 	<ul style="list-style-type: none"> Seas 8-12 ft on the Ocean Seas 3-5 ft central/eastern Long Island Sound and twin forks 	Nearshore Waters	<ul style="list-style-type: none"> Monday Night into Wednesday

Heavy Snow

Hazards and Impacts:

Interior portions of Lower Hud, NE NJ and SW CT

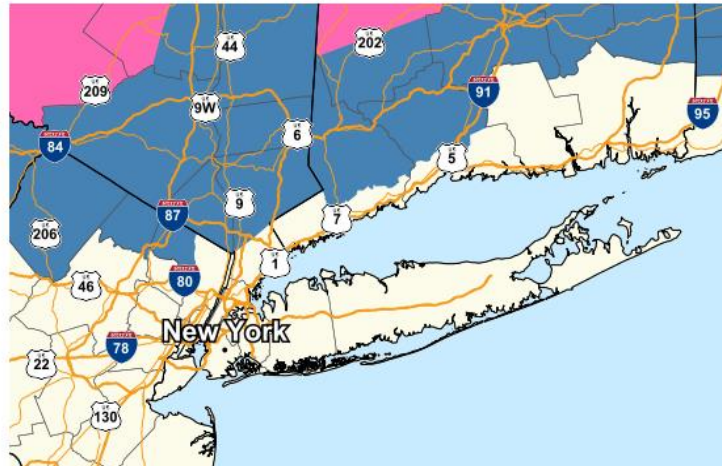
Winter Storm Watch

- ✓ **Snow Accum:** 5-10". Locally 1+ ft possible. Highest amounts likely above 750ft.
- ✓ **Timing:** Rain changes to heavy snow after midnight and continues into Tuesday Morning. Periods of moderate snow Tue aft/eve, before coming to an end by around midnight.
- ✓ **Snowfall rates:** 1-2"/hr Midnight Mon through Tue AM
- ✓ **Snow Character:** Wet
- ✓ **Temps:** Lower 30s
- ✓ **Impacts:** Scattered to numerous downed trees limbs and powerlines. Difficult travel.

NYC/NJ metro and coast. Heavy Rain Monday Night changing to snow Tuesday.

- ✓ **Snow Accum:** 1-4" likely, heaviest across northern areas. Potential for locally higher amounts.
- ✓ **Timing:** Rain changes to snow from NW to SE Tuesday morning into afternoon. A period of moderate to heavy snow possible after changeover.
- ✓ **Snowfall rates:** Up to 1"/hr Tue AM/PM
- ✓ **Snow Character:** Wet
- ✓ **Temps:** Lower to mid 30s
- ✓ **Impacts:** **Potential for a period of moderate to heavy snow down to the city/coast Tue morning and/or evening commute. Uncertainty on exact time of changeover and intensity at this point, potentially as quick as Tue AM commute, more likely for Tue aft/eve commute.**

Winter Watches Warnings and Advisories



Graphic Created
March 12th, 2023
6:34 PM CDT

Forecast Challenges:

Confidence is high in a significant heavy wet snowfall for interior portions of Lower Hud, NE NJ and SW CT.

Potential for a changeover to period of moderate to heavy snow down to the city/coast as early as Tue AM. This will depend on track and intensity of a double low pressure system, and will need to be refined over the next 24 hrs.

Most Likely Snowfall – Official Forecast

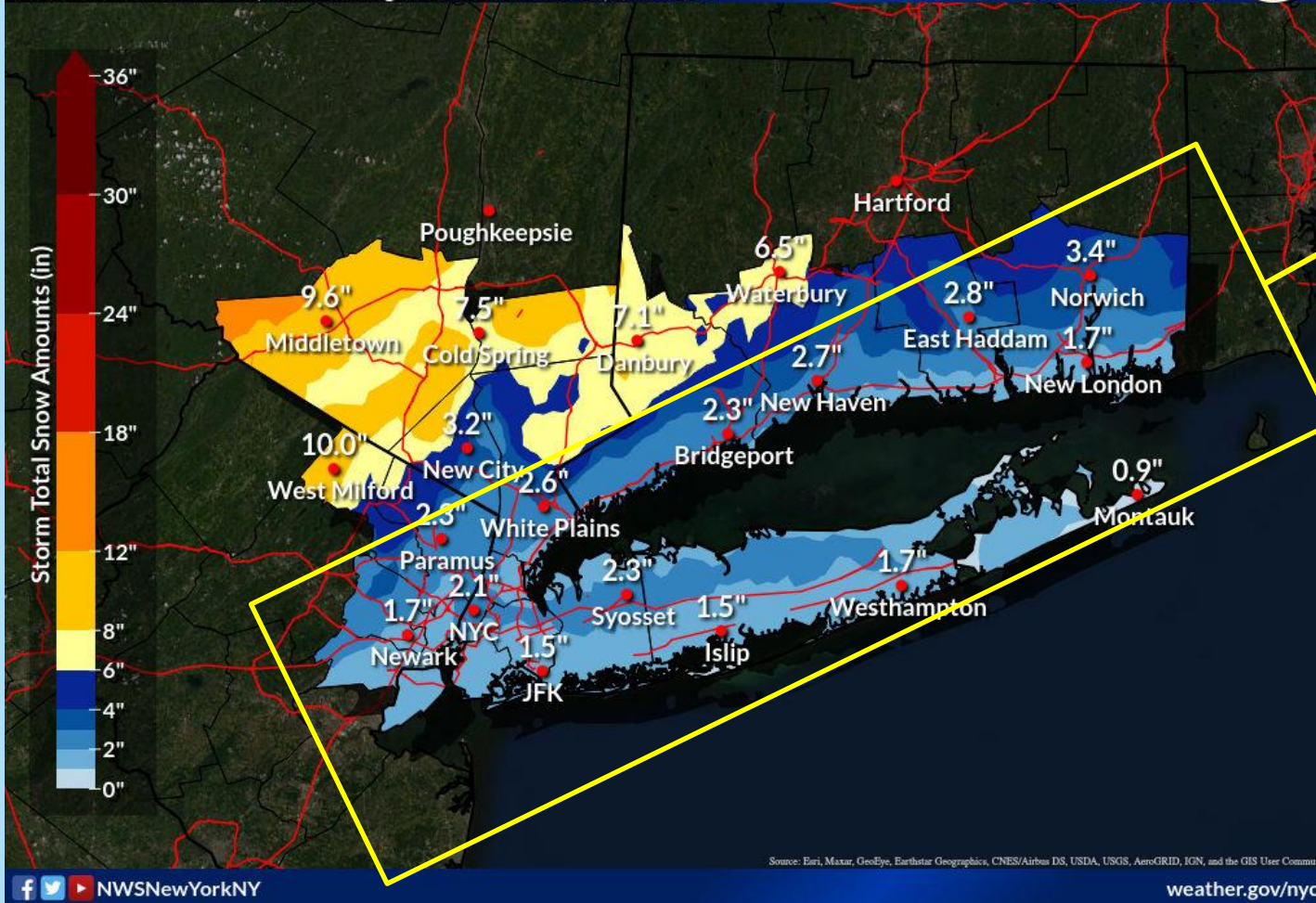
Expected Snowfall - Official NWS Forecast

Weather Forecast Office

New York, NY

Valid 2 AM Mon Mar 13, 2023 through 2 AM Wed Mar 15, 2023 EDT

Issued Mar 12, 2023 5:21 PM EDT



The greatest uncertainty in snow amounts is in the boxed area. It will be dependent on how quickly low pressure intensifies and how close to the coast.

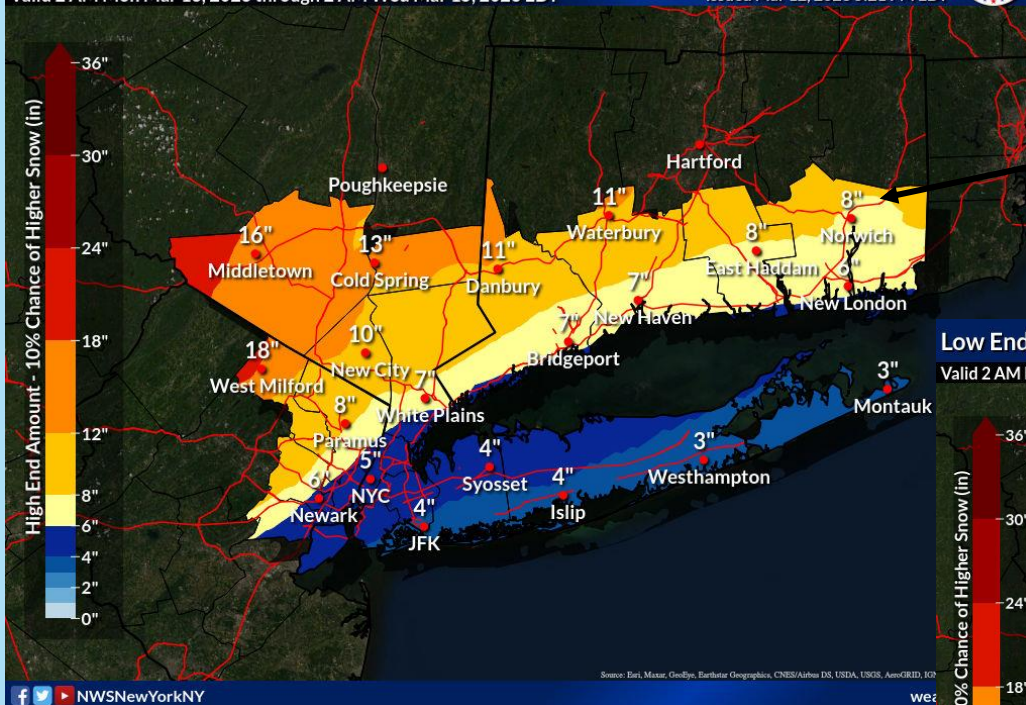
Probabilistic Snowfall Forecast

High End Amount - 1 in 10 Chance (10%) Of Higher Snowfall

Valid 2 AM Mon Mar 13, 2023 through 2 AM Wed Mar 15, 2023 EDT

Weather Forecast Office
New York, NY

Issued Mar 12, 2023 5:21 PM EDT



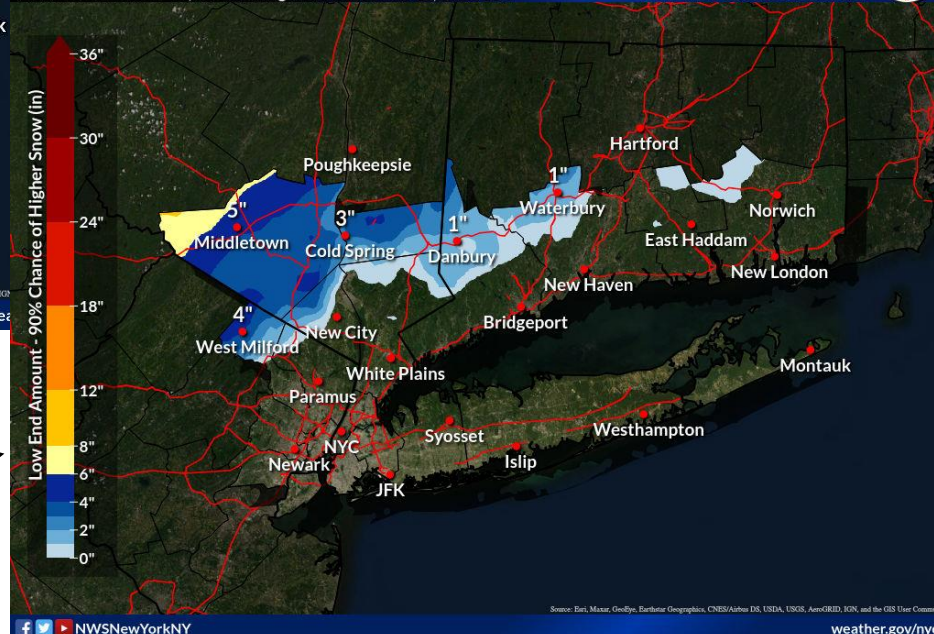
Snow amounts could be close to these levels if low pressure intensifies quicker than forecast, transitioning rain to snow earlier than forecast and/or lingering heavy snow banding over the region for a longer period of time

Low End Amount - 9 in 10 Chance (90%) Of Higher Snowfall

Valid 2 AM Mon Mar 13, 2023 through 2 AM Wed Mar 15, 2023 EDT

Weather Forecast Office
New York, NY

Issued Mar 12, 2023 5:21 PM EDT

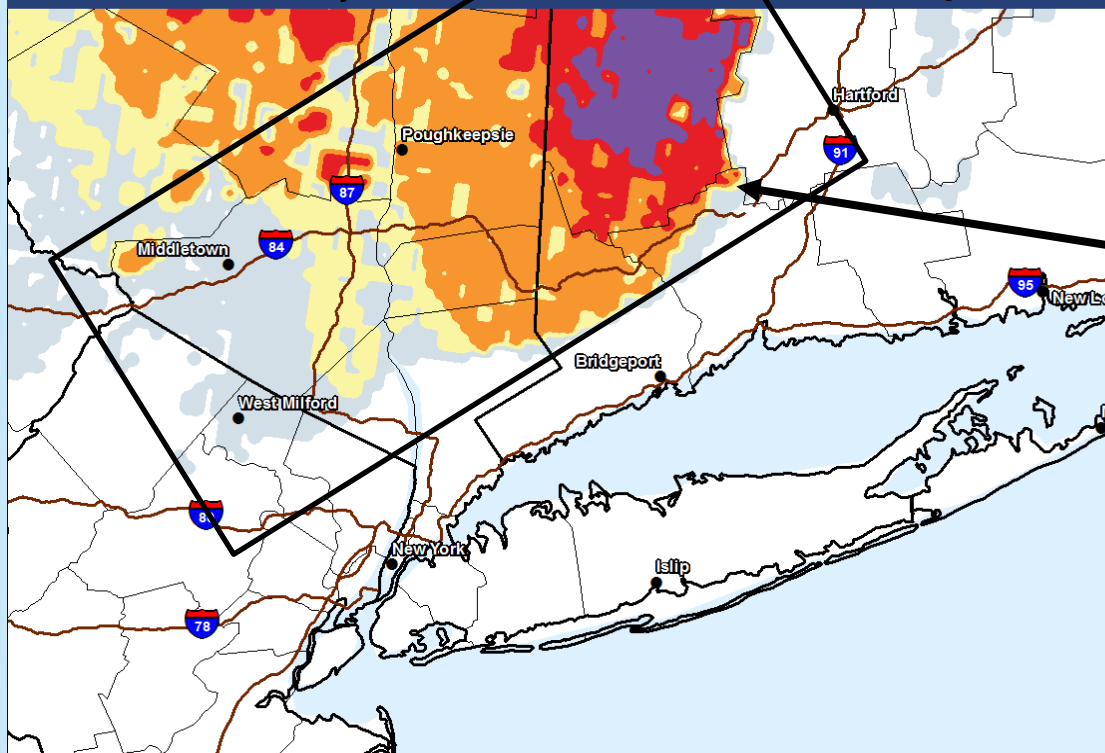


Expect at least this much snow.

Snow Load Impact

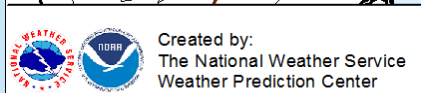
WSSI Snow Load -- Day3

Valid through Tue, Mar 14, 2023 08 PM ET



Greatest risk of snow load issues from 6+” of heavy wet snow Monday Night into Tuesday across the boxed area.

Potential for scattered to numerous downed tree limbs and powerlines.



Potential Winter Storm Impacts

Winter Storm Severity Index (WSSI)

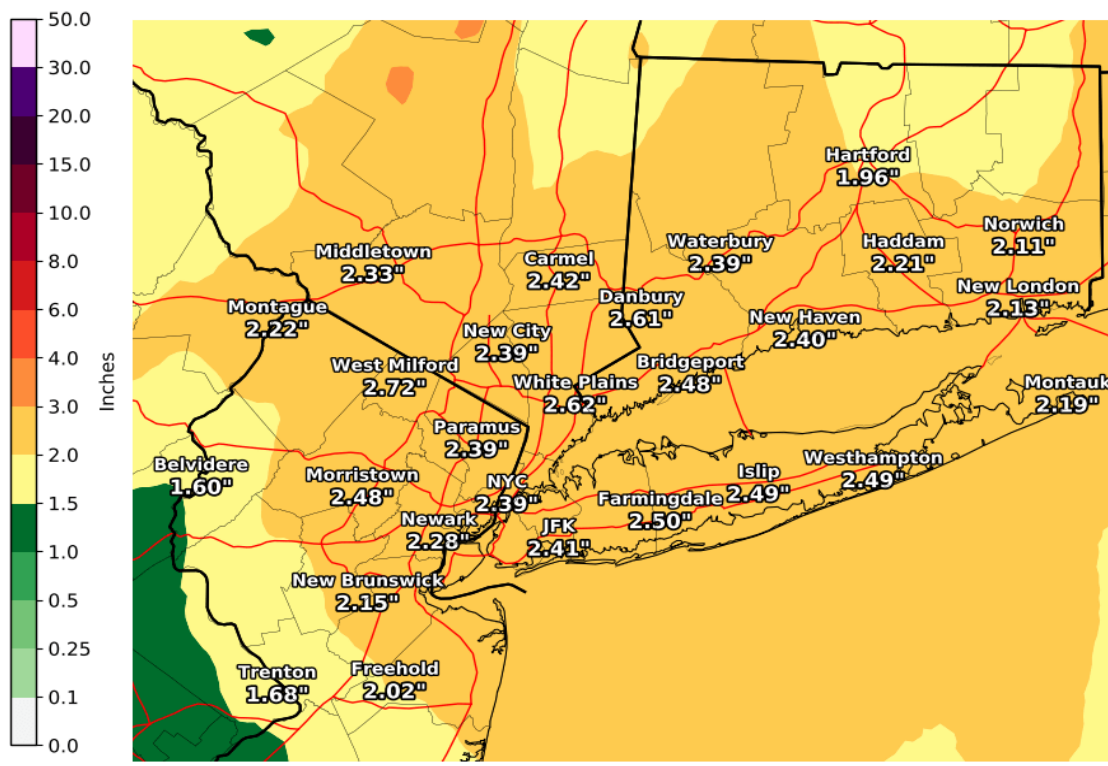
Issued: Sat, Mar 11, 2023 07 PM ET

Winter Weather Area	Minor Impacts	Moderate Impacts	Major Impacts	Extreme Impacts
<p>Winter Weather Area Expect winter weather.</p> <ul style="list-style-type: none"> Winter driving conditions. Drive carefully. 	<p>Minor Impacts Expect a few inconveniences to daily life.</p> <ul style="list-style-type: none"> Winter driving conditions. Use Caution while driving. 	<p>Moderate Impacts Expect disruptions to daily life.</p> <ul style="list-style-type: none"> Hazardous driving conditions. Use extra caution while driving. Closures and disruptions to infrastructure may occur. 	<p>Major Impacts Expect considerable disruptions to daily life.</p> <ul style="list-style-type: none"> Dangerous or impossible driving conditions. Avoid travel if possible. Widespread closures and disruptions to infrastructure may occur. 	<p>Extreme Impacts Expect substantial disruptions to daily life.</p> <ul style="list-style-type: none"> Extremely dangerous or impossible driving conditions. Travel is not advised. Extensive and widespread closures and disruptions to infrastructure may occur. Life-saving actions may be needed.

Heavy Rain

Expected Rainfall/Liquid Equivalent

Valid: 03/12/2023 12:00 AM - 03/15/2023 01:00 PM EDT



Hazards and Impacts:

Heavy rainfall for NYC/NJ metro, LI, and SE CT Monday Night into Tuesday morning:

- ✓ **StormTotal Rainfall:**
 - ✓ 2 to 2 1/2", locally 3"
- ✓ **Rainfall Rates:** Peak rates from 10pm to 10am Mon Night into Tue AM
 - ✓ Moderate to high potential (>70%) for...
 - ✓ 1" in 6hr
 - ✓ 2" in 12hrs
 - ✓ Low potential (<30%) for 1" in 3 hr

Impacts:

- ✓ Scattered areas of minor urban and poor drainage flooding.
- ✓ Minor flooding possible along a few quick responding small rivers and streams of NE NJ and Lower Hudson Valley.
- ✓ Heavy rainfall during the times of high tide could exacerbate flooding in vulnerable coastal and shoreline communities.

Forecast Challenges:

Confidence is increasing in forecast rainfall amounts. Flood impacts may be locally enhanced due to combo of rain, snow melt, snow clogged drainages, and frozen ground.

Minor to Locally Moderate Coastal Flooding

Marine / Coastal Hazards



Coastal Flood Hazards and Impacts:

- ✓ **Coastal Flood Advisory:** Widespread minor to moderate (1-2 ft above ground) coastal flooding along Western Great South Bay, Jamaica Bay, Western LI Sounds, and Peconic and Gardiners Bay during the Monday Night/early Tue Am high tide.

Shoreline Hazards and Impacts:

- ✓ 4-7' breaking waves along the oceanfront, resulting in beach erosion and flooding during times of high tide Monday Night/early Tue Am. Minor erosion impacts to dune base possible.
- ✓ 1 to 3' breaking waves along Western LI sound and Orient Point shoreline resulting in beach erosion and wave splash over bulkheads and seawalls.




Uncertainty:

- ✓ Magnitude of coastal flooding Monday Night/Tue AM will be dependent on timing of easterly gale winds backing from the E to NE. Forecast has been leaned towards a later wind shift, and higher surge scenarios based on low pressure track and intensity spread.

For the latest coastal flood forecasts (hydrographs and tables) and the tools to visualize the potential coastal impacts (zoomable potential inundation map, impact catalogs, climatology, etc.) in your area of concern please go to the [NWS New York, NY Coastal Flooding Page](#)



Coastal Flooding Thresholds

	Minor (CF Advisory)	Moderate (CF Warning)	Major (Warning)
Picture	 Westport	 Lindenhurst	 New Haven
Hazard	<ul style="list-style-type: none"> • Low threat of property damage...and no direct threat to life. • 1 to 2 ft of inundation in shoreline and vulnerable areas. 	<ul style="list-style-type: none"> • Elevated threat of property damage...with a risk to life if one places themselves in unnecessary danger. • 2 to 3 ft of inundation in shoreline and vulnerable areas. • Minor to no inundation of surrounding coastal communities. 	<ul style="list-style-type: none"> • Significant threat to life and property. • 3-5+ ft of inundation in shoreline and other vulnerable areas. • Minor to moderate inundation (1 to 3 ft) of surrounding coastal communities that rarely experience coastal flooding.
Impact	<ul style="list-style-type: none"> • A few shoreline and vulnerable roadways and adjacent properties will experience shallow flooding. 	<ul style="list-style-type: none"> • Several shoreline and vulnerable area home and businesses will experience water inside. • Several low-lying coastal and shoreline roads will be closed. • A few cars may take on water or even be destroyed. 	<ul style="list-style-type: none"> • Evacuations will be necessary for the most vulnerable shoreline and coastal areas. • Many coastal communities will experience damage...with some shoreline and flood prone homes and businesses being destroyed. • Many cars will likely be submerged or washed away. • Several sections of nearshore roads and escape routes will be impassable and a few could be washed out. • Flood waters may extend well inland in low lying areas.

Event Summary

- ✓ Heavy wet snowfall across interior portions of Lower Hudson Valley, northeastern NJ, and southwestern CT. Scattered to numerous downed tree limbs and powerlines due to snow loading.
- ✓ Potential for accumulating snowfall down to the coast Tue AM/PM
- ✓ Strong easterly winds gusts to 40-50 mph possible across E LI/SE CT Monday Night into Tue AM. Widespread northwesterly gusts to 50mph areawide Tue afternoon into Wednesday.
- ✓ Minor to locally moderate coastal flooding along Western Great South Bay, Jamaica Bay, Western LI Sounds, and Peconic and Gardiners Bay during the Monday Night/early Tue Am high tide.