

Strong Storm System Tonight into Saturday

Decision Support Briefing #5

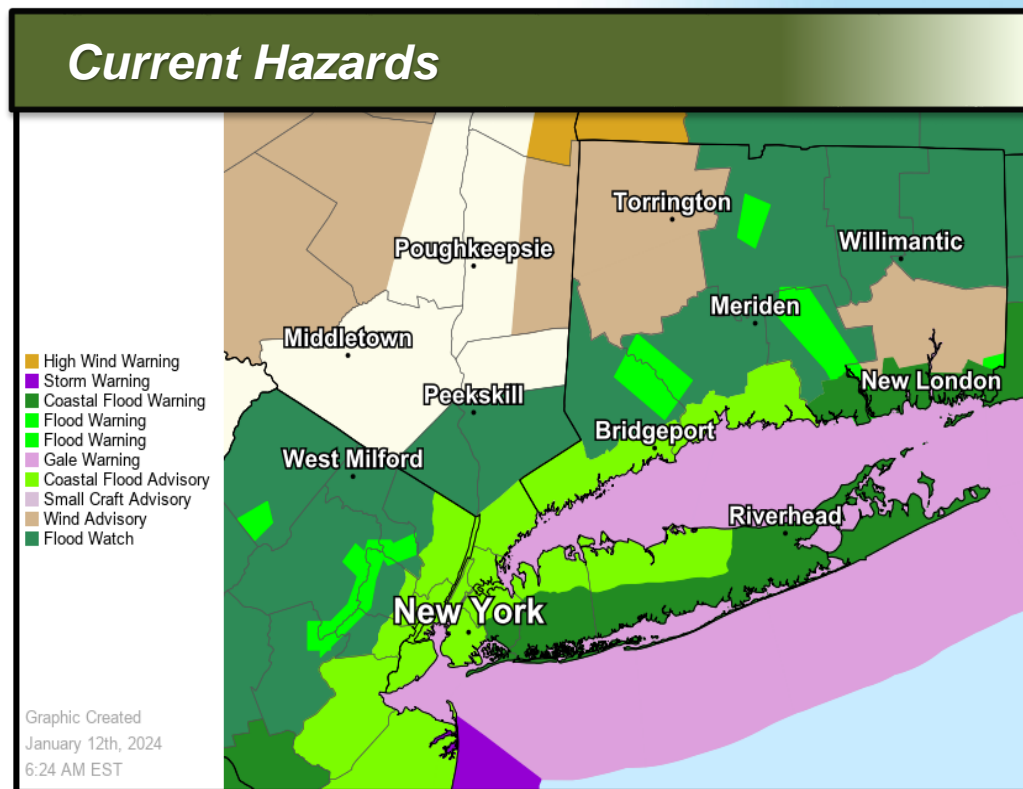
As of: 6:00 AM January 12, 2024

What Has Changed?

- Wind advisories issued for NYC, Long Island, and Southern CT.
- Gale warnings now in effect for all waters.

Key Messages...

- ✓ Widespread minor to moderate river flooding likely. Locally major river flooding possible.
- ✓ Widespread minor urban and poor drainage flooding threat. Isolated flash flooding possible.
- ✓ Widespread moderate coastal flooding likely for south shore of Queens, southern and eastern Long Island and SE CT coast with the Saturday morning high tide. Locally major flooding possible along the southern bays of LI and Queens.
- ✓ Widespread dune erosion and scattered overwashes likely along the ocean beachfront Saturday morning.
- ✓ Strong winds possible for the coast with Gale conditions likely on all waters.



Moderate River Flood Threat Tonight into Saturday

Current Convective and Flood Watches



Compounding Factors:

- ✓ Streamflows are running very high (above the 90th percentile), with well above normal soil moisture (99th percentile), increasing the threat for flood impacts.
- ✓ River flooding will likely be exacerbated along the tidal reaches of rivers Saturday morning during time of high tide.

Hazard: **Flood Watch in Effect**

✓ **Storm Total Rainfall:**

- ✓ 1 1/2 to 2", locally 2 1/2" possible.
- ✓ Much of this will fall between 10pm tonight and 8am Saturday

✓ **Rainfall Rates:**

- ✓ 1/4 to 1/2"/hr possible for a 4 to 6 hr period between midnight and 8am Saturday.

Timing:

- ✓ Heaviest rainfall between 10pm tonight and 8am Saturday morning, but significant river flood impacts could continue through Sunday.

Impacts:

- ✓ **Moderate River Flooding threat tonight into Saturday along numerous quick responding small rivers and streams of NE NJ, Lower Hud and SW CT. This will likely cause some inundation of structures and roads near rivers and streams, evacuations of people and/or transfer of property to higher elevations is possible along a few rivers.**
- ✓ **Widespread minor urban and poor drainage flooding potential tonight into Saturday morning. Isolated flash flooding possible.** This will likely cause scattered disruptions to transportation and scattered flooding of basements, with minor flooding of first floors of residences and businesses as well as some underground infrastructures possible.

Official Rainfall Forecast

Expected Rainfall/Liquid Equivalent - Official NWS Forecast

Weather Forecast Office
New York, NY

Valid Fri 7:00PM through Sat 1:00PM EST

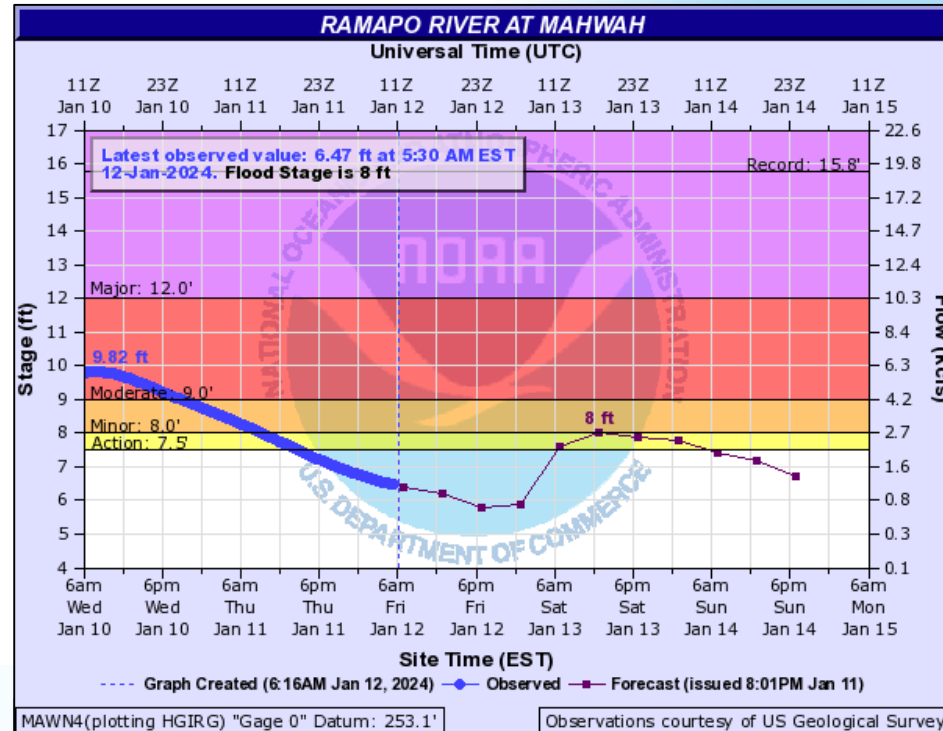
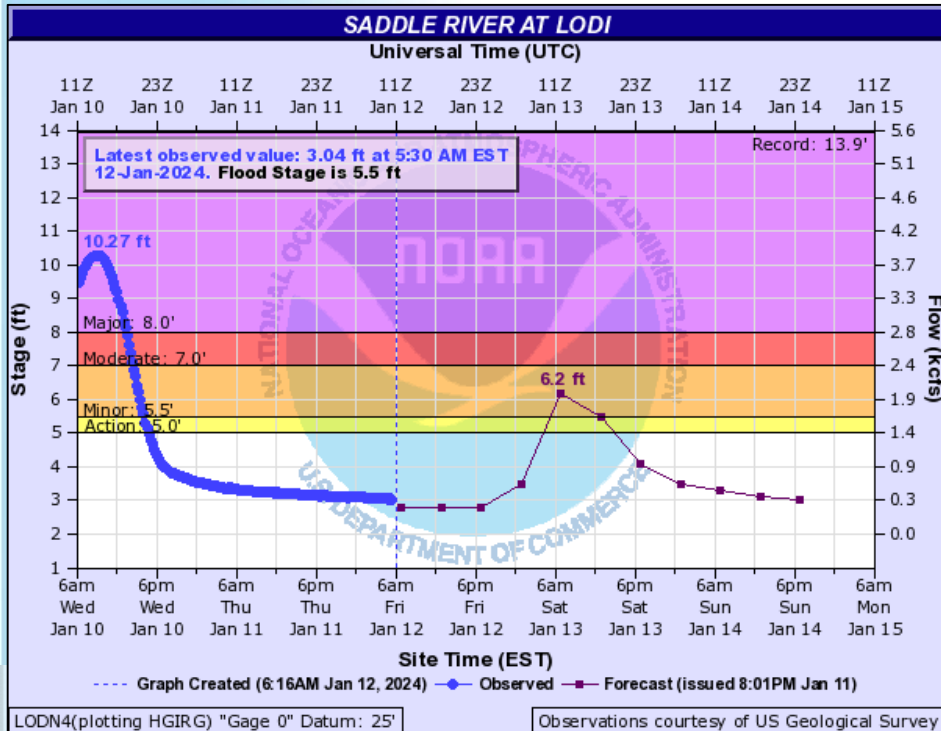
Issued Jan 12, 2024 4:55 AM EST



Bergen County: Northeastern NJ River Flooding Potential

- ✓ **Moderate Flood threat on the Saddle River tonight into Saturday morning. Major flooding potential if greater than 2" of rainfall occur.**
- ✓ **Minor to Moderate Flooding threat on the Ramapo River.**
- ✓ **Moderate flooding possible for several other quick responding rivers and streams as well, including the Hackensack, Hohokus and Pascack.**
- ✓ **Prepare for Moderate Flood Impacts:** Some inundation of structures and roads near stream, evacuations of people and/or transfer of property to higher elevations.

For more details...See here for the latest [river forecasts](#), impact catalogs, and [inundation maps](#).



Northeastern NJ River Flooding Potential: Passaic and Essex Counties

- ✓ Moderate to Major flooding continues along the Passaic River, likely continuing through this weekend.
 - ✓ **Prepare for Major Flooding Impacts:** Extensive inundation of structures and roads, significant evacuations of people and/or transfer of property to higher elevations is likely.
 - ✓ **Passaic River at Little Falls Impacts:** At 9ft+, widespread flooding occurs in Fairfield, Wayne, and parts of Paterson.
 - ✓ **Passaic at Pine Brook Impacts:** At 21ft+, widespread flooding occurs in Fairfield and parts of Wayne and West Caldwell. Residences between Route 80 and Route 46 may flood in Fairfield.

- ✓ Minor flooding continues along the Pompton River. **Possible moderate flooding tonight into Saturday.**
 - ✓ **Prepare for Moderate Flooding Impacts:** Some inundation of structures and roads near stream, evacuations of people and/or transfer of property to higher elevations.

For official forecast details...See the latest [river forecasts](#) from WFO PHI, impact catalogs, and [inundation maps](#).

Lower Hudson Valley River Flooding Potential

- ✓ **Moderate flood threat for several quick responding small rivers and streams, including Hackensack River at West Nyack in Rockland County, and Bronx River, Sprain Brook, Saw Mill River, and Hutchinson Rivers in Westchester Counties.**
- ✓ **Prepare for Moderate Flood Impacts:** Some inundation of structures and roads near streams, evacuations of people and/or transfer of property to higher elevations.

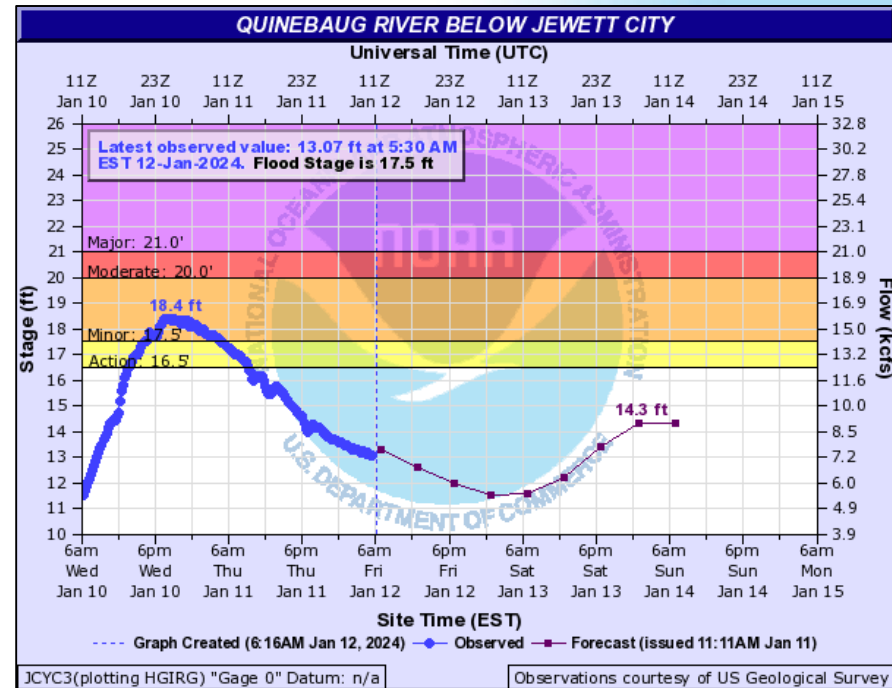
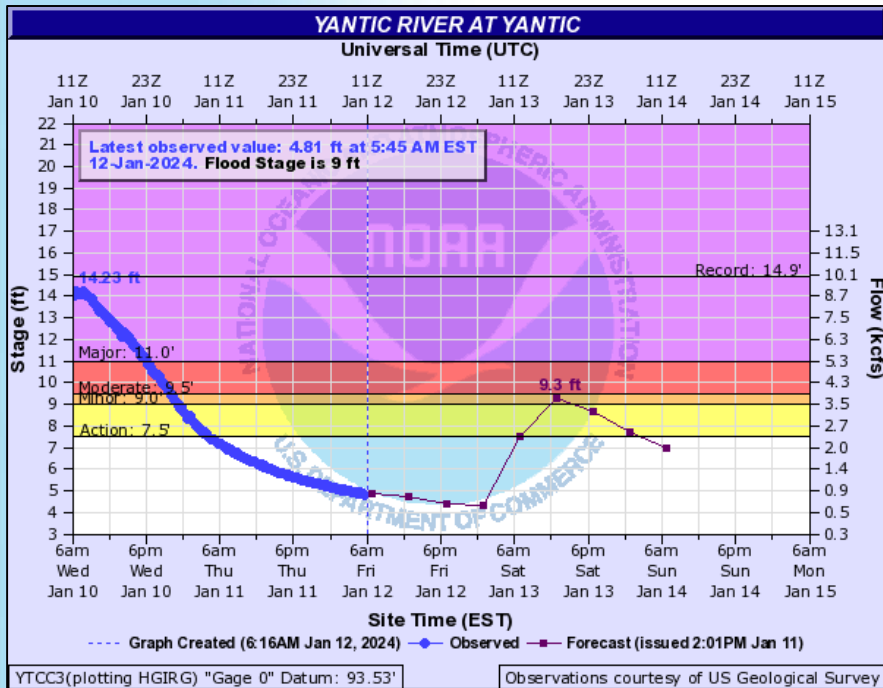
For more details...See here for the latest [river forecasts](#) and impact catalogs.



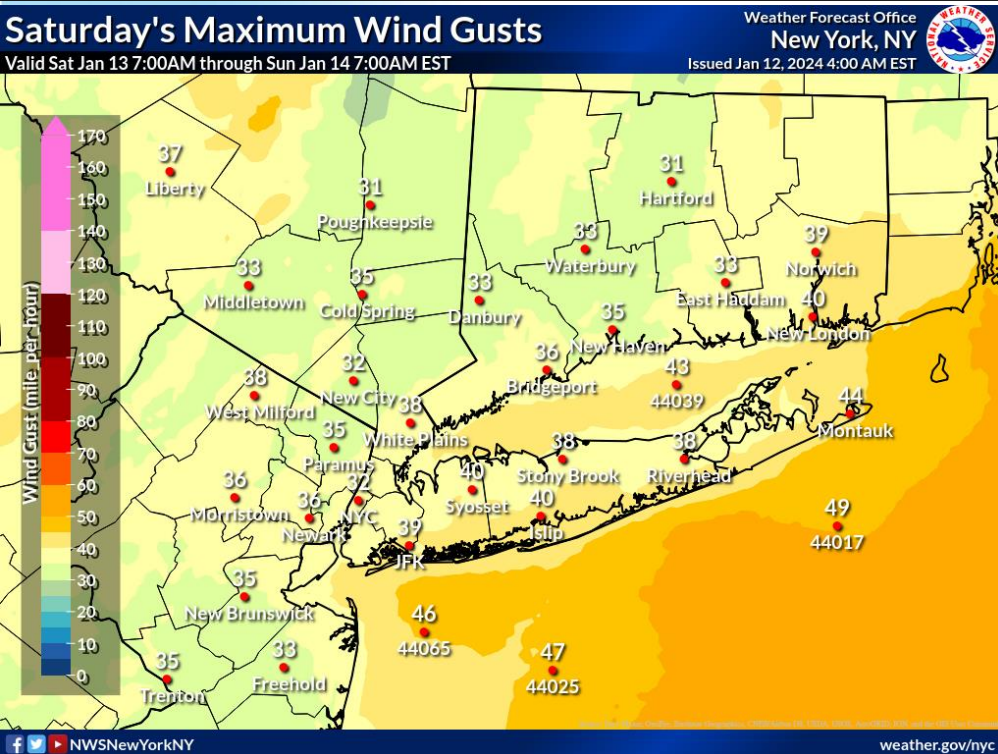
CT River Flooding Potential

- ✓ Minor flood threat for exists for Quinebaug, Rippowam and Quinnipiac Rivers tonight into Saturday.
- ✓ **Moderate flooding threat exists for the Yantic, Pomeraug and Still Rivers.**
- ✓ **Prepare for Moderate Flooding Impacts:** Extensive inundation of structures and roads, evacuations of people and/or transfer of property to higher elevations is likely.

For more details...See here for the latest [river forecasts](#) and impact catalogs.



Strong Winds



Hazards and Impacts:

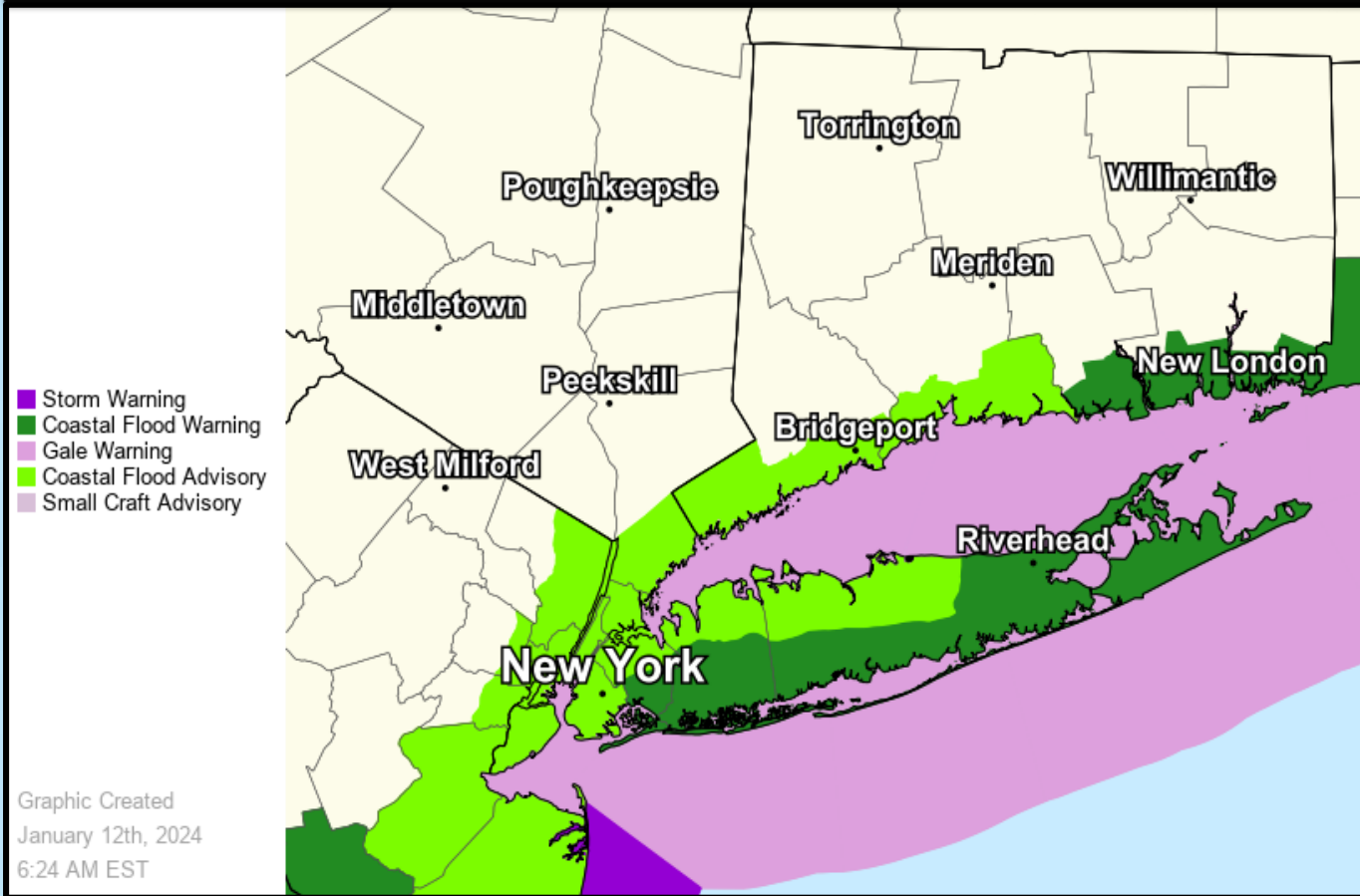
Coastal Strong Wind Potential for tonight into Saturday

- ✓ **Peak Winds:** Southeast winds of 25 to 35 mph with gusts up to 50 mph tonight, particularly LI. Strongest winds between midnight and 8am Saturday. Shift to southwest winds of 20 to 30 mph with gusts up to 45 mph during the day Saturday.
- ✓ **Impacts:** Scattered tree limbs will likely be downed, as well as isolated trees and power lines. A few power outages possible. Poorly secured outdoor objects will be damaged or blown away.

Forecast Challenges:

Southeast wind direction and saturated soils tonight may increase the downed tree and powerline impacts.

Marine / Coastal Hazards



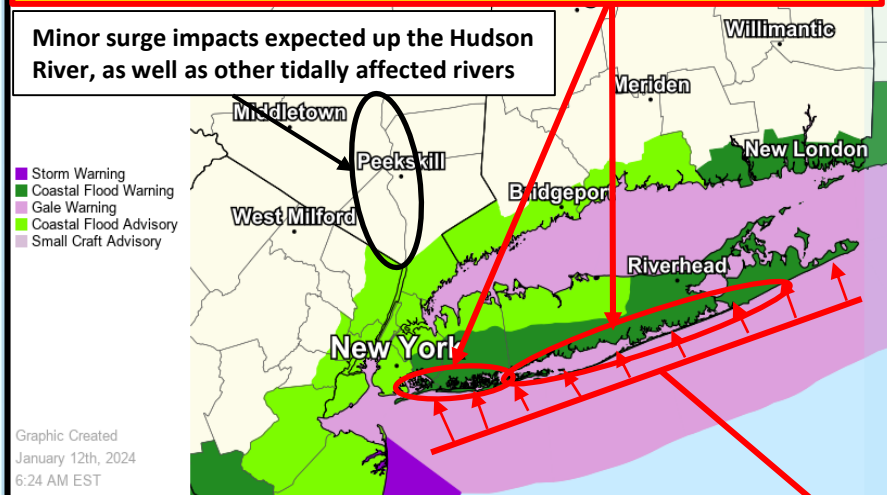
**Gale Warning on all waters starting tonight.
High Seas on the ocean 13 to 17 ft, 3 to 6 ft on LI Sound.**

Coastal Flooding Hazard and Impacts

Marine / Coastal Hazards

Greatest threat areas for locally major coastal flooding during Saturday morning high tide (inundation of 3 ft above ground level).

Minor surge impacts expected up the Hudson River, as well as other tidally affected rivers



Coastal Flood Hazards and Impacts: Saturday Morning high tide:

- ✓ **Coastal Flood Warning Areas:** Widespread moderate to major coastal flooding (2 to 3 ft above ground) expected.
 - ✓ **Potential Impacts:** Extensive road closures and flooding of low lying property including parking lots, parks, lawns and first floors and basements of homes/businesses near the waterfront. Vehicles parked in vulnerable areas near the waterfront will likely become flooded and/or submerged. Flooding will likely also extend inland from typical flood prone areas along the tidal rivers and bays, causing flooding in some areas that typically don't see flooding.
- ✓ **Coastal Flood Advisory Areas:** Widespread minor to moderate coastal flooding (1 ½ to 2 ft above ground) expected.
 - ✓ **Potential Impacts:** Some roads and low lying property including parking lots, parks, lawns and homes/businesses with basements near the waterfront will experience minor flooding.

Shoreline Hazards and Impacts:

- ✓ **12-17' breaking waves along the oceanfront, resulting in widespread dune base erosion and scattered overwashes with Sat afternoon high tide. Isolated breaches or inundation is possible where dune structures have been severely compromised by previous storms.**
 - ✓ 3 to 5' waves along southeast coastal CT and 4 to 8' along Orient Point shoreline resulting in beach erosion and wave splasher onto shoreline roads and properties.

Timing:

- ✓ Around the times of high tide Saturday morning.




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 see to the [NWS New York, NY Coastal Flooding Page](#)

Forecast Challenges:

- ✓ Peak surge of 3 to 4 ft will be likely between times of high tide tonight and Sat morning. Storm surge on Sat AM will be dependent on time of AM wind shift from SE gales to WSW gales.
- ✓ Tidal piling will inhibit recession of water from the southern bays of LI, maximized across eastern parts of the Great South Bay behind wind shift, presenting the greatest threat for major flooding.
- ✓ Freshwater runoff coinciding with this Sat AM high tide will exacerbate street and property flooding along tidally affected rivers.



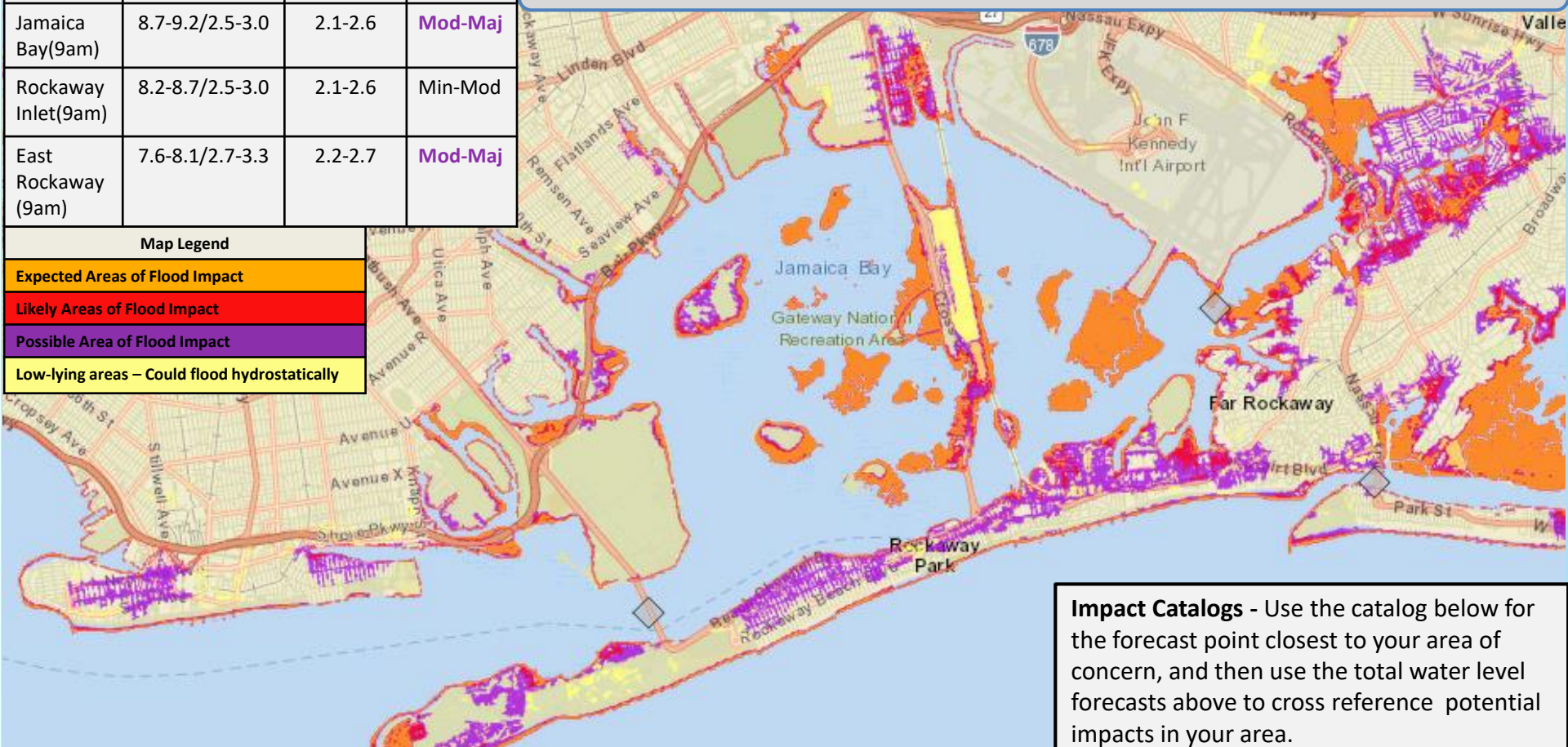
Coastal Flooding Thresholds

	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.

Coastal Flooding – Potential Flood Impact Areas

Forecast Location (High tide Time)	Peak Water Level (ft) (MLLW/MHHW)	Departure at high tide (ft)	Flood Impact
Jamaica Bay(9am)	8.7-9.2/2.5-3.0	2.1-2.6	Mod-Maj
Rockaway Inlet(9am)	8.2-8.7/2.5-3.0	2.1-2.6	Min-Mod
East Rockaway (9am)	7.6-8.1/2.7-3.3	2.2-2.7	Mod-Maj

The map below shows the potential extent of flood impact (water above ground) during the Saturday morning high tides. Flooding will likely be as deep as 2 to 2 ½ ft in spots, possibly as much as 3 ft in spots.



Impact Catalogs - Use the catalog below for the forecast point closest to your area of concern, and then use the total water level forecasts above to cross reference potential impacts in your area.

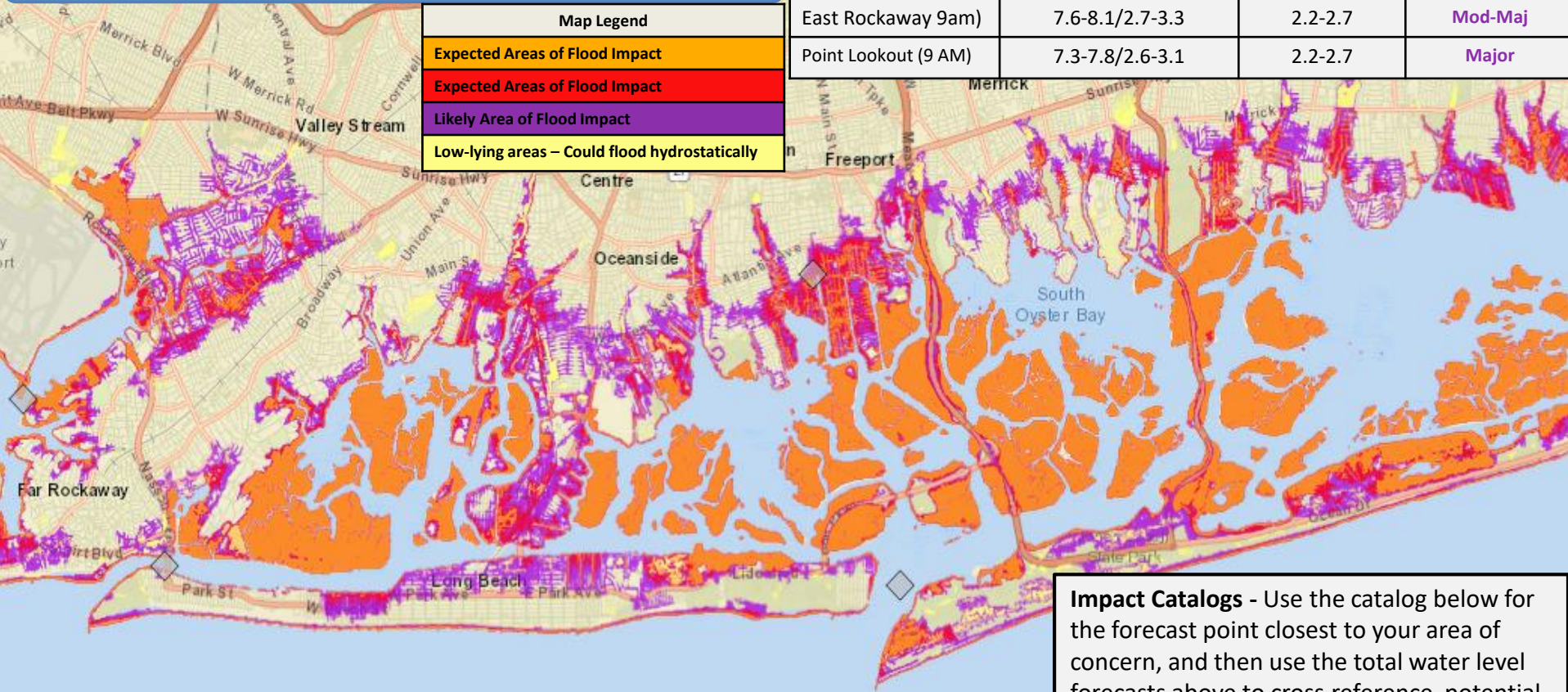
- [Jamaica Bay at Inwood](#)
- [East Rockaway](#)
- [Rockaway Inlet](#)

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

Coastal Flooding – Potential Flood Impact Areas

The map below shows the potential extent of flood impact (water above ground) during the Saturday morning high tides. Flooding may be as deep as 2 ½ to 3 ft in spots.

Forecast Location (High tide Time)	Peak Water Level (ft) (MLLW/MHHW)	Departure at high tide (ft)	Flood Impact
Freeport (10 AM)	6.8-7.3/2.2-2.7	3.1-3.6	Major
East Rockaway 9am)	7.6-8.1/2.7-3.3	2.2-2.7	Mod-Maj
Point Lookout (9 AM)	7.3-7.8/2.6-3.1	2.2-2.7	Major



Map Legend
Expected Areas of Flood Impact
Expected Areas of Flood Impact
Likely Area of Flood Impact
Low-lying areas – Could flood hydrostatically

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- [Freeport](#)
- [East Rockaway](#)
- [Point Lookout](#)

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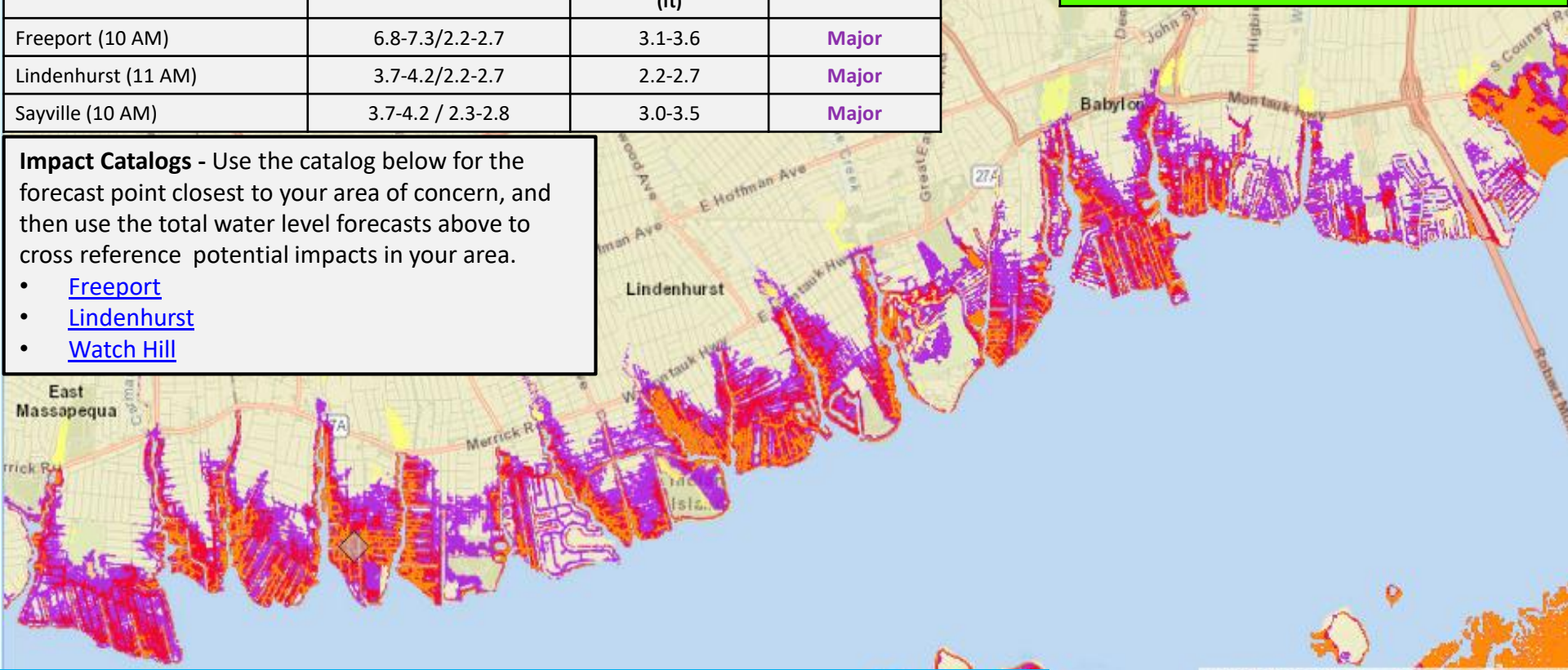
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Freeport (10 AM)	6.8-7.3/2.2-2.7	3.1-3.6	Major
Lindenhurst (11 AM)	3.7-4.2/2.2-2.7	2.2-2.7	Major
Sayville (10 AM)	3.7-4.2 / 2.3-2.8	3.0-3.5	Major

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- [Freeport](#)
- [Lindenhurst](#)
- [Watch Hill](#)



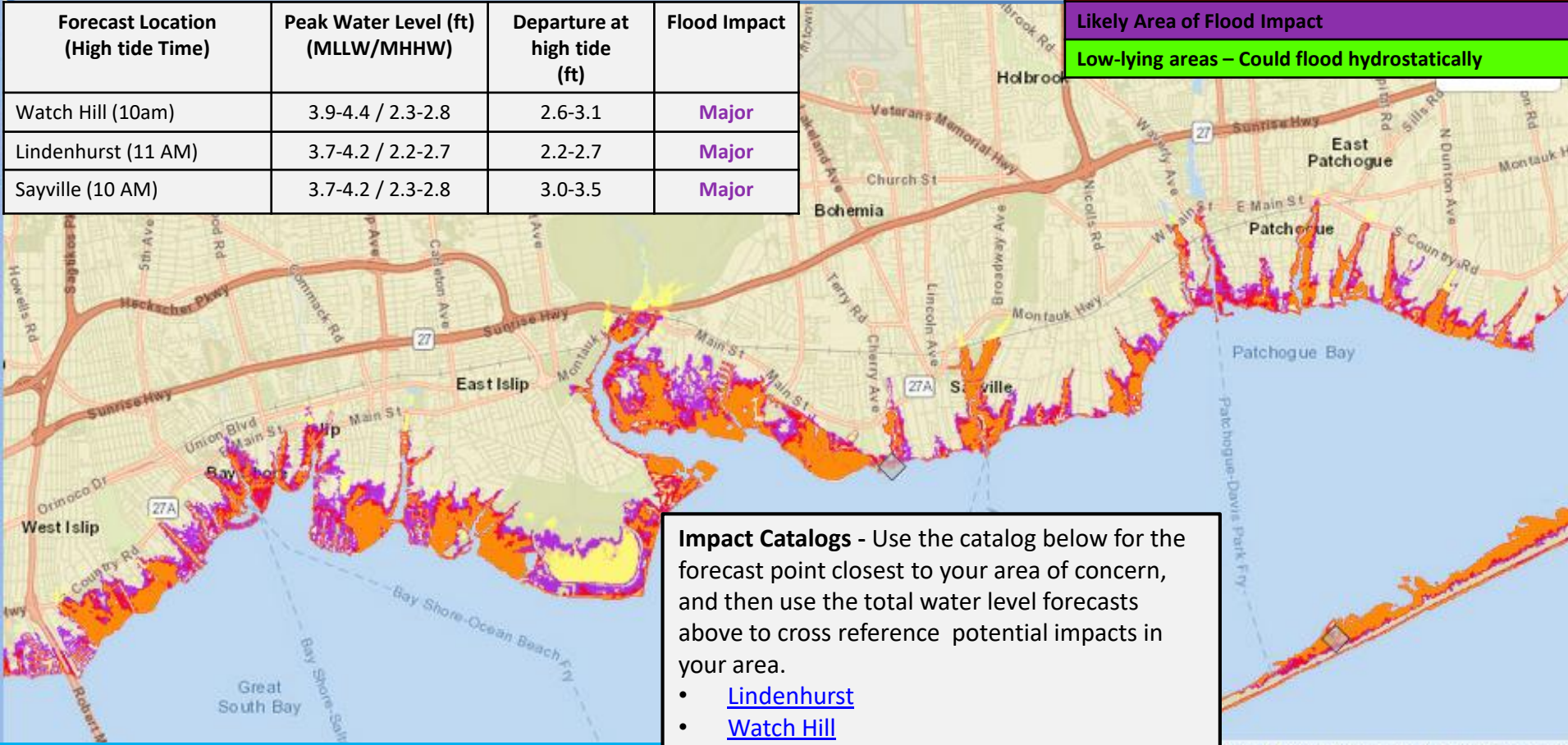
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Coastal Flooding – Potential Major Flood Impact Areas

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Watch Hill (10am)	3.9-4.4 / 2.3-2.8	2.6-3.1	Major
Lindenhurst (11 AM)	3.7-4.2 / 2.2-2.7	2.2-2.7	Major
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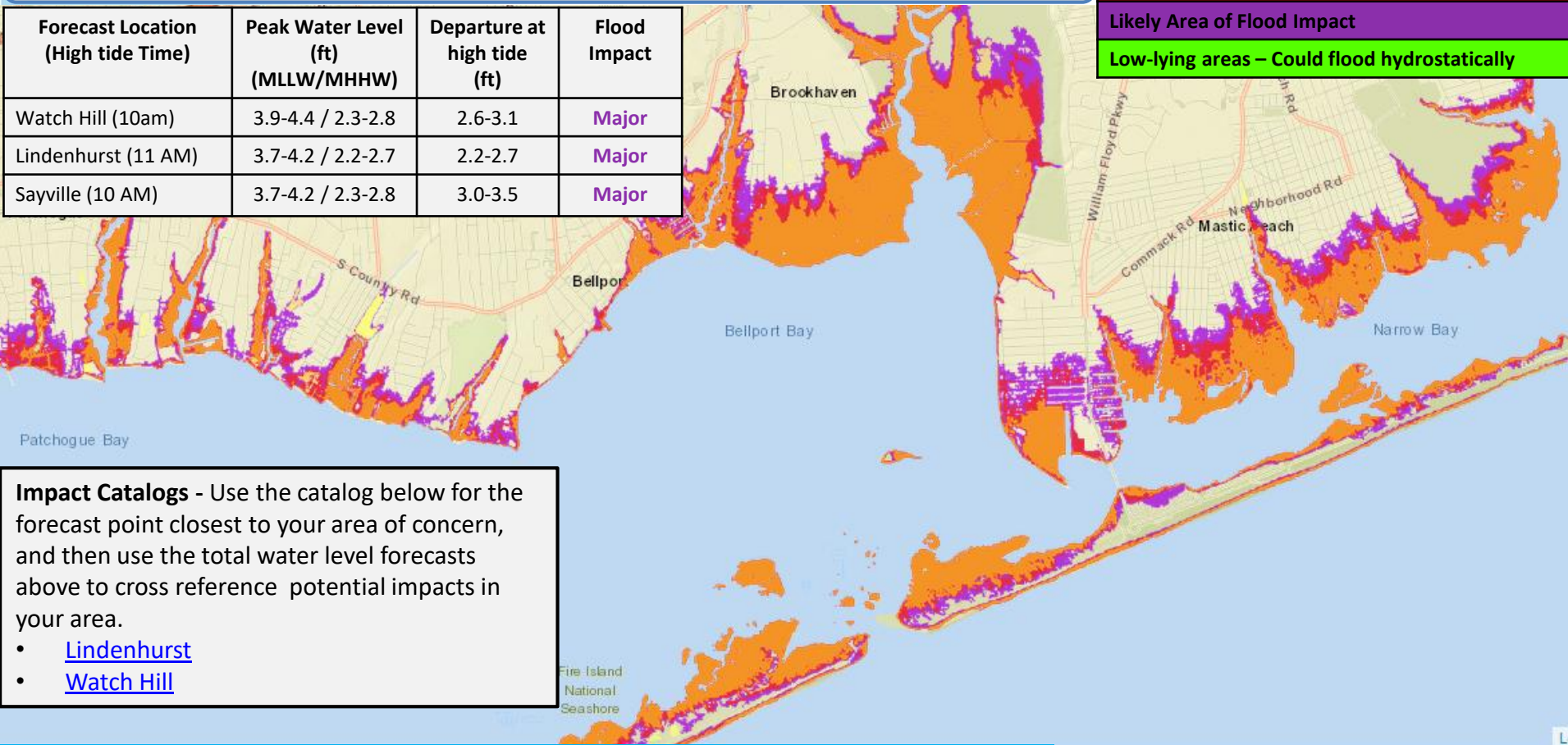
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Coastal Flooding – Potential Major Flood Impact Areas

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Event Summary

- ✓ Widespread 1 to 2", locally 2 ½", of rainfall late tonight into Saturday.
 - ✓ **Widespread moderate river flood threat across NE NJ, Lower Hudson Valley and SW CT into Thursday.**
 - ✓ Widespread minor urban and poor drainage flood threat, with isolated flash flood threat.
- ✓ **Widespread moderate to major (2 ½ to 3 ft inundation above ground) coastal flooding is likely along the south shore bays and ocean front of Long Island and Queens**
 - ✓ Elsewhere widespread minor to moderate coastal flooding, including up the tidally affected rivers as well.
- ✓ 12 to 17 ft breaking surf causing **widespread dune erosion and scattered overwashes for the ocean beachfront tonight into Saturday. Isolated dune breaches are possible where dunes are severely compromised.**
- ✓ Southeast winds 25 to 35 mph with gusts 45 to 50 mph likely tonight along the coast, shifting to the southwest Saturday, causing scattered tree impacts. Power impacts are possible.
- ✓ Gale conditions are likely on all waters late tonight into Saturday.