

Over the last year, the Department of City Planning met with you and other community members from across the floodplain to discuss strategies to make buildings resilient to flooding. We heard many of you express an interest in learning more about flood resilience more broadly. This newsletter addresses some of the most common questions.

In our last newsletter, we discussed how investing in small changes, or “partial mitigations” to your building can reduce the risk of damage from flooding, while being less costly than elevating or fully floodproofing a structure. When meeting with residents living in coastal communities, we also heard questions about different types of flooding, and what types of strategies are appropriate for different floods. We will dedicate the next two newsletters to clarifying the differences between coastal flooding and inland flooding, beginning with:

What is coastal flooding?

Coastal flooding refers to any type of flooding that is generated from the ocean or other tidally connected waterbodies, as opposed to inland flooding caused by rain or coming from rivers. The most severe form of coastal flooding is storm surge, which is the rise in water levels caused by a storm’s strong winds and low atmospheric pressure.

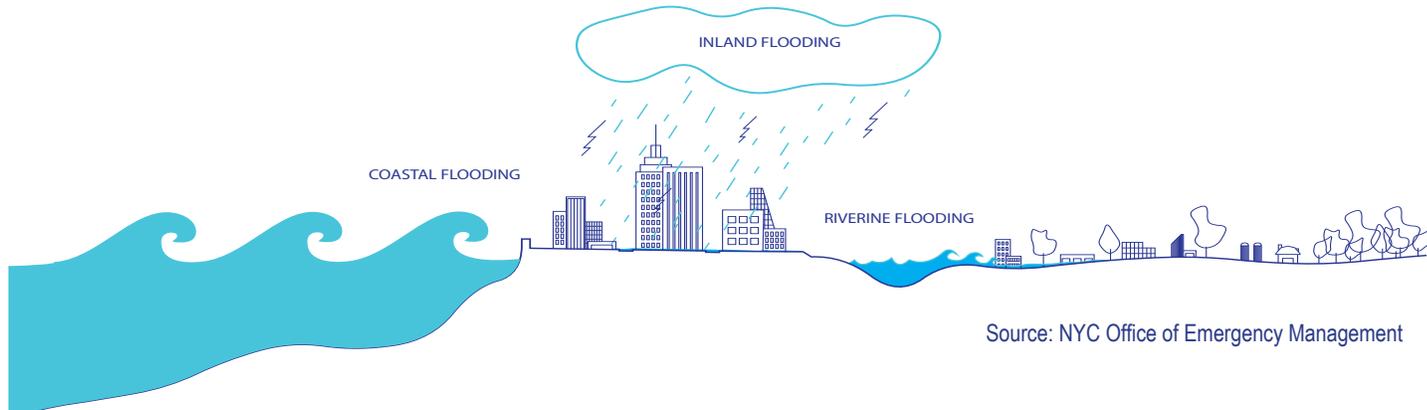
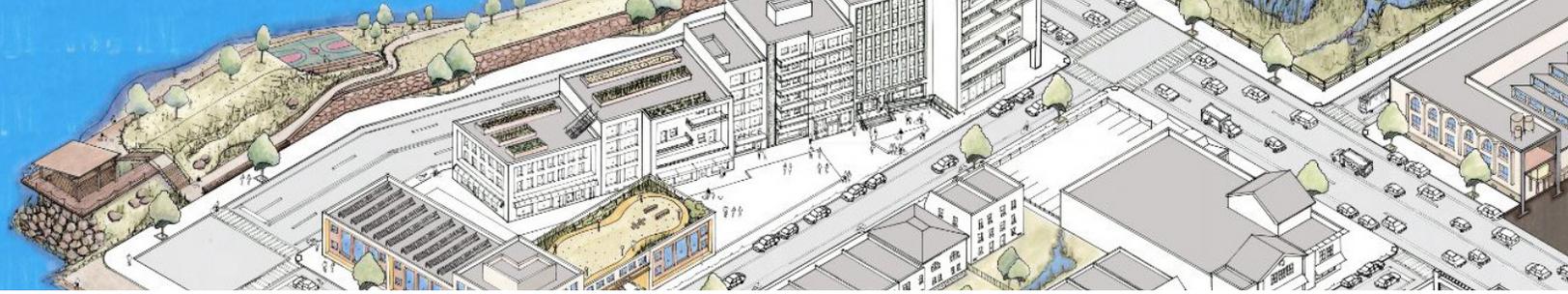
Storm surge occurs when a strong coastal storm, such as a tropical storm, hurricane, or nor’easter, approaches land, raising the water levels and flooding low-lying areas.

- A **hurricane** is an intense tropical weather system of strong thunderstorms and maximum sustained winds of 74 miles per hour or greater. When storm conditions coincide with a normal high tide, water levels may reach up to 20 feet or more above mean sea level, causing sudden shoreline erosion and significant building damage. While June 1st marked the beginning of hurricane season across the country, New York City is at the most risk from hurricanes between August and October.
- A **nor’easter** is a type of coastal storm which typically forms when circulation brings winds from the northeast off the Atlantic Ocean, and is characterized by heavy snow, sleet, and/or freezing rain. Nor’easters typically occur during the winter.

Did you know?

Sandy was a convergence of a number of weather systems. It was a hurricane headed toward the Atlantic when a high-pressure system blocked its advance to the north and a low-pressure system from the southeastern US caused it to intensify.

By the time it made landfall in New Jersey, it was technically a post-tropical cyclone.



Source: NYC Office of Emergency Management

Coastal flooding can also occur from high tides; this is often called “sunny day flooding” or “nuisance flooding.”

A normal high tide refers to the maximum height reached by a rising tide during the course of the daily tidal cycle. During a full and new moon, exceptionally strong gravitational forces cause very high and very low tides, called spring tides. Today, spring high tides can cause minor flooding in some low-lying neighborhoods, mostly located around Jamaica Bay. However, as sea levels rise, tidal flooding will become more severe and more areas may be affected.

How can I prepare for coastal flooding?

- Know your flood risk: nyc.gov/floodhazardmapper
- Know your hurricane evacuation zone: nyc.gov/knowyourzone
- Create an emergency plan: nyc.gov/readynewyork

Why DCP developed this newsletter

Over the last year, the NYC Department of City Planning met with community members from across the floodplain to discuss strategies to make buildings resilient to flooding. At these meetings, we heard valuable input that will help shape our climate resiliency initiatives, and we are planning to release a draft proposal to update the Flood Resiliency Zoning Text later this year.

We also heard many of you express an interest in learning more about flood resiliency more broadly. So we’ve put together this newsletter to begin addressing some of the most common questions. In the coming months, you can expect to learn from this newsletter about the importance of flood insurance, the City’s plans for coastal resiliency, and how zoning can promote flood-resistant building design.

We hope you’ll stay engaged by sharing this newsletter with friends and colleagues, and e-mailing us ideas for future topics at: ResilientNeighborhoods@planning.nyc.gov

Additional Resources
For more information from NOAA on different types of flooding: <https://goo.gl/j2NWB8>