Hurricane Sandy flooded nearly 90,000 buildings, but the resulting damage differed depending on the storm’s waves, surge, and depth, as well as the building’s age and characteristics. Buildings pre-dating modern building code and zoning standards fared worse than newer buildings built to flood resilient construction standards. When meeting with floodplain communities, many residents expressed interest in learning more about flood resilience more broadly. This newsletter addresses some of the most common questions.

What qualifies as a “substantial improvement”? Any building repair, construction, rehabilitation, addition, or improvement with a cost equaling or exceeding 50% of the current market value of the building.

reduce potential damages from flooding, and can also lower your flood insurance premiums.

Understanding the following site-specific flood risks are important for all buildings undergoing resiliency improvements:

Location of your building within the flood zone

The 1% annual chance floodplain is divided into three zones based on risk: V Zones are vulnerable to severe wave action, Coastal A Zones are vulnerable to moderate wave action, and A Zones are vulnerable to flooding but not wave damage. Resilient building standards apply to these areas. Additional standards to protect from waves apply in the V Zones.

The 0.2% annual chance floodplain is denoted as Shaded X Zones on FEMA’s maps and has a lower annual chance of flooding than the A Zone. Currently, resilient building standards do not apply to most buildings in this area.

When am I required to make my home resilient to flooding?

Within the flood zone, you are required to meet resiliency standards if you are building a new structure or making a substantial improvement to your building. Existing buildings are not required to make resiliency improvements, but doing so can

Understanding the following site-specific flood risks are important for all buildings undergoing resiliency improvements:

Location of your building within the flood zone

The 1% annual chance floodplain is divided into three zones based on risk: V Zones are vulnerable to severe wave action, Coastal A Zones are vulnerable to moderate wave action, and A Zones are vulnerable to flooding but not wave damage. Resilient building standards apply to these areas. Additional standards to protect from waves apply in the V Zones.

The 0.2% annual chance floodplain is denoted as Shaded X Zones on FEMA’s maps and has a lower annual chance of flooding than the A Zone. Currently, resilient building standards do not apply to most buildings in this area.
Did you know?
Check to see if you’re in the flood zone and learn your BFE at www.floodhelpny.org.

Expected height of flooding for your building
The height to which floodwater is anticipated to rise during the 1% annual chance storm is referred to as the Base Flood Elevation (BFE). When designing a residential building to meet resiliency standards, you will be required to elevate the building so the lowest occupied floor is above this level to meet the Design Flood Elevation (DFE). The DFE is determined by adding the specified amount of freeboard—additional height for safety (usually 1 to 2 feet depending on building type)—to the BFE.

In upcoming newsletters, we plan to share strategies for making both new and existing buildings more resilient. City Planning is looking into providing zoning flexibility so that all buildings can make proactive investments, even when not required to. If you have tried to elevate your home or make it more resilient, but have experienced zoning or other regulatory barriers to doing so, we hope you’ll share your story with us.

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 Resilience Zoning Text later this year.

We also heard many of you express an interest in learning more about flood resilience 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

Learn more about our work and check out our video!