

KEY TERMS¹

100-year flood (1% annual chance flood)	A flood that has a 1% probability of occurring in any given year. The 100-year floodplain is the extent of the area of a flood that has a 1% chance of occurring or being exceeded in any given year.
500-year flood (0.2% annual chance flood)	A flood that has a 0.2% probability of occurring in any given year. The 500-year floodplain is the extent of the area of a flood that has a 0.2% chance of occurring or being exceeded in any given year.
Adaptation	Adjustment in natural or human systems to a new or changing environment that seeks to maximize beneficial opportunities or moderate negative effects.
Base flood elevation (BFE)	The elevation of surface water resulting from a flood that has a 1% annual chance of occurring or being exceeded in any given year. The BFE is shown on the Flood Insurance Rate Map (FIRM). ²
Climate change	Changes in average weather conditions that persist over multiple decades or longer. Climate change encompasses both increases and decreases in temperature, as well as shifts in precipitation, changing risk of certain types of severe weather events and changes to other variables of the climate system.
Climate risk	The chance that investments can be affected by the physical impacts of climate change. ³ Risks are evaluated as a product of the likelihood of occurrence (probability) and the damages that would result if they did occur (consequences).
Design life	The life expectancy of an asset or product as determined during design. ⁴ As opposed to <i>useful life</i> (see below).
Extreme event	A weather event that has a low probability of occurring at a particular place and time of year, including, for example, heat waves, cold waves, heavy rains, periods of drought and flooding and severe storms.
Flexible adaptation pathway	Resilience-building strategies that can evolve over time as climate risk assessments, evaluations of adaptation strategies and monitoring continue. ⁵
Flood Insurance Rate Maps (FIRM)	Official flood map of a community on which FEMA has delineated the 1% annual chance floodplain and the base flood elevations (BFEs) applicable to the community. ⁶
Freeboard	An additional amount of height above the base flood elevation used as a factor of safety (e.g., 2 feet above the base flood) in determining the level at which a structure's lowest floor must be elevated or floodproofed to be in accordance with state or community floodplain management regulations. ⁷

¹ All terms are from the U.S. Global Change Research Program (USGCRP) glossary unless otherwise noted. The USGCRP glossary is available at: <http://www.globalchange.gov/climate-change/glossary>

² “Definitions,” FEMA, last modified March 1, 2017. <https://www.fema.gov/national-flood-insurance-program/definitions>

³ “Account for Climate Risk,” International Finance Corporation

⁴ Sustainable Infrastructure Management Program Learning Environment. <http://simple.werf.org/>

⁵ Rosenzweig, C. et al. *Climate Change Adaptation in New York City: Building a Risk Management Response*.

⁶ “Definitions,” FEMA.

⁷ Ibid.

Heat wave	A period of three consecutive days where temperatures rise above 90°F ⁸
New York City Panel on Climate Change (NPCC)	A body of leading climate and social scientists charged with making climate projections for the city. ⁹
Open-grid pavement system	Pavements that consist of loose substrates supported by a grid of a more structurally sound grid or webbing. Unbounded, loose substrates in these systems transfer and store less heat than bound and compacted pavements. ¹⁰
Preliminary Flood Insurance Rate Map (PFIRM)	Flood map developed by FEMA that provides an initial look at flood hazards. ¹¹
Resiliency	The ability to bounce back after change or adversity. The capability of preparing for, responding to and recovering from difficult conditions. ¹²
Sea level rise-adjusted design flood elevation	As defined in these guidelines, the height of the base flood elevation, plus freeboard depending on the criticality of the facility, plus a sea level rise adjustment depending on the useful life of the facility.
Storm surge	The water height during storms such as hurricanes that is above the normal level expected at that time and place based on the tides alone.
Substantial improvement	Any repair, reconstruction, rehabilitation, addition, or improvement of a building or structure, the cost which equals or exceeds 50% of the market value of the structure before the improvement or repairs started. <i>For more information, see Appendix G of the NYC Building Code and 1 RCNY §3606-01</i> ¹³
Tidal inundation	Flooding which occurs at high tides due to climate-related sea level rise, land subsidence and/or the loss of natural barriers. ¹⁴
Urban Heat Island (UHI) effect	The tendency for higher air temperatures to persist in urban areas as a result of heat absorbed and emitted by buildings and asphalt, tending to make cities warmer than the surrounding countryside.
Useful life	The period over which an asset or component is expected to be available for use by an entity. This period of time typically exceeds the <i>design life</i> (see above). ¹⁵

⁸ Horton, R. et al. *New York City Panel on Climate Change 2015 Report: Chapter 1: Climate Observations and Projections*. Ann. N.Y. Acad. Sci. ISSN 0077-8923. (New York, 2015) 25.

⁹ *A Stronger, More Resilient New York*, PlaNYC. (The City of New York, 2013).

¹⁰ “Glossary,” US Green Building Council (2017). Available at: <http://www.usgbc.org/glossary/term/5525>

¹¹ “Preliminary FEMA Map Products,” FEMA Map Service Center. Available at: <https://hazards.fema.gov/femaportal/prelimdownload/>

¹² *A Stronger, More Resilient New York* (2013), 1.

¹³ “Flood Resistant Construction,” Appendix G, New York City Building Code (2008), and 1 RCNY §3606-01 available at https://www1.nyc.gov/assets/buildings/rules/1_RCNY_3606-01.pdf

¹⁴ “Ocean Facts,” National Ocean Service. NOAA. Available at: <http://oceanservice.noaa.gov/facts/nuisance-flooding.html>.

¹⁵ “Glossary,” International Infrastructure Management Manual (2011). Available at: <http://www.ipwea.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=ba2a9420-363c-4229-a240-df5239ec6d29>