

GLOSSARY

1% Flood (100-Year Flood)

A flood of a magnitude that has a 1 % chance of being equaled or exceeded in a given year (i.e. has a recurrence interval of 100 years, on average).

1% Floodplain (100-Year Floodplain)

Areas with a 1 % annual chance of flooding.

0.2% Flood (500-Year Flood)

A flood of a magnitude that has a 0.2 % chance of being equaled or exceeded in a given year (i.e. has a recurrence interval of 500 years, on average).

0.2% Floodplain (500-Year Floodplain)

Areas with a 0.2 % annual chance of flooding.

Base Flood Elevation

The elevation of surface water resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.

Cloudburst

A sudden and heavy downpour where a lot of precipitation falls in a short amount of time.

Coastal Flooding

When water inundates or covers normally dry coastal land as a result of high or rising tides or storm surges. Coastal flooding can occur by direct flooding, overtopping, or breaching a barrier. (Source: FEMA)

Community-Based Process

Varies among communities and project scope, but generally includes the following steps: initial community consultation; gathering data, observations, and analysis of primary issues; sharing those issues back to the community for further input; and implementation. (Source: Project for Public Spaces)

Compound Flooding

Caused by the combination of two or more flood drivers (pluvial, fluvial, riverine, coastal) occurring simultaneously or in close succession.

Environmental Justice

Just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other activities that affect human health and the environment. Environmental justice seeks to protect all people from disproportionate and adverse human health and environmental effects, risks, and hazards, including those related to climate change, the cumulative impacts of environmental burdens, and the legacy of racism or other structural barriers. Environmental justice also looks to have equitable access to a healthy, sustainable, and resilient environment for all. (Source: EPA)

Exposure

Refers to the presence of people, assets, infrastructure, and ecosystems located in hazard-prone areas. (Source: UNDRR)

Fenceline Community

Communities living immediately adjacent to highly polluting facilities (e.g. fossil fuel infrastructure or manufacturing facilities), and directly affected by traffic, noise, operations, and chemical and fossil fuel emissions. Many fenceline communities are disproportionately communities of color and/or low-income areas.

Flash Flooding

Flooding that begins within 6 hours, and often within 3 hours, of heavy rainfall or other cause. Influenced by intensity of rainfall, location and distribution of rainfall, land use, topography, vegetation types, soil type, and soil-water content. (Source: NWS)

Fluvial Flooding

Flooding that occurs when the stage of a river, creek, or stream exceeds the elevation of its banks. Also known as river flooding, or river, stream, and creek flooding.

Green Stormwater Infrastructure

A nature-based approach to managing stormwater runoff in ways that mimic the natural environment as much as possible, using plants, soil, and stone to filter and manage stormwater more effectively and reduce how much stormwater enters sewer systems. Tools include rain gardens, swales, stormwater planters, stormwater tree trenches, green roofs, stormwater bump outs, porous paving, infiltration trenches, and stormwater wetlands. (Source: PWD)

Groundwater Flooding

Flooding that occurs when the water table rises to levels that cause the inundation of the land surface or subterranean property such as basements.

Heat Index

Refers to what the temperature feels like to the human body when relative humidity is combined with air temperature. Also known as "apparent temperature." (Source: NWS)

HESCO Barrier

A temporary to semi-permanent flood control structure made of wire mesh and sand, soil, or gravel.

Hurricane - Category 1

Winds 74 to 95 miles per hour (miles per hour). Damage primarily to shrubbery, tree foliage, poorly constructed items, and unanchored mobile homes. Low lying coastal roads inundated. (Source: NOAA)

Hurricane - Category 3

Winds 111 to 130 miles per hour. Foliage torn from trees and large trees blown down. Poorly constructed items destroyed, damage to roofing materials, windows, and doors expected. Mobile homes destroyed and some structural damage to small buildings. Serious coastal flooding, many small structures destroyed; large structures damaged by waves and debris. Major erosion to beaches and massive evacuation of all residences within 500 yards of beach and single-story residences on low ground within 2 miles of shore. (Source: NOAA)

H&H Modeling

Hydrologic and hydraulic modeling. A study of movement of water, including the volume and rate of flow as it moves through a watershed, basin, channel, or man-made structure.

Natech

A natural hazard triggered technological accident. Involves the release of hazardous substances, fires, or explosions that have been triggered by a natural hazard event such as a hurricane, storm, or major flood. (Source: OECD)

Natural Hazard

Defined as environmental phenomena that have the potential to impact societies and the human environment. Includes coastal flooding, hurricanes, riverine flooding, strong winds, wildfires, heat waves, droughts, and earthquakes. (Source: FEMA)

Nature-Based Solutions(NBS)

A sustainable planning, design, environmental management and engineering practice that brings natural features or processes into the built environment to promote adaptation and resilience. NBS look to combat climate change, reduce flood risk, improve water quality, reduce urban heat, protect coastal property, and more. Co-benefits can also include lower costs, economic growth, green jobs, and public health. (Source: FEMA)

Non-Point Source

Non-point source pollution comes from many diffuse sources that contaminate air and water. Runoff moving over and through ground, picks up and carries natural and human-made pollutants before depositing them into lakes, rivers, wetlands, coastal waters, and groundwaters. Can include oil and toxic chemicals from urban runoff, sediment from eroding streambanks, and bacteria and nutrients from faulty septic systems. (Source: EPA)

Nor'easter

A storm along the East Coast and influenced by the winds over the northeast coastal area. Past nor'easters have caused economic, transportation, and human damage as well as coastal flooding. (Source: NWS)

Pluvial Flooding

Flooding that occurs when the intensity of precipitation exceeds the capacity of the land surface to infiltrate it and/or when the rate of runoff exceeds the conveyance capacities of natural and engineered systems. Often described as "urban" flooding.

Point Source

Point source pollution stems from a single, identifiable source of pollution from which pollutants are discharged, e.g. a pipe. Common types of point source pollution include factories like oil refineries and sewage treatment plants. Some discharge pollutants (known as effluents) directly into a waterbody while others treat effluents before they are released. The National Pollutant Discharge Elimination System (NPDES) program monitors and enforces permits that regulate point source pollution of water bodies. Permits are classified as major or minor based on discharge volume, waste characteristics, and other human and ecosystem health considerations. (Source: EPA)

Risk

The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society, or community in a specific period of time. Determined probabilistically as a function of hazard, exposure, vulnerability, and capacity. (Source: UNDRR)

Resiliency

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform, and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management. (Source: UNDRR)

*Note: resiliency can carry many different definitions and incorporate different socio-economic aspects, e.g. social resiliency.

Social Vulnerability

The susceptibility of groups to the adverse impacts of natural hazards, which includes disproportionate death, injury, loss, or disruption of livelihood, and their ability to anticipate, withstand, and recover from adverse impacts. (Source: UNDRR)

Storm Surge

Abnormal rise in seawater level during a storm. Measured as the height of the water above the normal predicted astronomical tide and caused primarily by a storm's winds pushing water onshore. Amplitude of storm surge depends on the orientation of coast line with storm track, the intensity, size, and speed of storm, and local bathymetry. (Source: NOAA)

Stormwater Runoff

Generated from rain and snowmelt that flows over land or impervious surfaces (e.g. paved streets, sidewalks, building rooftops) and does not infiltrate into the ground. See non-point source pollution.

Sunny Day Flooding

Also known as high tide flooding. Influenced by rising sea levels and can cause road closures, overwhelmed storm drains, and damage to sidewalks and roads. (Source: NOAA)

Upland

Refers to locations elevated above lower-lying locations. Often used when discussing two locations within a watershed.

Urban Heat Island

Occurs where areas experience hotter temperatures within a city. Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies. Daytime temperatures in urban areas are about 1–7°F higher than temperatures in outlying areas and nighttime temperatures are about 2–5°F higher. (Source: EPA)

Vulnerability

Refers to the degree to which people, assets, and ecosystems are adversely affected by a hazard. Can be further expanded to include climate and social vulnerability. (Source: UNDRR)

Watershed

The land area that drains into a river or stream. An area of land that contributes runoff to one specific delivery point. Large watersheds may be composed of several smaller "sub-watersheds," each of which contributes runoff to different locations that ultimately combine at a common delivery point. Watersheds are usually bordered and separated from other watersheds by mountain ridges or other naturally elevated areas.