

**1 Percent Flood Level** – The elevation of the maximum flood level with a one-percent chance of occurring within any given year, also known as the projected flood level. "A" zones, designated as Special Flood Hazard Areas (SFHAs) are at risk of flooding during the 1 percent flood.

**Backflow Valve** – Designed to block drainpipes temporarily and prevent flow into the house. Also called the "check valve," which allows water to flow in one direction (out of the house), but automatically closes when the direction of flow is reversed.

**Base Flood** – Flood that has a one percent probability of being equaled or exceeded in any given year. Also known as the 100-year flood.

**Base Flood Elevation (BFE)** – Elevation of the 100-year flood. This elevation is the basis of the insurance and floodplain management requirements of the National Flood Insurance Program.

**Berm** – Small levees, usually built from fill dirt.

**Cladding** – A layer of some metal or alloy bonded to another metal.

**Coastal Flooding** – The inundation of land areas along the oceanic coast that is caused by sea waters over and above normal tidal action. Such flooding can originate from the ocean front, back bays, sound, etc.

**Crawlspace** – Type of foundation in which the lowest floor of a house is suspended above the ground on continuous foundation walls.

**Cripple Wall** – A short wall that rests on the foundation and supports the floor and exterior walls of a structure.

**Creosote** – A black oily liquid with a pungent odor used as a wood preservative.

**Debris** – Materials (broken bits and pieces of wood, stone, glass, etc.) carried by wind or floodwaters, including objects of various sizes.

**Disaster** – Any natural catastrophe or, regardless of cause, any fire, flood, or explosion in any part of the United States which, in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance to supplement the efforts and available resources of States, local governments and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

**Dowel** – A short cylinder of wood, metal, etc., usually fitted into corresponding holes in two pieces to fasten them together.

**Downdraft** – A sudden descent of a stream of cool air from above, often causing windshear.

**Downdraft Furnace** – A furnace with a downward air current.

**Dry Floodproofing** – Protecting a building by sealing its exterior walls to prevent the entry of flood waters.

**Earthquake** – A sudden, rapid shaking, sometimes violent, of the Earth caused by the breaking and shifting of rock beneath the Earth's surface.

**Elevation** – In retrofitting, the process of raising a house or other building so that it is above the height of a given flood.

**El Niño** – the phenomenon of a warm current replacing normally cool waters off the coast of Peru. Coastal winds usually push away surface water and the water is replaced by cold, nutrient-rich water from deep in the ocean, which supports abundant sea life. El Niño shifts the normal storm tracks of the U.S. farther north, producing a warmer than average winter in the Northwest and a wetter than average winter in the Southeast.

**Emergency** – Any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, explosion, or other catastrophe in any part of the United States which requires federal emergency assistance to supplement State and local efforts to save lives and protect property, public health and safety, or to avert or lessen the threat of disaster.

**Epicenter** – The area of the Earth's surface directly above the place of origin, or focus, of an earthquake.

**Epoxy** – Blended with other chemicals to form strong, hard chemically resistant substances used as adhesives, enamel coatings, etc.

**Erosion** – Process by which flood waters lower the ground surface in an area by removing upper layers of soil.

**Federal Emergency Management Agency (FEMA)** – Former independent agency that became part of the Department of Homeland Security in March 2003, tasked with responding to, planning for, recovering from, and mitigating against disasters. FEMA administers the National Flood Insurance Program.

**Fill** – Material such as soil, gravel, or stone which is dumped in an area to increase the ground elevation. Fill is usually placed in layers, with each layer compacted.

**Flash Flood** – Flood that rises very quickly, occurring suddenly, within a short time (from minutes to less than 6 hours), and usually is characterized by high flow velocities. Flash floods often result from intense rainfall over a small area, usually in areas of steep terrain.

## Glossary

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**Flood** – Under the National Flood Insurance Program (NFIP), a partial or complete inundation of normally dry land areas from 1) the overland flow of a lake, river, stream, ditch, etc.; 2) the unusual and rapid accumulation or runoff of surface waters; and 3) mudflows or the sudden collapse of shoreline land.

**Flood Elevation** – Height of flood waters above an elevation datum plane.

**Flood Insurance Rate Maps (FIRMS)** – The official map of a community prepared by FEMA, showing base flood elevations along with the special hazard areas and the risk premium zones.

**Floodplain** – Any area susceptible to inundation by water from any source.

**Floodproofing** – Using materials and practices that will prevent or minimize flood damage in the future.

**Floodwall** – Flood barrier constructed of manmade materials, such as concrete or masonry.

**Floodway** – The channel of a river and the adjacent overbank areas reserved to carry base flood discharge without raising the BFE more than a designated amount

**Fujita Tornado Scale** – Usually referred to as the F-Scale, it classifies tornadoes based on the damage caused. It assigns categories as F-0 through F-5. It was developed by Dr. Theodore Fujita.

**Hasp** – Hinged metal fastening for a door, window, lid, etc., especially a metal piece that fits over a staple and is held in place by a pin or padlock.

**Hazard Identification** – A review of hazards, and of locations and conditions associated with hazards in a particular area; being aware of those hazards which, if they occur, could harm a community.

**Human Intervention** – Any action that a person must take to enable a flood protection measure to function as intended. This action must be taken every time flooding threatens.

**Hurricane** – A severe tropical disturbance in the North Atlantic Ocean, Caribbean Sea, or Gulf of Mexico that achieves a sustained wind force of a least 74 miles per hour.

**Hurricane Straps** – Usually galvanized metal, designed to help hold your roof to the walls, reducing the risk of losing your roof to high winds.

**Hydrodynamic Force** – Force extended by moving water.

**Hydrostatic Force** – Force exerted by water at rest, including lateral pressure on walls and uplift (buoyancy) on floors.

**Joists** – Any of the parallel planks or beams that hold up the planks of a floor or the ceiling.

**Levee** – Flood barrier constructed of compacted soil.

**Mitigation** – Sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects.

**Mudflows** – Sometimes called debris flows, are rivers of rock, Earth, and debris saturated with water. They develop when water accumulates rapidly in the ground, so that the Earth becomes a flowing river of mud (called a *slurry*).

**National Flood Insurance Program (NFIP)** – Provides the availability of flood insurance in exchange for the adoption and enforcement of a minimum local floodplain management ordinance. The ordinance regulates new and substantially damaged or improved development in identified flood hazard areas.

**Ocean Flooding** – Flooding caused by storm surge and wave action and affects primarily coastal areas, especially those along the beachfront.

**Plate Tectonics** – Theory that the Earth's surface is made up of about ten large plates and a number of small ones that fit together like a jigsaw puzzle. Plates are constantly moving, though slowly. When the stress exceeds the strength of the rock, the rock ruptures --or breaks--along a pre-existing or new fracture plain known as a fault. When the rock ruptures, it causes the Earth to tremble.

**Preparedness** – Activities to ensure that people are ready for disaster and respond to it effectively. Preparedness requires figuring out what will be done if essential services break down, developing a plan for contingencies, and practicing the plan.

**Projected Flood Level** – The elevation of the maximum flood level with a one-percent chance of occurring within any given year, also known as the one percent or 100-year flood.

**Relocation** – In retrofitting, the process of moving a house or other building to a new location outside the flood hazard area.

**Reinforcement** – Inclusion of steel bars in concrete members and structures to increase their strength. or other hazards.

**Retrofitting** – Making structural changes to an existing building to protect it from hazards such as flooding, high winds, and earthquakes. Retrofitting may range from simple measures to major construction.

**Richter Scale** – a measure of the amplitude of seismic waves. The scale is logarithmic, which means that an Earthquake that measures 7 on the Richter Scale has ground motion 10 times as large as one with a measurement of 6. Earthquakes of 6 or more are considered major. Extremely strong Earthquakes have magnitudes of 8 or more.

**Riverine Flooding** – Occurs when a river or stream flows over its banks and causes considerable inundation of nearby land and roads. Riverine flooding is a longer-term event that may last a week or more.

**Saffir-Simpson Scale** – A disaster-potential scale used by the National Oceanic and Atmosphere Administration's hurricane forecasters. The scale assigns storms to five categories. All hurricanes are dangerous but some are more so than others. The scale was designed to make comparisons easier and to make the predicted hazards of approaching hurricanes clearer to emergency forces.

**Scour** – Process by which floodwaters remove soil around objects that obstruct flow, such as the foundation walls of a house.

**Sealant** – In retrofitting, a waterproofing material or substance used to prevent the infiltration of floodwaters.

**Seismic** – Of, subject to, or caused by an Earthquake or an Earth vibration.

**Seismic Event** – The abrupt release of energy in the Earth's crust (the solid, rocky part of the Earth) causing an Earth vibration or Earthquake.

**Seismograph** – Used by scientists to record the changing intensity of the vibrations of an Earthquake.

**Service Equipment** – In retrofitting, the utility systems, heating and cooling systems, and large appliances in a house.

**Sill Plate** – A heavy, horizontal timber or line of masonry supporting a house wall, which sits directly on top of the foundation wall.

**Slab-on-grade** – Type of foundation in which the lowest floor of the house is formed by a concrete slab that sits directly on the ground. The slab may be supported by independent footings or integral grade beams.

**Soffit** – The horizontal underside of an eave.

**Special Flood Hazard Area (SFHA)** – Portion of the floodplain subject to inundation of the base flood, designated Zone A, AE, A1-A30, AH, AO, V, V1-V30, or M on a flood insurance rate map.

## Glossary

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**Storm Surge** – Rise in the level of the ocean that results from the decrease in atmospheric pressure associated with hurricanes and other storms

**Subgrade** – Below the level of the ground surface.

**Sump Pump** – Device used to remove water from seepage or rainfall that collects in areas protected by a levee, floodwall, or dry floodproofing. In addition, a sump pump is often part of a standard house drainage system that removes water that collects below a basement slab floor.

**Tornado** – The most violent storms on Earth, with estimated wind speeds of 250 mph or more. At tornado is a violently rotating column of air extending between a cloud (often a thunderstorm cloud) and the ground. The spinning motion of a tornado is almost always counterclockwise. Thunderstorms, nicknamed "twisters, develop in warm, moist air in advance of eastward-moving fronts. A **funnel cloud** is a similar column of air that is not in contact with the ground. A **water spout** is a tornado that is over water. When either a funnel cloud or a water spout come in contact with the ground, they become, by definition, a tornado.

**Truss** – A rigid framework of beams, girders, struts, bars, etc., for supporting a roof, bridge, etc.

**Tsunami** – (pronounced soo-náh-mee) A series of ocean waves of extremely long length, generated by disturbances from Earthquakes, underwater volcanic eruptions, or landslides occurring below or near the ocean floor.

**Veneer** – Nonstructural, decorative, exterior layer of brick, stone, or concrete block added to the walls of a building, sealing all openings, including doors, to prevent the entry of water.

**Vulnerability Analysis** – Identifying how people, properties and structures will be damaged by a disastrous event.

**Wet Floodproofing** – Protecting a building by allowing flood waters to enter so that internal and external hydrostatic pressures are equalized. Usually only enclosed areas used for parking, storage, or building access are wet floodproofed.

**Wildland-Urban Interface** – The area where homes and structures meet the natural environment of forests and wildlands.

**Wind** – Air in motion parallel to the surface of the ground.

**Windshear** – A sudden variation in the vector of wind flow that is especially dangerous to aircraft during takeoff and landing.