

Appendix G

Definitions

100-Year Floodplain – The area flooded by the flood that has a 1-percent chance of being equaled or exceeded each year. This is a statistical average only; in fact, a 100-year flood can occur more than once in a short period of time. The 1-percent annual chance flood is the standard used by most federal and state agencies.

500-year Floodplain – Also known as the 0.2-percent annual chance flood. The area inundated by floodwaters that has a 0.2-percent chance of being equaled or exceeded each year.

Asset – Any man-made or natural feature that has value, including, but not limited to, people; buildings; infrastructure, such as bridges, roads, sewers, and water systems; lifelines, such as electricity and communication resources; and environmental, cultural, or recreational features such as parks, wetlands, and landmarks.

Benefit – A net project outcome and is usually defined in monetary terms. Benefits may include direct and indirect effects. For the purposes of benefit-cost analysis of proposed mitigation measures, benefits are limited to specific, measurable, risk reduction factors, including reduction in expected property losses (buildings, contents, and functions) and protection of human life.

Building – A structure that is walled and roofed, principally aboveground, and permanently fixed to a site. The term includes manufactured homes on permanent foundations on which the wheels and axles carry no weight.

Building Resilient Infrastructure and Communities (BRIC) Program – Authorized by the Disaster Relief and Recovery Act of 2018, the BRIC program is replacing FEMA’s Pre-Disaster Mitigation Program. BRIC will support states, local communities, tribes and territories as they undertake projects that mitigate hazard risks and increase community resiliency. Grant awards will prioritize infrastructure projects and projects that support community lifelines: safety and security; food, water, shelter; health and medical; energy; communications; transportation; and hazardous material.

Capability Assessment – Provides a description and analysis of a community’s current capacity to address threats associated with hazards. The assessment includes two components: an inventory of an agency’s mission, programs, and policies, and an analysis of its capacity to carry them out. A capability assessment is an integral part of the planning process in which a community’s actions to reduce losses are identified, reviewed, and analyzed, and the framework for implementation is identified. The following capabilities were reviewed under this assessment: • Legal and regulatory capability • Administrative and technical capability • Fiscal capability

Cluster – An aggregation of cases grouped in place and time that are suspected to be greater than the number expected.

Community Rating System (CRS) – A voluntary program under the NFIP that rewards participating communities (provides incentives) for exceeding the minimum requirements of the NFIP and completing activities that reduce flood hazard risk by providing flood insurance premium discounts.

Conflagration – A fire that grows beyond its original source area to engulf adjoining regions. Wind, extremely dry or hazardous weather conditions, excessive fuel buildup, and explosions are usually the elements behind a wildfire conflagration.

Critical Area – An area defined by state or local regulations as deserving special protection because of unique natural features or its value as habitat for a wide range of species of flora and fauna. A sensitive/critical area is usually subject to more restrictive development regulations.

Critical Facility – Buildings and infrastructure that are significant to the health and welfare of the population. These become especially important after any hazard event occurs.

Dam – Any artificial barrier and/or any controlling works, together with appurtenant works that can or do impound or divert water.

Dam Failure – An uncontrolled release of impounded water due to structural deficiencies in the water barrier.

Debris Flow – A moving mass of loose mud, sand, soil, rock, water, and air moving down a slope under the influence of gravity.

Disaster Mitigation Act of 2000 (DMA) – Public Law 106-390 and is the latest federal legislation enacted to encourage and promote proactive, pre-disaster planning as a condition of receiving financial assistance under the Robert T. Stafford Act. The DMA emphasizes planning for disasters before they occur. Under the DMA, a pre-disaster hazard mitigation program and new requirements for the national post-disaster hazard mitigation grant program (HMGP) were established.

Drainage Basin – The area within which all surface water (whether from rainfall, snowmelt, springs or other sources) flows to a single water body or watercourse. The boundary of a river basin is defined by natural topography, such as hills, mountains and ridges. Drainage basins are also referred to as watersheds or basins.

Earthquake – The shaking of the ground caused by an abrupt shift of rock along a fracture in the earth or a contact zone between tectonic plates. Earthquakes are typically measured in both magnitude and intensity.

Ecosystem Services – The benefits people obtain from the ecosystem. They are grouped in four broad categories: provisioning, such as the production of food and water; regulating, such as control of the climate and disease; supporting, such as the nutrient cycles and crop pollination; and cultural, such as spiritual and recreational benefits. Ecosystem services associated with natural hazard mitigation include but are not limited to the following. Vegetated land cover intercepts and absorbs water, retaining it and slowing its movement, helping to reduce flooding and its subsequent effects. Vegetated stream buffers help absorb water along streams and rivers, which also reduces flooding by holding

excess water. Vegetated stream buffers reduce bank erosion. Floodplains spread high volume flows, reducing stream velocity and flood levels. Wetlands, such as coral reefs and coastal marshes, offer shoreline protection in coastal regions and help reduce the impacts of storms, including erosion, by acting as a physical barrier and reducing wind and wave energy. Tree and forest cover can reduce surface wind velocities. Vegetative cover is also important for reducing temperatures on micro- and macro-scales. Vegetation helps to shade areas and reduce surface temperatures, mitigating the potential public health effects of extreme heat.

Emergency Action Plan (EAP) – A formal document that identifies potential emergency conditions at a dam and specifies preplanned actions to be followed to minimize property damage and loss of life. The plan contains specifies actions the dam owner should take to moderate or alleviate the problems at the dam, procedures on issuing early warning and notification messages to responsible downstream emergency management authorities, and inundation maps to show the emergency management authorities the critical areas for action in case of an emergency.

Endemic – Refers to the constant presence and/or usual prevalence of a disease or infectious agent in a population within a geographic area. An increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area.

Epicenter – The point on the earth’s surface directly above the hypocenter of an earthquake. The location of an earthquake is commonly described by the geographic position of its epicenter and by its focal depth.

Fault – A fracture in the earth’s crust along which two blocks of the crust have slipped with respect to each other. Most common is a strike-slip, normal, or thrust fault.

Firestorm – A fire that expands to cover a large area, often more than a square mile. A firestorm usually occurs when many individual fires grow together into one. The area involved becomes so hot that all combustible materials ignite, even if they are not exposed to direct flame. Temperatures may exceed 1,000°C. Superheated air and hot gases of combustion rise over the fire zone, drawing surface winds in from all sides, often at velocities approaching 50 miles per hour. Although firestorms seldom spread because of the inward direction of the winds, once started, there is no known way of stopping them.

Flood Insurance Rate Map (FIRM) – The official maps on which the Federal Emergency Management Agency (FEMA) has delineated the Special Flood Hazard Area (SFHA).

Flood Insurance Study – A report published by the Federal Insurance and Mitigation Administration for a community in conjunction with the community’s Flood Insurance rate Map. The study contains such background data as the base flood discharges and water surface elevations that were used to prepare the FIRM. In most cases, a community FIRM with detailed mapping will have a corresponding flood insurance study.

Flood – Inundation of normally dry land resulting from rising and overflowing of a body of water.

Flood Mitigation Assistance (FMA) Program – FEMA’s FMA grant program provides funding to states, local communities, federally-recognized tribes, and territories for projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the National Flood Insurance Program.

Floodplain – Land area along the sides of a river that becomes inundated with water during a flood

Focal Depth – The depth from the earth’s surface to the hypocenter.

Hazard Mitigation Grant Program (HMGP) – Authorized under Section 202 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, the HMGP is administered by FEMA and provides grants to states, tribes, and local governments to implement hazard mitigation actions after a major disaster declaration. The purpose of the program is to reduce the loss of life and property due to disasters and to enable mitigation activities to be implemented as a community recovers from a disaster

Hazardous Substance – Those substances listed in Appendix A of 49 CFR §172.101; does not include petroleum, natural gas, liquefied natural gas, or fuel.

Hazardous Waste – Materials subject to 40 CFR §262.

US Multi-Hazard (HAZUS-MH) Loss Estimation Program – A GIS-based program used to support the development of risk assessments as required under the DMA. The HAZUS-MH software program assesses risk in a quantitative manner to estimate damages and losses associated with natural hazards. HAZUS-MH is FEMA’s nationally applicable, standardized methodology and software program and contains modules for estimating potential losses from earthquakes, floods, and wind hazards. HAZUS-MH has also been used to assess vulnerability (exposure) for other hazards.

High Hazard Dam – Dams assigned the high hazard potential classification are those where failure or operational issues will probably cause loss of human life.

Hyperendemic – Persistent, high levels of disease occurrence.

Hypocenter – The region underground where an earthquake’s energy originates.

Interface Area – An area susceptible to wildfires and where wildland vegetation and urban or suburban development occur together. An example would be smaller urban areas and dispersed rural housing in forested areas.

Inundation Area – The area of land that would be flooded following a dam failure

Landslide – The sliding movement of masses of loosened rock and soil down a hillside or slope. Slope failures occur when the strength of the soils forming the slope is exceeded by the pressure, such as weight or saturation, acting upon them.

Local Government – Any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate

government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

Mass Movement – A collective term for landslides, debris flows, falls and sinkholes.

Medical Countermeasures – Life-saving medicines and medical supplies that can be used to diagnose, prevent, protect from, or treat conditions associated with chemical, biological, radiological, or nuclear threats, emerging infectious disease, or natural disaster.

Mitigation – A preventive action that can be taken in advance of an event that will reduce or eliminate the risk to life or property.

Mitigation Actions – Specific processes or projects designed to achieve goals and objectives that minimize the effects from a disaster and reduce the loss of life and property.

Mudslide (or Mudflow) – A river of rock, earth, organic matter and other materials saturated with water.

Objective – Specific and measurable actions. For the purposes of this plan, defined as a short-term aim that, when combined with other objectives, forms a strategy or course of action to meet a goal.

Outbreak – The same definition of epidemic but is often used for a more limited geographic area, jurisdiction, or group of people.

Pandemic – An epidemic that has spread over several countries or continents, usually affecting many people.

Peak Ground Acceleration (PGA) – A measure of the highest amplitude of ground shaking that accompanies an earthquake, based on a percentage of the force of gravity.

Planning Committee – The group that oversaw all phases of the hazard mitigation plan's development. The members of this committee included key city and tribal personnel, residents, and other stakeholders from within the planning area.

Preparedness – Refers to actions that strengthen the capability of government, residents, and communities to respond to disasters.

Presidential Disaster Declaration – Typically made for events that cause more damage than state and local governments and resources can handle without federal government assistance. Generally, no specific dollar loss threshold has been established for such declarations. A Presidential disaster declaration puts into motion long-term federal recovery programs, some of which are matched by state programs, designed to help disaster victims, businesses, and public entities.

Probability of Occurrence – A statistical measure or estimate of the likelihood that a hazard will occur. This probability is generally based on past hazard events in the area and a forecast of events that could

occur in the future. A probability factor based on yearly values of occurrence is used to estimate probability of occurrence.

Return Period – The average period of time in years between occurrences of a particular hazard (equal to the inverse of the annual frequency of occurrence).

Risk – The estimated impact that a hazard would have on people, services, facilities, and structures in a community. Risk measures the likelihood of a hazard occurring and resulting in an adverse condition that causes injury or damage. Risk is often expressed in relative terms such as a high, moderate, or low likelihood of sustaining damage above a particular threshold due to occurrence of a specific type of hazard. Risk also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

Seiche – A standing wave in an enclosed or partly enclosed body of water, normally caused by earthquake activity; can affect harbors, bays, lakes, rivers, and canals.

Severe Local Storm – Small atmospheric systems including tornadoes, thunderstorms, and windstorms. Typically, major impacts from a severe storm are on transportation infrastructure and utilities. These storms may cause a great deal of destruction and even death, but their impact is generally confined to a small area.

Significant Hazard Dam – A dams where failure or operational issues result in no probable loss of human life but can cause economic loss, environmental damage, disruption of lifeline facilities, or can impact other concerns.

Sinkhole – A collapse depression in the ground with no visible outlet. Its drainage is subterranean. It is commonly vertical-sided or funnel-shaped.

Slab – Refers to one or more layers of snow in which the grains are bonded together. A slab initially fails over a large area instead of at a single point.

Sporadic – Refers to a disease that occurs infrequently or irregularly.

Robert T. Stafford Disaster Relief and Emergency Assistance Act – Referred to as the Stafford Act, it is a Public Law 100-107, was signed into law on November 23, 1988. This law amended the Disaster Relief Act of 1974, Public Law 93-288. The Stafford Act is the statutory authority for most federal disaster response activities, especially as they pertain to FEMA and its programs.

Stakeholder – Business leaders, civic groups, academia, non-profit organizations, major employers, managers of critical facilities, farmers, developers, special purpose districts, and others whose actions could impact hazard mitigation.

Stream Bank Erosion – Common along rivers, streams, and drains where banks have been eroded, sloughed or undercut. However, it is important to remember that a stream is a dynamic and constantly changing system. It is natural for a stream to want to meander, so not all eroding banks are “bad” and in need of repair. Generally, stream bank erosion becomes a problem where development has limited

the meandering nature of streams, where streams have been channelized, or where stream bank structures (like bridges, culverts, etc.) are located in places where they can actually cause damage to downstream areas. Stabilizing these areas can help protect watercourses from continued sedimentation, damage to adjacent land uses, control unwanted meander, and improvement of habitat for fish and wildlife.

Sustainable Hazard Mitigation – This concept includes the sound management of natural resources, local economic and social resiliency, and the recognition that hazards, and mitigation must be understood in the largest possible social and economic context.

Thunderstorm – Typically 15 miles in diameter and lasting about 30 minutes, thunderstorms are underrated hazards. Lightning, which occurs with all thunderstorms, is a serious threat to human life. Heavy rains over a small area in a short time can lead to flash flooding. Strong winds, hail, and tornadoes are also dangers associated with thunderstorms.

Tornado – Funnel clouds of varying sizes that generate winds more than 300 miles per hour, affecting an area up to $\frac{3}{4}$ of a mile wide. They are measured using the Enhanced Fujita Scale ranging from EF0 to EF5.

Vulnerability – Describes how exposed or susceptible an asset is to damage. The level of risk depends on an asset's construction, contents, and the economic value of its functions. Like indirect damages, the risk of one element of the community is often related to the risk of another. For example, many businesses depend on uninterrupted electrical power. Flooding of an electric substation would affect not only the substation itself but businesses as well. Often, indirect effects can be much more widespread and damaging than direct effects.

Watershed – A n area that drains downgradient from areas of higher land to areas of lower land to the lowest point, a common drainage basin.

Wildfire – Fires that result in uncontrolled destruction of forests, brush, field crops, grasslands, and real and personal property in non-urban areas. Because of their distance from firefighting resources, they can be difficult to contain and cause a great deal of destruction.

Windstorm – A storm featuring violent winds. Southwesterly winds are associated with strong storms moving onto the coast from the Pacific Ocean. Southern winds parallel to the coastal mountains are the strongest and most destructive winds. Windstorms tend to damage ridgelines that face into the winds.

Winter Storm – A storm having significant snowfall, ice, and/or freezing rain; the quantity of precipitation varies by elevation.

Zoning Ordinance – Designates allowable land use and intensities for a local jurisdiction. Zoning ordinances consist of two components: a zoning text and a zoning map.