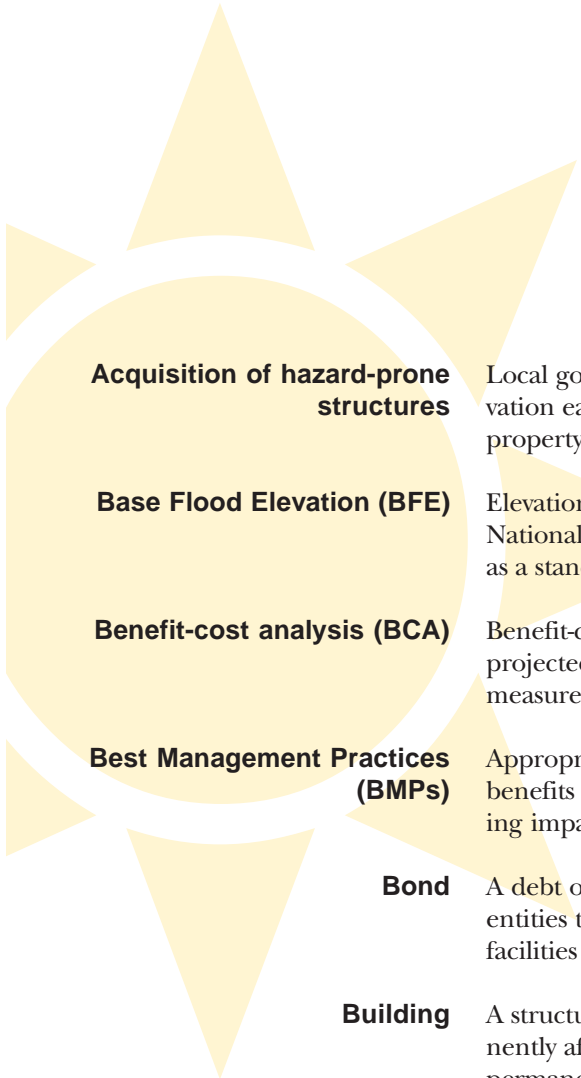


appendix a

glossary



Acquisition of hazard-prone structures

Local governments can acquire lands in high hazard areas through conservation easements, purchase of development rights, or outright purchase of property.

Base Flood Elevation (BFE)

Elevation of the base flood in relation to a specified datum, such as the National Geodetic Vertical Datum of 1929. The Base Flood Elevation is used as a standard for the National Flood Insurance Program.

Benefit-cost analysis (BCA)

Benefit-cost analysis is a systematic, quantitative method of comparing the projected benefits to projected costs of a project or policy. It is used as a measure of cost effectiveness.

Best Management Practices (BMPs)

Appropriate, site-specific management techniques that maximize the benefits of land and natural resource management actions, while minimizing impacts.

Bond

A debt obligation issued by states, cities, counties, and other governmental entities to raise money to pay for public projects, such as government facilities and infrastructure.

Building

A structure that is walled and roofed, principally above ground and permanently affixed to a site. The term includes a manufactured home on a permanent foundation on which the wheel and axles carry no weight.

Building codes

Regulations that set forth standards and requirements for the construction, maintenance, operation, occupancy, use, or appearance of buildings, premises, and dwelling units. Building codes can include standards for structures to withstand natural hazards.

Capability assessment

An assessment that provides an inventory and analysis of a community or state's current capacity to address the threats associated with hazards. The capability assessment attempts to identify and evaluate existing policies, regulations, programs, and practices that positively or negatively affect the community or state's vulnerability to hazards or specific threats.

Channel maintenance

Ensuring that flood channels, storm sewers, retaining ponds, etc. do not become blocked by debris, sedimentation, overgrowth, or structural failure.

Coastal zone

The area along the shore where the ocean meets the land as the surface of the land rises above the ocean. This land/water interface includes barrier islands, estuaries, beaches, coastal wetlands, and land areas with direct drainage to the ocean.



Coastal zone management regulations	Regulations enacted to control growth and protect natural resources along coastlines. Under the federal Coastal Zone Management Act (CZMA) enacted in 1972, states and local governments adopt coastal zone management regulations designed to preserve, protect, and, where possible, restore or enhance valuable natural coastal resources such as wetlands, floodplains, estuaries, beaches, dunes, barrier islands, and coral reefs, as well as the wildlife dependent on those habitats.
Community Rating System (CRS)	CRS is a program that provides incentives for National Flood Insurance Program communities to complete activities that reduce flood hazard risk. When the community completes specified activities, the insurance premiums of the policyholders in those communities are reduced.
Comprehensive plan	A document, also known as a "general plan," covering the entire geographic area of a community and expressing community goals and objectives. The plan lays out the vision, policies, and strategies for the future of the community, including all of the physical elements that will determine the community's future development. This plan can discuss the community's desired physical development, desired rate and quantity of growth, community character, transportation services, location of growth, and siting of public facilities and transportation. In most states, the comprehensive plan has no authority in and of itself, but serves as a guide for community decision-making.
Construction of barriers around structures	Protective structures, such as berms and retaining walls, created by grading or filling areas with soil meant to keep flood waters from reaching buildings.
Critical facilities	Facilities vital to the health, safety, and welfare of the population and that are especially important following hazard events. Critical facilities include, but are not limited to, shelters, police and fire stations, and hospitals.
Dams	Dams are artificial barriers which impound water, wastewater, or any liquid-borne material for the purpose of storage or control of water. For a more detailed definition, see the National Dam Safety Program Act (as amended through P.L. 106-580, December 29, 2000).
Debris	The scattered remains of assets broken or destroyed in a hazard event. Debris caused by a wind or water hazard event can cause additional damage to other assets.
Density controls	Regulations that manage growth by limiting the density of development, often expressed in terms of the number of dwelling units per acre. Density controls allow the community to plan in an orderly way for infrastructure.
Design review standards	Guidelines enacted by local governments requiring new development to meet certain appearance and aesthetic standards and establishing a process by which local officials can examine site plans or structure blueprints to assess compliance with those standards. Design review standards can help ensure new development blends with existing buildings and the landscape or meet other priorities, including hazard loss reduction.
Design standards	A set of guidelines pertaining to the appearance and aesthetics of buildings or improvements that governs construction, alteration, demolition, or relocation of a building or improvement of land.



Disaster Mitigation Act of 2000 (DMA 2000)	DMA 2000 (Public Law 106-390) is the latest legislation to improve the planning process. It was signed into law on October 30, 2000. This new legislation reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur.
Dune and beach restoration	Actions taken to re-establish dunes and beaches that serve as natural protection against coastal flooding and storm surge. Dune and beach restoration activities consist of replenishing sand, re-planting protective vegetation, controlling or restricting foot and vehicles traffic, and constructing sand traps or wind barriers.
Earthquake	A sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of earth's tectonic plates.
Easements	Grant a right to use property, or restrict the landowner's right to use the property in a certain way.
Elevation of structures	Raising structures above the base flood elevation to protect structures located in areas prone to flooding.
Emergency response services	The actions of first responders such as firefighters, police, and other emergency services personnel at the scene of a hazard event. The first responders take appropriate action to contain the hazard, protect property, conduct search and rescue operations, provide mass care, and ensure public safety.
Eminent domain	The right of a government to appropriate private property for public use, with adequate compensation to the owner.
Environmental review standards	Guidelines established to ensure new development adheres to certain construction and site design standards to minimize the impact on the environment.
Erosion	Wearing away of the land surface by detachment and movement of soil and rock fragments during a flood or storm over a period of years, through the action of wind, water, or other geologic processes.
Federal Emergency Management Agency (FEMA)	Independent agency created in 1979 to provide a single point of accountability for all federal activities related to disaster mitigation and emergency preparedness, response, and recovery.
Fire-proofing	Actions taken on and around buildings to prevent the spread of fires.
Flood Mitigation Assistance (FMA) Program	A program created as part of the National Flood Insurance Reform Act of 1994. FMA provides funding to assist communities and states in implementing actions that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other NFIP insurable structures, with a focus on repetitive loss properties.
Floodplain development regulations	Regulations requiring flood insurance and mandating certain design aspects of new or substantially improved structures that lie within regulated flood-prone areas. Current federal regulations through the National Flood Insurance Program require that, at a minimum, new residential buildings in the Special Flood Hazard Area have their lowest floor at or above the base flood elevation.



Floodplain zoning	Zoning regulations that prescribe special uses for and serve to minimize development in floodplain areas.
Flood-proofing	Actions that prevent or minimize future flood damage. Making the areas below the anticipated flood level watertight or intentionally allowing floodwaters to enter the interior to equalize flood pressures are examples of flood proofing.
Forest and vegetation management	The management of forests and vegetation so they are resilient to landslides, high-winds, and other storm-related hazards.
Forest fire fuel reduction	Minimizing fuel loads in forested areas by clearing excess ground cover and thinning diseased or damaged woodland to create healthier forests and to decrease the vulnerability to the devastation of forest fire.
General obligation bond	A bond secured by the taxing and borrowing power of the municipality issuing it.
Goals	General guidelines that explain what you want to achieve. They are usually broad policy statements, long-term in nature.
Hazard	A source of potential danger or adverse condition.
Hazard information center	Information booths, publication kiosks, exhibits, etc. that display information to educate the public about hazards that affect the jurisdiction and hazard mitigation activities people can undertake.
Hazard mitigation	Sustained actions taken to reduce or eliminate long-term risk from hazards and their effects.
Hazard Mitigation Grant Program (HMGP)	Authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 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 natural disasters and to enable mitigation activities to be implemented as a community recovers from a disaster.
Hazard profile	A description of the physical characteristics of hazards and a determination of various descriptors, including magnitude, duration, frequency, probability, and extent. In most cases, a community can most easily use these descriptors when they are recorded and displayed as maps.
Hazard threat recognition	The process of identifying possible hazards and estimating potential consequences.
Hazard warning systems	Systems or equipment such as community sirens and National Oceanic Atmospheric Administration (NOAA) weather radios designed to provide advanced warning of an impending hazard. Warning systems allow communities to take protective actions before a hazard event occurs, including taking cover, finding shelter, or moving furniture, cars, and people out of harm's way.



HAZUS, HAZUS-MH	A GIS-based, nationally standardized, loss estimation tool developed by FEMA. HAZUS-MH is the new multi-hazard version that includes earthquake, wind, hurricane, and flood loss estimate components.
Health and safety maintenance	Sections of emergency response/operations plans that provide for the security of affected areas, including clean up and special precautions for each type of hazard (e.g., draining standing water after a flood, cautioning about aftershocks after an earthquake or successive tsunami waves, etc.).
Hillside development regulations	Site design and engineering techniques prescribed through regulations such as selective grading, drainage improvements, and vegetation clearance to eliminate, minimize, or control development on hillsides, thereby protecting the natural features of hillsides and reducing the likelihood of property damage from landslides.
Levees and floodwalls	Flood barriers constructed of compacted soil or reinforced concrete walls.
Loss estimation	Forecasts of human and economic impacts and property damage from future hazard events, based on current scientific and engineering knowledge.
Mitigation actions	Activities, measures, or projects that help achieve the goals and objectives of a mitigation plan.
National Flood Insurance Program (NFIP)	Federal program created by Congress in 1968 that makes flood insurance available in communities that enact minimum floodplain management regulations as indicated in 44 CFR §60.3.
Objectives	Objectives define strategies or implementation steps to attain the identified goals. Unlike goals, objectives are specific and measurable.
Open space preservation	Preserving undeveloped areas from development through any number of methods, including low-density zoning, open space zoning, easements, or public or private acquisition. Open space preservation is a technique that can be used to prevent flood damage in flood-prone areas, land failures on steep slopes or liquefaction-prone soils, and can enhance the natural and beneficial functions of floodplains.
Ordinance	A term for a law or regulation adopted by a local government.
Performance standards	Standards setting the allowable effects or levels of impact of development. Often used in conjunction with traditional zoning, the standards typically address specific environmental conditions, traffic, or stormwater runoff. Can also be imposed on structures in hazard areas to ensure they withstand the effect of hazards.
Planning team	A group composed of government, private sector, and individuals with a variety of skills and areas of expertise, usually appointed by a city or town manager, or chief elected official. The group finds solutions to community mitigation needs and seeks community acceptance of those solutions.
Policy	A course of action or specific rule of conduct to be followed in achieving goals and objectives.



Post-disaster mitigation	Mitigation actions taken after a disaster has occurred, usually during recovery and reconstruction.
Post-disaster recovery ordinance	An ordinance authorizing certain governmental actions to be taken during the immediate aftermath of a hazard event to expedite implementation of recovery and reconstruction actions identified in a pre-event plan.
Post-disaster recovery planning	The process of planning those steps the jurisdiction will take to implement long-term reconstruction with a primary goal of mitigating its exposure to future hazards. The post-disaster recovery planning process can also involve coordination with other types of plans and agencies, but it is distinct from planning for emergency operations.
Private activity bond	A bond whose interest may or may not be federally taxable. Under the Internal Revenue Code, private activity bonds are described generally as any bond: (1) of which more than 10% of the proceeds is to be used in a trade or business of any person or persons other than a governmental unit, and which is to be directly or indirectly repaid, or secured by revenues from, a private trade or business; and (2) in which an amount exceeding the lesser of 5% or \$5 million of the proceeds is to be used for loans to any person or persons other than a governmental unit. Certain private activity bonds are tax exempt when used to finance private water, wastewater, and multifamily housing projects.
Public education and outreach programs	Any campaign to make the public more aware of hazard mitigation and mitigation programs, including hazard information centers, mailings, public meetings, etc.
Real estate disclosure	Laws requiring the buyer and lender to be notified if a property is located in a hazard-prone area.
Regulation	Most states have granted local jurisdictions broad regulatory powers to enable the enactment and enforcement of ordinances that deal with public health, safety, and welfare. These include building codes, building inspections, zoning, floodplain and subdivision ordinances, and growth management initiatives.
Relocation out of hazard areas	A mitigation technique that features the process of demolishing or moving a building to a new location outside the hazard area.
Reservoirs	Large water storage facilities that can be used to hold water during peak runoff periods for controlled release during off-peak periods.
Resources	Resources include the people, materials, technologies, money, etc., required to implement strategies or processes. The costs of these resources are often included in a budget.
Retrofitting	See definition for structural retrofitting.
Risk	The estimated impact that a hazard would have on people, services, facilities, and structures in a community; the likelihood of a hazard event 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 a specific type of hazard event. It also can be expressed in terms of potential monetary losses associated with the intensity of the hazard.

Safe room/shelter	A small interior room constructed above grade and used to provide protection from tornadoes and other severe storm events. Bathrooms and large closets often double as safe rooms.
Seawalls/bulkheads	Vertical coastal walls that are built and designed to protect buildings against shoreline erosion. May also protect against storm surge.
Sediment and erosion control regulations	Regulations that stipulate the amount of sediment and erosion that is acceptable for land undergoing development.
Shoreline setback regulations	Regulations that establish a minimum distance between the existing shoreline and buildable areas.
Special tax bond	A bond secured by the pledge of a specific special tax.
Special use permits	Permits granted by local governments for land uses that have the potential for creating conflicts with uses on adjacent properties.
Stakeholder	Individual or group that will be affected in any way by an action or policy. Stakeholders include businesses, private organizations, and citizens.
State Hazard Mitigation Officer (SHMO)	The representative of state government who is the primary point of contact with FEMA, other state and federal agencies, and local units of government in the planning and implementation of pre- and post-disaster mitigation activities.
Storm water management regulations	Regulations governing the maintenance and improvement of urban storm water systems and the implementation of land treatment actions to minimize the effects of surface water runoff. Land treatment actions include maintenance of vegetative cover, terracing, and slope stabilization.
Strategy	Collection of actions to achieve goals and objectives.
Stream corridor restoration	The restoration of the areas bordering creeks, including the stream bank and vegetation.
Stream dumping regulations	Regulations prohibiting dumping in the community's drainage system, thereby maintaining stream carrying capacities and reducing the possibility of localized flooding.
Structural retrofitting	Modifying existing buildings and infrastructure to protect them from hazards.
Subdivision	The division of a tract of land into two or more lots for sale or development.
Subdivision and development regulations	Regulations and standards governing the division of land for development or sale. Subdivision regulations can control the configuration of parcels, set standards for developer-built infrastructure, and set standards for minimizing runoff, impervious surfaces, and sediment during development. They can be used to minimize exposure of buildings and infrastructure to hazards.



Taxation	Taxes and special assessments can be an important source of revenue for governments to help pay for mitigation activities. The power of taxation can also have a profound impact on the pattern of development in local communities. Special tax districts, for example, can be used to discourage intensive development in hazard-prone areas.
Transfer of development rights (TDR)	A growth management technique through which development rights are transferred from a designated "sending" area to a designated "receiving" area. The sending area is generally prohibited from development and the receiving area is a targeted development area that can be built at a higher density.
Urban forestry and landscape management	Forestry management techniques that promote the conservation of forests and related natural resources in urbanized areas, with a focus on obtaining the highest social, environmental, and economic benefits.
Vulnerability	Describes how exposed or susceptible to damage an asset is. Vulnerability depends on an asset's construction, contents, and the economic value of its functions.
Wetlands development regulations	Regulations designed to preserve and/or minimize the impact of development on wetlands.
Wind-proofing	Modification of design and construction of buildings to withstand wind damage.
Zoning	The division of land within a local jurisdiction by local legislative regulation into zones of allowable types and intensities of land uses.
Zoning or land use map	A map that identifies the various zoning district boundaries and the uses permitted by a zoning ordinance within those boundaries.
Zoning ordinance	Designation of allowable land use and intensities for a local jurisdiction. Zoning ordinances consist of two components: a zoning text and a zoning map.

