Building Safer and Stronger

Mitigation is the effort to reduce the loss of life and property by lessening the impact of disasters. Stated plainly, hazard mitigation can keep natural hazards, like flooding, from becoming major disasters.

Hazard mitigation has a number of benefits to our society. It enables individuals and communities to recover more rapidly from floods and other disasters, and it lessens the financial impact on local communities, states, tribes, and federal agencies. In fact, a 2005 study by the Multihazard Mitigation Council (MMC) shows that each $1 spent on mitigation saves an average of $4.

Mitigation goes beyond dollars and cents, though. Mitigation also produces secondary effects that are often overlooked yet have significant economic implications, including the prevention of business and education interruptions, enhanced public safety, and improved public spaces.

Case Study: Grand Forks, North Dakota

In 1997, the Red River flooded 8,600 homes in Grand Forks, North Dakota, causing $3.7 billion in flood losses. Following the disaster, the State of North Dakota, local governments, and FEMA worked together to buy out almost 700 of the most vulnerable homes in the state with FEMA mitigation grant program funding.

The Red River flooded again in 2006, yet losses were kept to $6.5 million as a result of the mitigation projects and studies.

Demonstrating mitigation’s cost-effectiveness is critical to the continued success of FEMA mitigation programs.

FEMA’s Role in Supporting Mitigation

The Federal Insurance and Mitigation Administration (FIMA) implements numerous congressionally authorized programs that address the effects of natural hazards through mitigation activities and provide funding to support these activities, including:

- **Hazard Mitigation Grant Program (HMGP)**
- **Pre-Disaster Mitigation (PDM) Program**
- **Flood Mitigation Assistance (FMA) Program**

HMGP funding almost always becomes available after disasters that are authorized under a Presidential Major Disaster Declaration.

In addition, FEMA provides technical assistance in the areas of hazard mitigation planning and building sciences for communities that want to mitigate their hazards before potential disaster strikes. Hazard mitigation planning helps community officials think through how to plan, design, and build up their community to withstand and recover from the impacts of potential natural and manmade disasters. FEMA’s Building Science Program develops publications, guidance materials, tools, technical bulletins, and recovery advisories that incorporate the most up-to-date building codes, requirements, and design standards for new construction and the repair of existing buildings.
Mitigation Activities for Communities

Typical community risk-reducing mitigation activities include:

- Adopting and enforcing regulatory tools, including ordinances, regulations, and building codes to guide and inform land use, development, and redevelopment decisions in areas affected by hazards.

- Creating a buffer area by protecting natural resources, such as floodplains, wetlands, or sensitive habitats.

- Acquiring or elevating flood-damaged homes or businesses and retrofitting public buildings, schools, and critical facilities to withstand hazard events.

- Implementing outreach programs to educate property owners and the public about risk and about mitigation measures to protect homes and businesses.

Mitigation Activities for Homeowners

There are things you can do to make your home and family safer through mitigation. Homeowners can reduce their own risk of loss by:

- Elevating their home’s living floor above the Base Flood Elevation shown on the community’s effective Flood Insurance Rate Map, which can be viewed at FEMA’s Map Service Center (https://msc.fema.gov). This may also be done as a requirement to be compliant with your community’s regulations. However, the savings is lower flood insurance premiums and protection from future flood levels.

- Elevating HVAC and/or mechanical units above the Base Flood Elevation.

- Installing flood vents, which reduce the risk of damage by allowing flood water to flow through and drain out.

- Using flood-resistant materials in areas of your home below the Base Flood Elevation, like replacing carpeting with tiles, to prevent water from doing major damage.

Interested in Learning More About How You Can Mitigate?

Check out FEMA’s Mitigation Ideas publication

Contact your State Hazard Mitigation Officer

Visit the Hazard Mitigation Assistance Website

FEMA’s mission is to help people prepare before, during and after disasters.

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