FACT SHEET ABOUT MITIGATION PLANNING

Information from FEMA

(Hazard Mitigation Planning for Local Communities (fema.gov))

Hazard Mitigation is...

Hazard mitigation describes actions taken to help reduce or eliminate long-term risks caused by hazards or disasters, such as flooding, droughts, hurricanes and Tropical storms, wildfires, or winter storms. As the costs of disaster management and recovery continue to rise, governments and citizens must find ways to reduce hazard risks to our communities. While communities make plans and approve new developments and improvements to existing infrastructure, mitigation can and should be an important component of the planning effort.

Hazard Mitigation Planning

Harris County Water Control and Improvement District 110 (HCWCID 110 or District) is in the process of developing a hazard mitigation plan. Mitigation plans must be reviewed and updated, formally approved by the Texas Department of Emergency Management (TDEM) and the Federal Emergency Management Agency (FEMA) and then formally adopted by the District.

While mitigation can and should be taken before a disaster occurs, hazard mitigation is also essential after a disaster. Often after disasters, repairs and reconstruction are completed in such a way as to simply restore damaged property to pre-disaster conditions. These efforts may get the community back to normal for a time, but the replication of pre-disaster conditions may result in a repetitive cycle of damage, reconstruction, and repeated damage .This recurrent reconstruction becomes more expensive as years go by.

Hazard mitigation breaks this repetitive cycle by taking a long-term view of rebuilding and recovering following disasters. The implementation of such hazard mitigation actions leads to building stronger, safer and smarter communities that are better able to reduce future injuries and future damage.

Types of Mitigation Techniques

Natural Resource Protection – Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Structural Projects - Actions that involve the construction of structures to reduce the impact of a hazard. Includes dams, setback levees, floodwalls, retaining walls, and safe rooms.

Emergency Services - Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.

Prevention - Government, administrative, or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, floodplain laws, capital improvement programs, open space preservation, and stormwater management regulations.

Property Protection - Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass.

Public Education and Awareness - Actions to inform citizens and elected officials about hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.

Common Mitigation Actions

- Drainage projects including detention, retention, channelization, and culvert expansion.
- Enforcement of building codes, floodplain management codes and environmental regulations.
- Public safety measures such as continual maintenance of roadways, culverts, and dams.
- Protecting critical facilities and infrastructure from future hazard events.
- Planning for hazard mitigation, emergency operations, disaster recovery, and continuity of operations.
- Development and distribution of outreach materials related to hazard mitigation.
- Deployment of warning systems to alert and notify the public.
- Acquisition of relocation of structures, such as purchasing buildings located in a floodplain.
- Acquisition of undeveloped hazard prone lands to ensure no future construction occurs there.
- Retrofitting of structures and design of new construction, such as elevating a home or building.

Mitigation Planning Process, Implementation and Monitoring

The mitigation planning process encourages communities to integrate mitigation into their day-to-day decision making about land use planning, floodplain management, site design and other functions. Mitigation plans:

Organize the Planning Process and Resources: Assemble the resources needed for a successful mitigation planning process. This includes reaching out to technical experts, defining the planning area, and identifying individuals, agencies, neighboring jurisdictions, businesses, and other partners to participate in the process. This includes whole community outreach for input and participation in the planning process.

Assess Risks: Identify the characteristics and potential consequences of hazards. This includes understanding where the hazard may occur and what people, property or community assets may be in harm's way.

Develop a Mitigation Strategy: Set priorities and develop long-term strategies for avoiding or minimizing the undesired effects of disasters. Communities base their strategy on an assessment of their unique regulatory, administrative, and financial capabilities that can support mitigation.

Adopt and Implement the Plan: Bring the plan to life by adopting it and implementing the mitigation actions outlined in the strategy.

Monitor the plan's implementation: Ensures it remains relevant as community priorities and development patterns change. A plan must be updated every 5 years.

Benefits of Hazard Mitigation

Mitigation is an investment in your community's future safety and sustainability. Mitigation planning helps you act now, before a disaster, to reduce losses when a disaster occurs. The planning process helps you think through how to plan, design, and develop your community while building partnerships for risk reduction.

Other benefits of mitigation planning include:

- Protecting public safety and preventing loss of life and injury.
- Reducing damage to existing and future development.
- Hazard Mitigation Planning for Local Communities
- Maintaining community continuity and strengthening the social connections that are essential for recovery.
- Preventing damage to your community's unique economic, cultural, and environmental assets.
- Minimizing downtime, accelerating recovery, and reducing the costs of disaster response.
- Helping accomplish other community objectives, such as capital improvements, infrastructure protection, open space preservation and economic resiliency.

Mitigation plans are also a prerequisite for certain kinds of non-emergency disaster assistance, such as Hazard Mitigation Assistance projects, including those funded by the Building Resilient Infrastructure and Communities program.

Natural Hazard Mitigation Saves

Natural hazard mitigation saves $6 on average for every $1 spent on Federal mitigation. The National Institute of Building Sciences estimates that adopting the latest building codes is affordable and saves $11 per $1 invested.