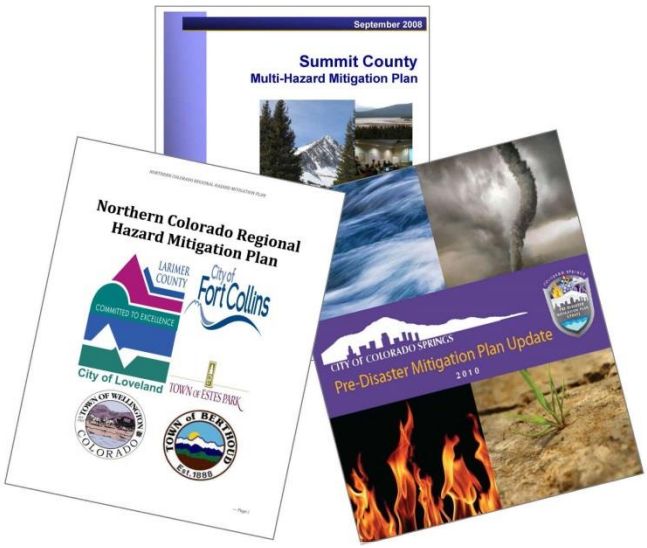
HAZARD MITIGATION PLAN



Source: Adapted by Clarion Associates

HAZARDS ADDRESSED

HOW IT WORKS

Hazard mitigation plans are prepared and adopted by communities with the primary purpose of identifying, assessing, and reducing the long-term risk to life and property from hazard events. Effective mitigation planning can break the cycle of disaster damage, reconstruction, and repeated damage. Hazard mitigation plans can address a range of natural and human-caused hazards. They typically include four key elements: 1) a risk assessment, 2) capability assessment, 3) mitigation strategy, and 4) plan maintenance procedures. Plans can be developed for a single community or as a multi-jurisdictional plan that includes multiple communities across a county or larger multi-county planning region. While most hazard mitigation plans are prepared as stand-alone documents, they can also be developed as an integrated component of a community's local comprehensive plan. Ninety-five percent of Colorado's population resides in a community that has adopted a local hazard mitigation plan.

Local hazard mitigation planning did not become a common or standard practice for most communities until the passage of the U.S. Disaster Mitigation Act of 2000, which amended federal legislation to require the development of a hazard mitigation plan as a condition for local jurisdictions to receive certain types of non-emergency disaster assistance, including funding for mitigation projects. Today, more than 27,000 communities nationwide have adopted local hazard mitigation plans in compliance with the planning laws, regulations, and guidance promulgated by the Federal Emergency Management Agency (FEMA). To maintain their compliance and eligibility for grant funding these plans must be updated and approved by FEMA every five years.

Similar to other local community plans, hazard mitigation plans are oriented toward anticipating and preparing for future conditions or impacts rather than responding to events as they occur. While there

are various methods and practices applied in the development of hazard mitigation plans, they should all be prepared in conformance with the latest regulations and guidance from FEMA and the Colorado Division of Homeland Security & Emergency Management (DHSEM).

Perhaps even more important for local governments is the horizontal coordination and integration of hazard mitigation plans with other plans, policies, and regulations for guiding community development. Describing a process for doing so is a requirement for local hazard mitigation plans, and in recent years both FEMA and the American Planning Association (APA) have distributed specific guidance for planners on this topic (see *Additional Resources*). **When developed and implemented in concert with land use plans, zoning ordinances, or other local planning mechanisms, the local mitigation plan can be a powerful tool for reducing community vulnerability to known hazards.** Moreover, in cases where a community may not have effective plans or regulations already in place, the hazard mitigation plan can become a critical document for guiding future decision and policy making.

IMPLEMENTATION

Many communities have already prepared and adopted a local hazard mitigation plan, and often have done so as part of a multi-jurisdictional planning effort. Regardless, **the responsibility for plan implementation lies with each jurisdiction**. Community-specific risk assessments, actions, and procedures in support of the overall goals for the planning area must be included as part of the mitigation strategy and plan maintenance elements of the plan. While the risk and capability assessment studies help form the foundation for the plan, mitigation policies, projects, or other actions and the community's roadmap for plan implementation are found in these latter elements. The actions included in a community's mitigation strategy should address the vulnerabilities identified in the risk assessment and include a comprehensive range of mitigation measures including structural projects and non-structural activities such as development codes and regulations, public education and outreach initiatives, and natural resource protection strategies.

At a minimum, per FEMA regulations, local hazard mitigation plans must undergo a comprehensive update and be formally approved and re-adopted by the community's governing body every five years. However, to promote more effective local implementation, they should be routinely monitored, updated, and reported on by each community on a frequent basis. This is particularly critical for integrating the hazard mitigation plan into other local planning mechanisms as described above.

WHERE IT'S BEEN DONE

Mesa County (2015) has been implementing and maintaining its hazard mitigation plan since it was first approved by FEMA in 2005. The plan was initially developed as a multi-jurisdictional plan and today covers not only all incorporated municipalities but extends to other jurisdictions including the 5-2-1 Drainage Authority and several fire protection districts. Mesa County led the plan's third comprehensive update process in 2014 under the direction of a planning committee that included representatives from all participating jurisdictions in addition to local businesses, utilities, state agencies, and other stakeholders. The County has also successfully integrated the 10-step planning process prescribed under FEMA's Community Rating System (CRS) and is among only a handful of Colorado communities to gain significant CRS credit points for floodplain management planning.

Examples of mitigation actions already completed under the direction of Mesa County's plan include the mapping of geologic and wildfire hazards, a community wildfire protection plan for the Plateau Valley, a flood mitigation project that removed more than 100 structures from the regulatory floodplain, and achieving certification as a *StormReady* community by the National Weather Service.

The plan also recognizes the importance of integrated planning, stating that "an important implementation mechanism that is highly effective and low-cost is incorporation of the hazard mitigation plan recommendations and their underlying principles into other plans such as comprehensive planning, capital improvement budgeting, and regional plans. Mitigation is most successful when it is incorporated in the day to day functions and priorities of government and in land use and development planning." As such, the incorporation of information contained in the plan into other planning mechanisms remains a high priority action for all jurisdictions. Per the 2015 plan update the County has also proposed to conduct community resilience planning through a more structured planning process.

In 2014, **Tulsa, Oklahoma,** completed a comprehensive update to its existing *Multi-Hazard Mitigation Plan* using the 10-step planning process as recommended through FEMA's Community Rating System (CRS). Although subject to many past flood disasters, today Tulsa is renowned for its status as one of the nation's most resilient and highest rated CRS communities (Class 2), thereby providing its floodplain residents with the direct benefit of a 40% discount on flood insurance costs. In order to maintain and enhance this rating, the City maintains a highly actionable and successful hazard mitigation plan that methodically addresses all natural and man-made hazards. The plan is widely recognized in as an exemplary model for other communities to follow in their own hazard mitigation and CRS planning efforts.

Tulsa, Oklahoma.

Source: Rex Brown

ADVANTAGES AND KEY TALKING POINTS

One of the most direct benefits and motivating factors for communities to prepare and adopt a hazard mitigation plan or integrate this into their comprehensive plan is maintaining their eligibility to pursue pre-disaster and post-disaster grant funding assistance for mitigation projects. Other benefits include:

- Gaining an increased awareness and understanding of local hazard risks and vulnerabilities, as well as existing mitigation capabilities and activities.
- Identifying, evaluating, and prioritizing potential risk reduction measures including both mitigation project and policy alternatives.
- Engaging and communicating with the public, community leaders, other stakeholders on the assessment and mitigation of known hazards.

- Building partnerships by involving citizens, organizations, and businesses to more comprehensively address disaster risk reduction.
- Developing strong partnerships between planners and emergency managers to fully integrate land use and hazard planning efforts.
- Aligning disaster risk reduction strategies with other community objectives.
- Communicating local risk reduction priorities to state and federal officials.
- Increasing the speed and decreasing the costs associated with disaster recovery.
- Pre-identifying risk reduction activities that can be partially or wholly funded through existing mitigation grant programs, including but not limited to FEMA's Hazard Mitigation Assistance (HMA) programs, in addition to leveraging other financial assistance to support multi-objective projects.
- Making the hazard mitigation plan a meaningful planning document rather than a requirement that simply needs to be submitted to FEMA for approval.

CHALLENGES

The greatest challenge for most communities is the initial development of a hazard mitigation plan that meets all state and federal requirements. The planning process, which is typically managed over the course of 8-12 months, must follow a fairly prescriptive and thoroughly documented approach in order to gain final plan approval. For this and other reasons, many communities opt to participate in a multi-jurisdictional plan and/or hire an outside consultant for planning assistance. Other related challenges include:

- Sustaining momentum and keeping the plan current and relevant can be a struggle for communities, especially those without clear plan implementation and maintenance procedures and/or the resources to carry them out.
- Multi-hazard risk assessments may require various levels of technical expertise, data, and technology to accurately identify and analyze hazard threats, vulnerabilities, and potential consequences.
- Unlike many other plans, the hazard mitigation plan is not a department-specific plan but should rather include the active participation and buy-in from many local offices and community and private-sector partners that can support risk reduction efforts.
- To be effective in engaging the public and other community stakeholders in the planning process, communities have to employ a coordinated, multi-faceted approach for outreach and communications. Civic engagement in hazard mitigation planning is a challenge for many communities.
- While plan updates should not be as challenging as initial plan development, communities are expected to run through a similar planning process at least every five years to maintain compliance with state and federal requirements.

KEY FACTS

Administrative capacity	Experienced planner with broad intergovernmental support; emergency manager

Mapping	Mapping highly desirable for risk assessment, but is not technically required, especially for hazards for which reliable map data does not exist, or for communities that have no capacity to do their own mapping. In these cases it is still possible to do quality risk assessments and mitigation plans through other means
Regulatory requirements	None required, but can support plan implementation
Maintenance	Must be updated every five years per federal rules and state regulations (Disaster Mitigation Act of 2000)
Adoption required	Yes
Statutory reference	Code of Federal Regulations (CFR), Title 44, Chapter 1, Part 201.6; no state statutory requirements
Associated costs	Staff time, plus potential costs for mapping or other technical work, public outreach activities, and consultant services

EXAMPLES

Adams County Hazard Mitigation Plan (Integrated into Comprehensive Plan)	co.adams.co.us/index.aspx?NID=1086
City of Colorado Springs Pre-Disaster Mitigation Plan Update	oem.coloradosprings.gov/public-safety/emergency-management/plans-reports-guides/2010-pre-disaster-mitigation-pdm-plan
Mesa County Hazard Mitigation Plan	sheriff.mesacounty.us/WorkArea/DownloadAsset.aspx?id=10319
Tulsa, OK Multi-Hazard Mitigation Plan	cityoftulsa.org/public-safety/hazard-mitigation.aspx

FOR MORE INFORMATION

FEMA Multi-Hazard Mitigation Planning Website

fema.gov/multi-hazard-mitigation-planning

DHSEM's Regional and Local Hazard Mitigation Plans Website

dhsem.state.co.us/emergency-management/mitigation-recovery/mitigation/regional-local-hazard-mitigation-plans

Beyond the Basics: Best Practices in Local Mitigation Planning

mitigationguide.org