Planning for Drought Resilience

Drought can be a slow and long-lasting hazard that impacts communities across the United States. Hazard mitigation planning can help reduce the impact of droughts and plan for future events.

Hazard Mitigation and Droughts

Hazard mitigation planning reduces loss of life and property by minimizing the impact of disasters. It enables state, local, tribal and territorial (SLLT) governments to build resilience to natural events. It is thinking ahead and acting now to reduce loss later.

SLLTs use the planning process to manage actions that reduce long-term risks from natural hazards. Mitigation planning is most effective when used with other plans, processes, policies and decisions.

Drought is a slow-onset hazard that can last for months or years. Droughts can impact many aspects of life, including two important needs: drinking water and food. Droughts are also long-lasting, and their impact can be felt for years.

Severe droughts are projected for the future and may increase occurrence of other hazards, like wildfires. FEMA partners with state officials and tribal leaders to help communities plan for drought mitigation.

Supporting Drought Resilience through Mitigation Planning

FEMA helps communities take action to reduce the impacts of drought hazards through the hazard mitigation planning regulations established in Title 44 of the Code of Federal Regulations (CFR) Part 201. Hazard mitigation planning includes creating a strategy for risk reduction. FEMA encourages communities to plan for all hazards, including drought, and supports the use of watershed-level planning for hazard mitigation. Hazard mitigation supports drought resilience throughout the planning process, in the risk assessment, and in the mitigation strategy.

Planning Process

The mitigation planning process encourages consulting a wide range of sectors in plan development. These sectors include, but are not limited to, emergency management, economic development, land use and development, housing, health and social services, infrastructure, and natural and cultural resources. Climatologists can also help gather drought data so communities can understand the impacts of drought.

As drought can affect many aspects of a community, it is important to bring a wide range of sectors to the table. Each sector can contribute expertise and resources to manage chronic drought and address the hazard fully.





Risk Assessment

State, tribal, and local hazard mitigation plans must include a description of the type, location, extent, past occurrences, probability of future events, and impacts of all natural hazards to which they are vulnerable.

Communities are encouraged to work with their sector partners to use best available data to support the risk assessment. The risk assessment also provides the opportunity to connect the impacts of drought to other types of hazards, like wildfire.

Mitigation Strategy

The mitigation strategy is the long-term action plan for risk reduction. It focuses on developing actions that address the impacts and vulnerabilities in the risk assessment. It looks at current, community hazard- management capabilities and tells how communities can expand those capabilities to address hazards like drought.

The mitigation strategy also supports increasing community capacity to address hazards through adoption and enforcement of plans and regulations, implementing outreach programs and initiating projects like stream corridor and wetland protection, aquifer storage and recovery, flood diversion and storage, and green infrastructure.

Integrating Drought Hazard Mitigation into Other Plans

Identifying drought risk during the planning process helps a community find ways to reduce impacts before chronic drought reaches a crisis stage. Consider the following plans and regulations that can support drought resilience:

- Landscaping ordinances that dictate conserving and recycling potable water and the use of drought- tolerant plant species to help reduce water demand.
- Stormwater management plans that support a comprehensive approach to collecting, treating, and even reusing water to help mitigate drought.
- Capital improvement plans that emphasize investment in efficient water systems that prevent loss of water during transmission.

Integrating drought mitigation into other community plans ensures consistency, eliminates redundancies, prevents conflicting outcomes, and supports overall drought resilience.

Drought Planning Resources

FEMA and other federal agencies have a variety of guidance, tools, and resources to support planning for drought. These resources and more can be accessed from the <u>Hazard Mitigation Planning website</u>.

- <u>The Local Mitigation Planning Handbook</u> is the official guide for developing, updating, and implementing local mitigation plans. The Handbook includes guidance, tools, and examples that help communities assess capabilities and develop actions that lessen the impact of natural hazards.
- <u>Mitigation Ideas: A Resource for Reducing Risk to Natural Hazards</u> provides ideas for mitigation actions for a number of natural hazards, including drought.

- Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials (2013) makes the case for integrating hazard mitigation and provides practical tips on how to insert mitigation and resilience into community planning.
- The Environmental Protection Agency's <u>WaterSense and Water Research programs</u> address drought resilience.
- <u>Falling Dominoes: A Planner's Guide to Drought and Cascading Impacts</u> is a FEMA-funded resource from the American Planning Association to help plan for and address drought.
- <u>The National Integrated Drought Information System</u> provides data, maps, tools, and resources at both a national and regional scale to help communities plan for drought.
- <u>The National Drought Mitigation Center</u> provides basic information on droughts, as well as planning and monitoring tools that can be used in mitigation planning and drought-resilience initiatives.
- <u>Climate.gov</u> and the <u>U.S. Climate Resilience Toolkit</u> provide data, tools, and case studies to support planning for changing climate.