



TOWN OF BERLIN HAZARD MITIGATION PLAN

Berlin Board of Selectmen
November 13, 2017

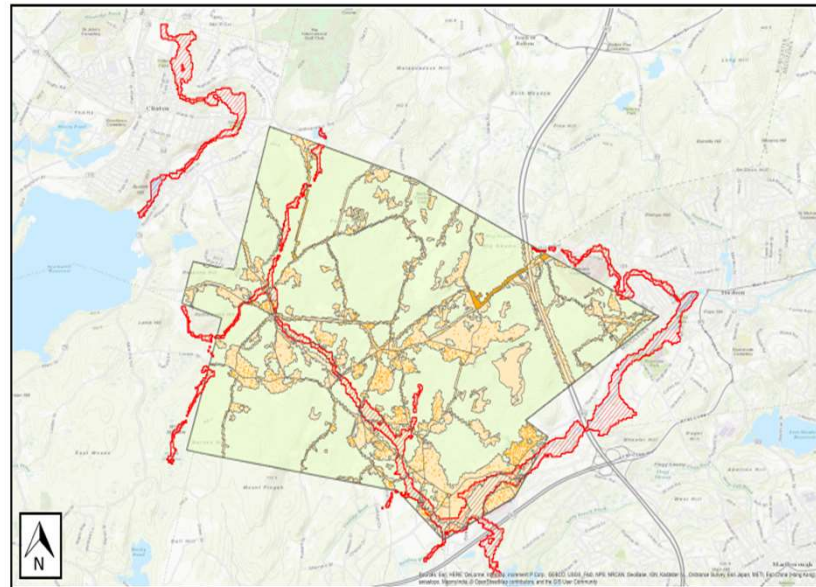
Janet Pierce, Executive Director

Adam Menard, Assistant Planner

Central Massachusetts Regional Planning Commission

WHY IS BERLIN DOING THIS PLAN?

- The **Federal Disaster Mitigation Act of 2000** requires that cities and towns adopt and update a Hazard Mitigation Plan to be eligible for FEMA mitigation grants.
- Plan will meet FEMA's requirements and help the town make good use of its resources.
- Currently there is a regional plan set to expire in 2018.



PLAN FOR MITIGATING DAMAGES FROM NATURAL HAZARDS

- Flooding
- High winds, hurricanes, tornadoes
- Winter storms, snow and ice
- Earthquakes, landslides
- Extreme temperatures
- Brush fires
- Drought



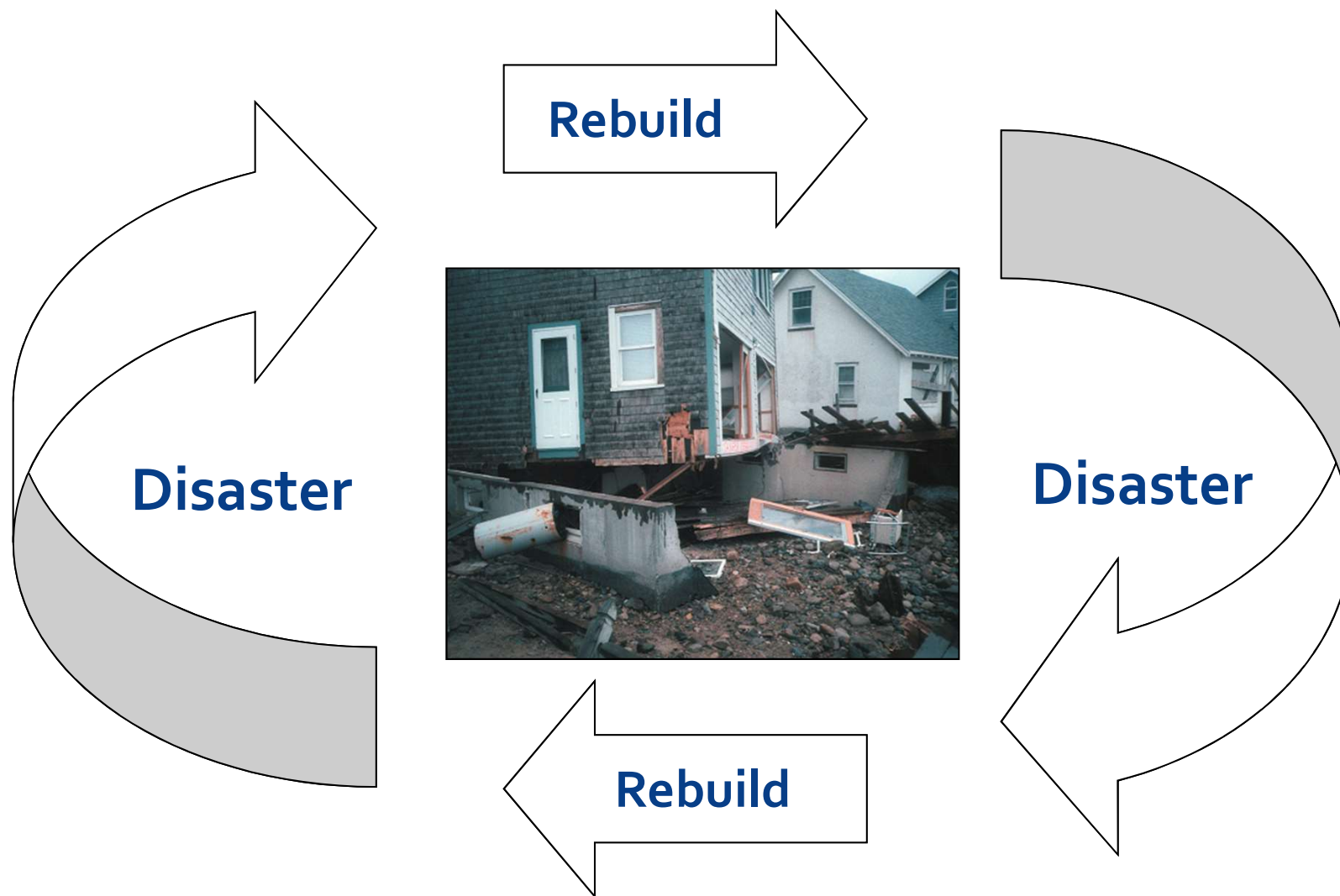
Not an Emergency Response Plan

WHAT IS HAZARD MITIGATION?

- *To permanently reduce or prevent losses of life, injuries and property damage by using long-term strategies*
- *What preventive actions are being taken NOW to reduce future risks and damages?*
- *What additional actions can be taken in the FUTURE?*
- *According to the Multihazard Mitigation Council, every \$1 spent on mitigation saves society \$4 in response costs*



Breaking the Cycle of Disaster & Rebuilding



Four Tools & Techniques for Hazard Mitigation



1. Structure & Infrastructure Projects
2. Preparedness, Coordination & Response Actions
3. Education & Awareness Programs
4. Local Plans & Regulations

STRUCTURE AND INFRASTRUCTURE PROJECTS

- Prevent floodwaters from reaching properties
- Man-made structures to control water flows
- Culverts, dams, storm drainage facilities, pumping facilities



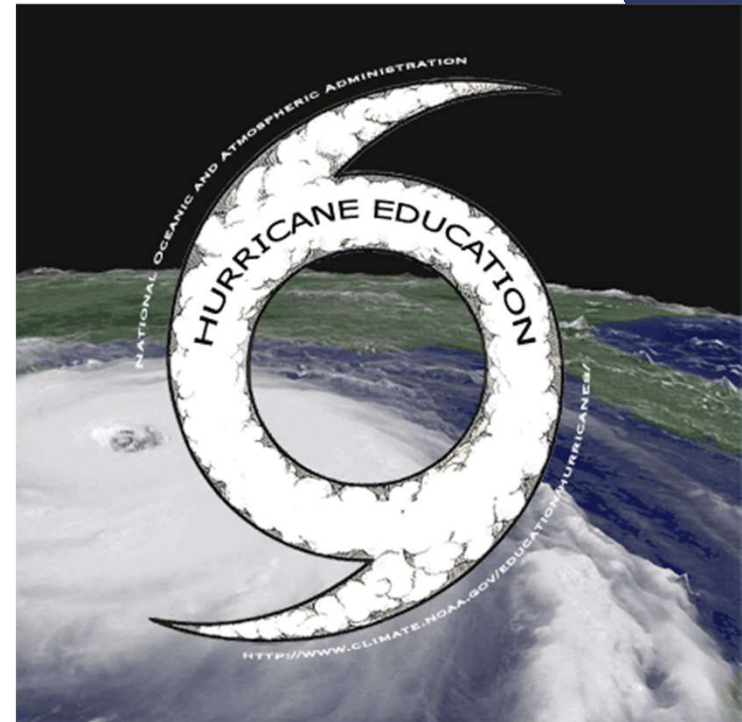
PREPAREDNESS AND RESPONSE

- National Flood Insurance Program
- Evacuation Planning
- Community Rating System
- Facilitate and coordinate the administration, enforcement and collaboration



EDUCATION AND AWARENESS

- Flood and hurricane awareness website
- Hazard information at libraries, schools, and public buildings
- Information brochures mailed to residents (e.g., safe operation of home generators)
- Public outreach at community events



LOCAL PLANS & REGULATIONS

- Planning & Zoning
- Subdivision and Site Plan
- Floodplain regulations
- Wetlands bylaws
- Storm water regulations
- Building Code



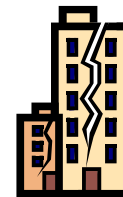
PLANNING PROCESS

- CMRPC provides technical assistance to the Town for plan development
- The Town coordinates through its Local Hazard Mitigation Team
- Public meeting #1 (tonight), during plan development and review of the draft plan
- Submittal of Draft Plan to MEMA and FEMA for review, revision, and approval
- Public meeting #2 (this Winter), and adoption by BOS

DEVELOPMENT OF THE PLAN

CMRPC assisted the Berlin Local Hazard Mitigation Planning Team to:

- Identify & Map Critical Facilities
- Identify & Map Locally Identified Hazard Areas
- Identify & Review Existing Mitigation Measures
- Identify and Prioritize New Mitigation Strategies
- Gather Feedback & Input from the Public



IDENTIFY CRITICAL FACILITIES

Database & GIS maps of critical facilities, infrastructure

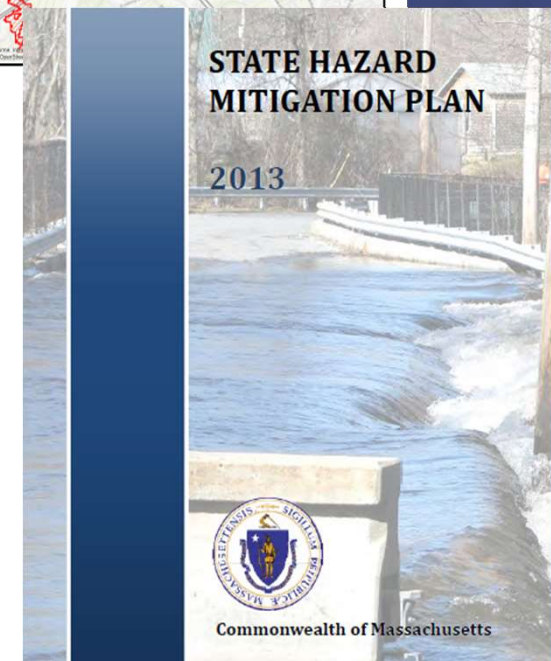
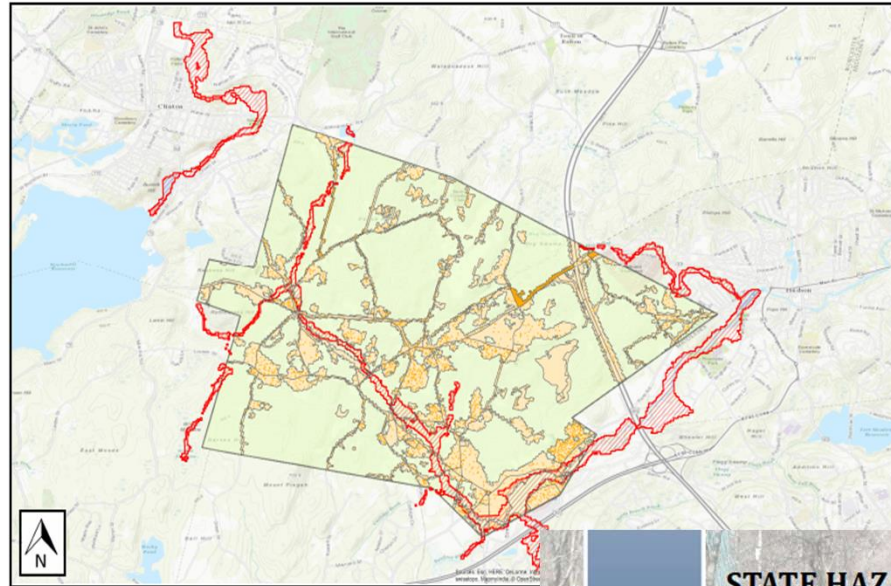
Sites identified include:

- Disaster response sites such as the fire station and police station
- Sites requiring assistance such as elderly housing
- Places of assembly
- Critical infrastructure (Dams, pump stations, communications)



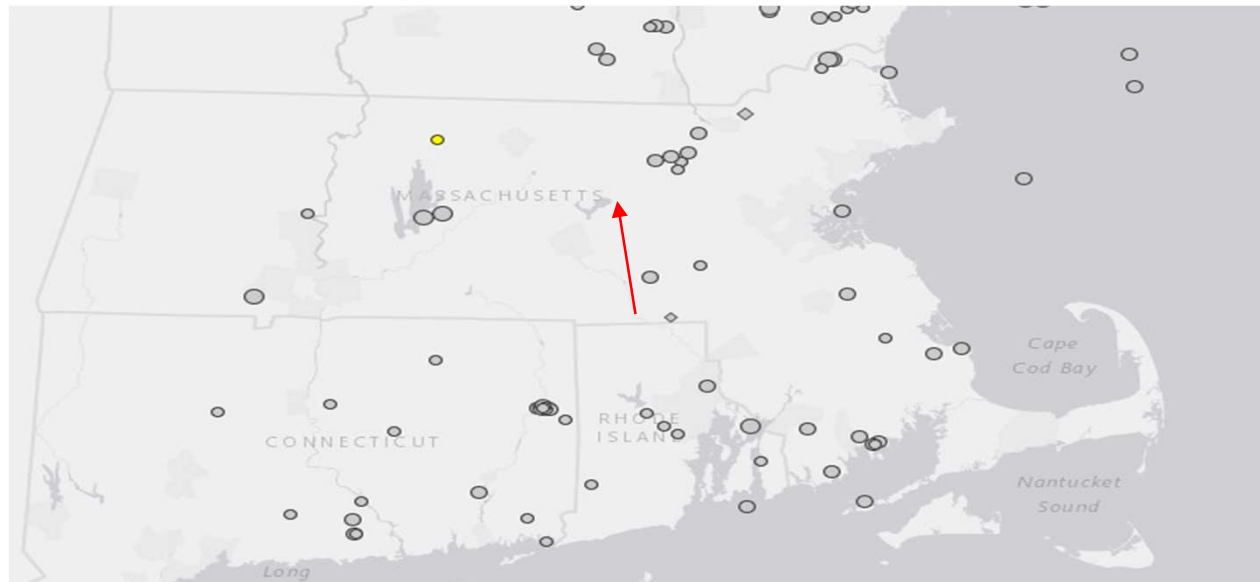
HAZARD IDENTIFICATION & MAPPING

- State & Federal data on floodplains, snowfall, wind speeds, hurricanes, earthquake risk, etc.
- Review Mass. State Hazard Mitigation Plan
- Coordinate with Local Team to get local information on hazard areas and potential future developments



OTHER HAZARDS – GEOLOGIC, WIND, & SNOW

Earthquakes Since 1990 1+ Magnitude



Recent Declared Hurricanes & Snow Disasters

Disaster	Title	Dates
DR-751	Hurricane Gloria	9/27/1985
DR-914	Hurricane Bob	8/19/1991
EM-3252	Hurricane Katrina Evacuation	8/29/2005-10/1/2005
EM-3315	Hurricane Earl	9/1/2010-9/4/2010
EM-3350	Hurricane Sandy	10/29/12-10/30

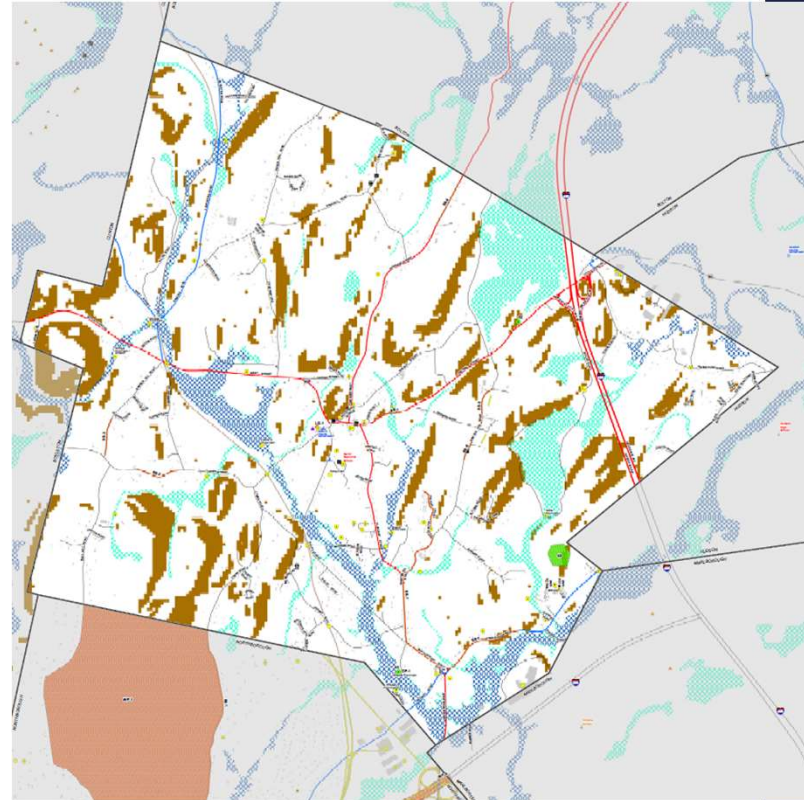
Source: Federal Emergency Management Agency (FEMA)

Disaster	Title	Dates
DR-4051	Severe Storm & Snowstorm	10/29/11-10/30/11
DR-4110	Severe Winter Storm, Snowstorm & Flooding	2/8/13-2/10/13
DR-4214	Severe Winter Storm, Snowstorm & Flooding	1/26/15-1/29/15

Source: Federal Emergency Management Agency (FEMA)

LOCALLY-IDENTIFIED HAZARD AREAS

- | |
|---|
| •Snow drifting is a concern in much of the Town |
| • History of Microbursts in higher elevations |
| •Wheeler Pond Dam |
| •Wildfires, Mt. Piscah area |
| •Shallow Fire Ponds |



PUBLIC SURVEY – Autumn 2017

Posts



Town of Berlin, MA

2 hrs · 🌐

Hazard Mitigation Plan Public Survey

Overview

The Central Massachusetts Regional Planning Commission through a grant from FEMA is working with the Town of Berlin to develop an updated Natural Hazard Mitigation Plan for the Town. The Hazard Mitigation Grant Program (HMGP) provides funds to states, territories, Indian tribal governments, communities, and regional entities to help communities implement hazard mitigation measures following a Presidential major disaster... [See More](#)

Hazard Mitigation Plan Public Survey

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Hazard Mitigation Plan Public Survey

Overview

The Central Massachusetts Regional Planning Commission (CMRPC) through a grant from FEMA is working with your community to develop an updated Natural Hazard Mitigation Plan for your city or town. FEMA's Hazard Mitigation Grant Program (HMGP) provides funds to states, territories, Indian tribal governments, communities, and regional entities to help communities implement hazard mitigation measures following a Presidential major disaster declaration. The plans and the projects that result from them reduce the overall risk to residents and property and reduce the costs of disaster recovery.

Participating communities in the current hazard mitigation planning round include Auburn, Barre, Berlin, Boylston, Brookfield, Charlton, Dudley, East Brookfield, Hardwick, Leicester, Millbury, New Braintree, North Brookfield, Northborough, Northbridge, Oakham, Rutland, Shrewsbury, Southbridge, Spencer, Sturbridge, Upton, Uxbridge, Warren, Webster, West Boylston, and Worcester. As we create your community's plan, we need to hear from you. There are two easy ways you can help:

1. Take this survey! Your input will help the local planning team and CMRPC to understand the community's concerns, and your input will help guide discussions during the plan development process.
2. Attend public meetings. At least two public meetings will be held during the planning process in each participating community to discuss the plan's progress and content. Meeting notices and related documents will be posted on your community's website.

Thank you for your participation and input!

This survey is open to residents and other stakeholders in participating communities, including business operators, property owners, local officials, and institutional or organizational partners. Please limit your response to ONE (1) per household/business/organization.

More information on CMRPC's hazard mitigation planning program is available online here:

<http://cmrpc.org/hazard-mitigation-planning>

EXISTING MITIGATION MEASURES

MULTIHAZARD

- Comprehensive Emergency Management Plan (CEMP)
- Massachusetts State Building Code

FLOOD RELATED HAZARDS

- National Flood Insurance Program
- Street sweeping
- Catch basin cleaning
- Roadway treatments
- Drainage preventive practices to reduce clogging
- Subdivision Rules and Regulations
- Zoning Regulations

DAM FAILURES

- State permits for dam construction
- DCR dam safety regulations

WIND-RELATED HAZARDS

- Tree trimming program

WINTER-RELATED HAZARDS

- Salting and sanding of roads and plowing

BRUSH FIRE RELATED HAZARDS

- Permits for outdoor burning

BERLIN MITIGATION STRATEGIES

- Where are the GAPS?
- What actions will further reduce vulnerability?
- Where are the PRIORITIES?



DRAFT PLAN

MITIGATION MEASURES

- Continue annual tree trimming program across the town to protect utility wires.
- Properly clean (at least annually, or more often as may be required) all storm water structures and basins
- Update Open Space and Recreation Plan (2018) to include hazard mitigation goals
- Continue snow fence installation, repair and replace as necessary.

PLAN APPROVAL AND ADOPTION

- Draft plan reviewed by MEMA
- FEMA reviews the plan and issues conditional approval
- BOS resolution vote to adopt the plan (~~~)
- FEMA issues plan approval
- Plan is in effect for 5 years



IMPLEMENTING THE PLAN

WHAT HAPPENS AFTER THE PLAN IS APPROVED?

- Establish a local implementation group
- Prepare a timeline for implementation
- Integrate the plan's recommendations with other local plans and policies
- Seek and implement funding sources and other resolutions
- Update the plan every 5 years



DRAFT PLAN

The full draft plan will be available on the CMRPC website at:

<http://www.cmrpc.org/berlin-hazard-mitigation-plan>

Please send any comments by November 29, 2017:

amenard@cmrpc.org

