

MULTI-HAZARD MITIGATION AND ADAPTATION

SARAH WHITE

MASS EMERGENCY MANAGEMENT AGENCY
JULY 2014



MISSION AREAS OF EMERGENCY MANAGEMENT

Prevention	Protection	Mitigation	Response	Recovery
Planning				
Public Information and Warning				
Operational				
Forensics and Attribution	Access Control and Identity Verification	Community Resilience	Critical Transportation	Economic Recovery
Intelligence and Information Sharing	Cybersecurity	Long-term Vulnerability Reduction	Environmental Response/Health and Safety	Health and Social Services
Interdiction and Disruption	Intelligence and Information Sharing	Risk and Disaster Resilience Assessment	Fatality Management Services	Housing
Screening, Search, and Detection	Interdiction and Disruption	Threats and Hazard Identification	Infrastructure Systems	Infrastructure Systems
	Physical Protective Measures		Mass Care Services	Natural and Cultural Resources
	Risk Management for Protection Programs and Activities		Mass Search and Rescue Operations	
	Screening, Search, and Detection		On-scene Security and Protection	
	Supply Chain Integrity and Security		Operational Communications	
			Public and Private Services and Resources	
			Public Health and Medical Services	
			Situational Assessment	

DEFINITION OF HAZARD MITIGATION

Any sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects.

The purpose of hazard mitigation is twofold:

- To protect people and structures from future hazards.
- To minimize the costs of disaster response and recovery.



MOVING IN THE RIGHT DIRECTION



MITIGATION PLANNING IS...

- A process for States and communities to assess risks and vulnerabilities, identify policies, activities, and tools to implement mitigation actions.
- Municipalities should have a local Hazard Mitigation Plan

Status	Number	% of Massachusetts
Approved*	136	39%
Under Development	135	38%
Under Review (FEMA or MEMA)	28	8%
No Mitigation Plan or Expired	57	16%

*includes approved and pending approved

As of July 2014



HAZARDS IN THE STATE HM PLAN

- Coastal Erosion
- Dam Failure
- Earthquake
- Wildfires
- Flooding
- Hurricanes/TS
- Landslide
- Nor'easter
- Severe Weather
- Winter Storm
- Tsunami

Climate Change = Existing Hazards Exacerbated

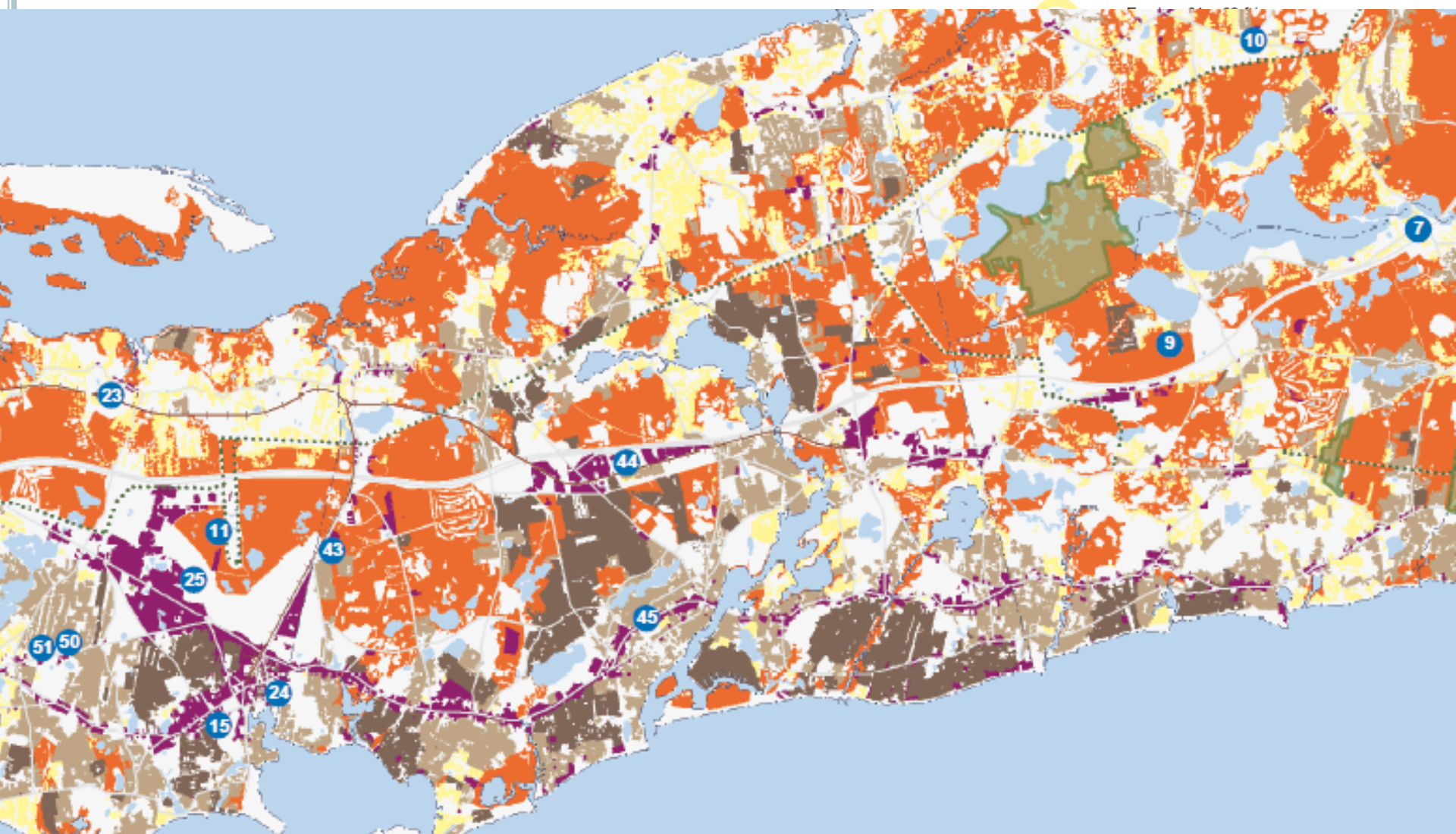


EXAMPLE HAZARD ASSESSMENT

Shoreline Change Index

 Erosion > 2 feet per year

 Erosion 1 - 1.99 ft/year



WHOLE COMMUNITY

- Recognizing that emergency management is a shared responsibility, it calls for the involvement everyone—not just the government—in preparedness efforts.
- By working together, everyone can keep the nation safe from harm and resilient when struck by hazards, such as natural disasters, acts of terrorism, and pandemics.
- Municipalities are already engaged in Mitigation Planning.
- Community Stakeholders should be invited as a part of that process.



IDENTIFY HAZARD MITIGATION ACTIVITIES

- Non-structural Prevention
- Property Protection and Structural
- Public Education and Awareness
- Natural Resource Protection
- Emergency Services Protection

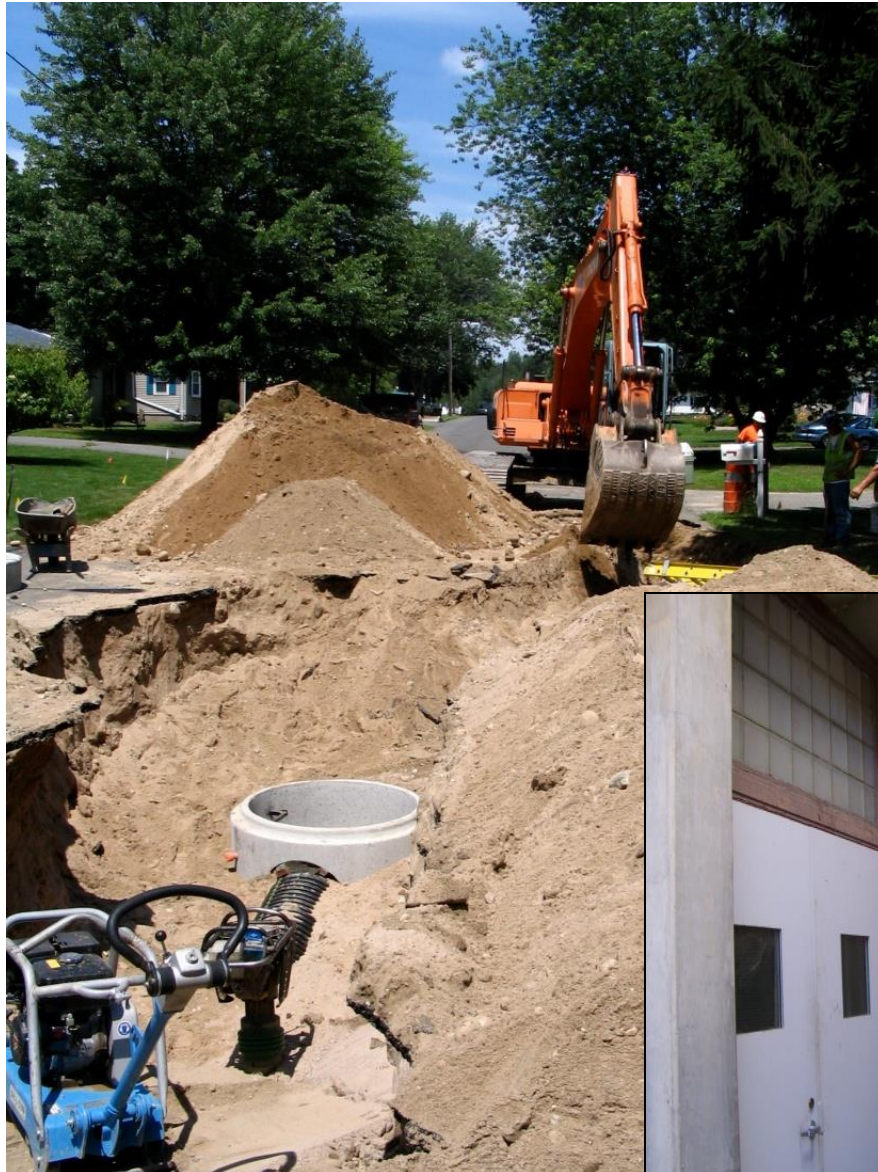
Available FEMA Grant Programs

- Unified HMA
 - Pre-Disaster Mitigation
 - Hazard Mitigation Grant Program
 - Flood Mitigation Assistance



EXAMPLES OF FEMA MITIGATION PROJECTS

- Mobile Home Acquisition, Greenfield
- Booker Hill Road Slope Stabilization Project, Becket
- Ell Pond Flood Mitigation Project, Melrose
- Quincy & Scituate Home Elevations and Utility Retrofits
- HG&E Flood Barriers, Holyoke
- Electric Park Drainage Upgrades, Ludlow



PROPERTY ACQUISITION – GREENFIELD





Utility Elevation out of
Floodplain, Private
Residence, Quincy

Thank You!

*...Wish I had
elevated my
house after the
last flood.*

For more information visit...

www.mass.gov/mema

Click on Recovery and Mitigation

