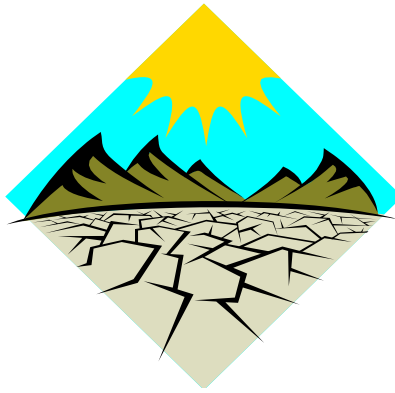


HAZARD MITIGATION PLAN UPDATE FOR THE NAUGATUCK VALLEY REGION

Meeting with Local Coordinators



Presented by:
David Murphy, PE, CFM
Milone & MacBroom, Inc.

August 13, 2020

AGENDA

- Purpose and Need for Hazard Mitigation Plan
- Update on Hazard Mitigation Grant Programs
- How Can a Plan be Used?
- Status of Existing Plans
- Schedule of Multi-Jurisdictional Update
- Coordination with *Resilient CT*
- Introduction for Approach to Public Engagement
- Scheduling of Local Meetings

PURPOSE AND NEED FOR HAZARD MITIGATION PLAN

Authority

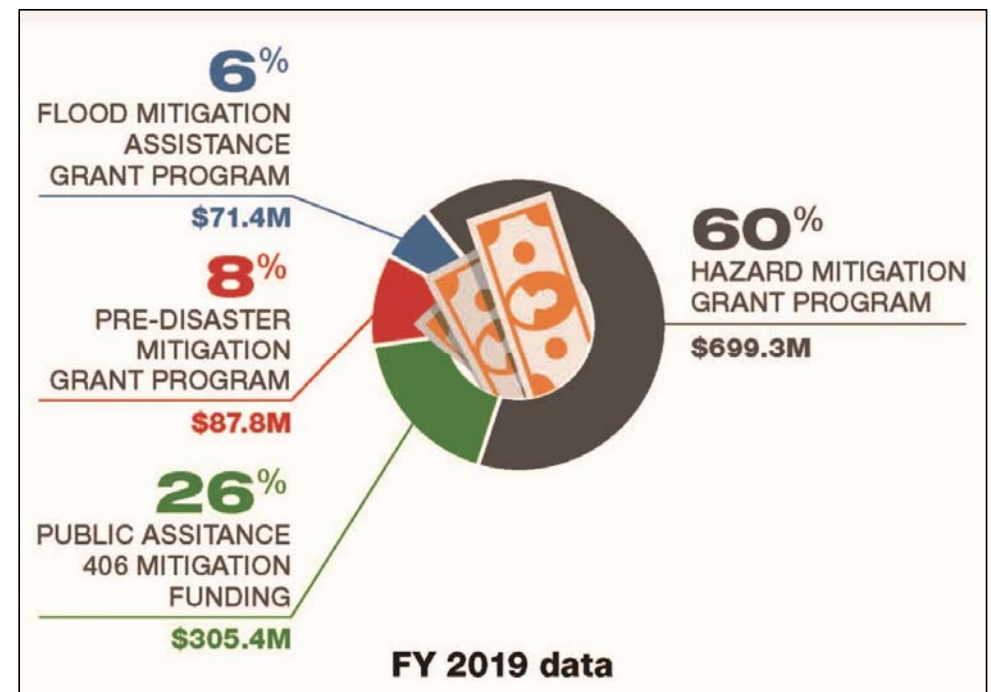
- Disaster Mitigation Act of 2000 (amendments to Stafford Act of 1988)

Goal of Disaster Mitigation Act

- Promote disaster *preparedness*
- Promote hazard mitigation *actions* to reduce losses

Mitigation Grant Programs

- Pre-Disaster Mitigation (PDM)
- Flood Mitigation Assistance (FMA)
- Hazard Mitigation Grant Program (HMGP)
- Building Resilient Infrastructure and Communities (BRIC) – ***replaced PDM in August 2020***



Graphic courtesy of FEMA

PURPOSE AND NEED FOR HAZARD MITIGATION PLAN

What is a Natural Hazard?

- An extreme natural event that poses a risk to people, infrastructure, and resources.



PURPOSE AND NEED FOR HAZARD MITIGATION PLAN

What is Hazard Mitigation?

- Actions we take now that reduce or eliminate long-term risk to people, property, and resources from natural hazards and their effects.



New Elevated Construction

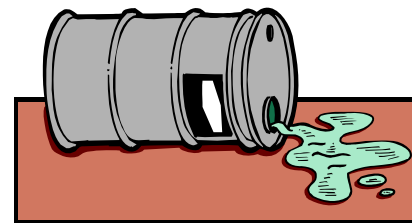


Removal of Structures from Floodplain

PURPOSE AND NEED FOR HAZARD MITIGATION PLAN

Hazard Mitigation Plan does not *directly* address:

- Disaster Response and Recovery
- Terrorism and Sabotage
- Human Induced Emergencies
(some fires, hazardous spills and contamination, disease, etc.)
- **Pandemics**



PURPOSE AND NEED FOR HAZARD MITIGATION PLAN

LONG-TERM GOALS OF HAZARD MITIGATION

Reduce

- Loss of life
- Damage to property and infrastructure
- Costs to residents and businesses (taxes, insurance, repair costs, etc.)
- Municipal service costs (long-term, e.g. emergency response, infrastructure maintenance)

Educate

- Residents
- Policy-makers

Connect

- Hazard mitigation planning to other community planning efforts

Enhance

- And preserve natural resource systems in the community

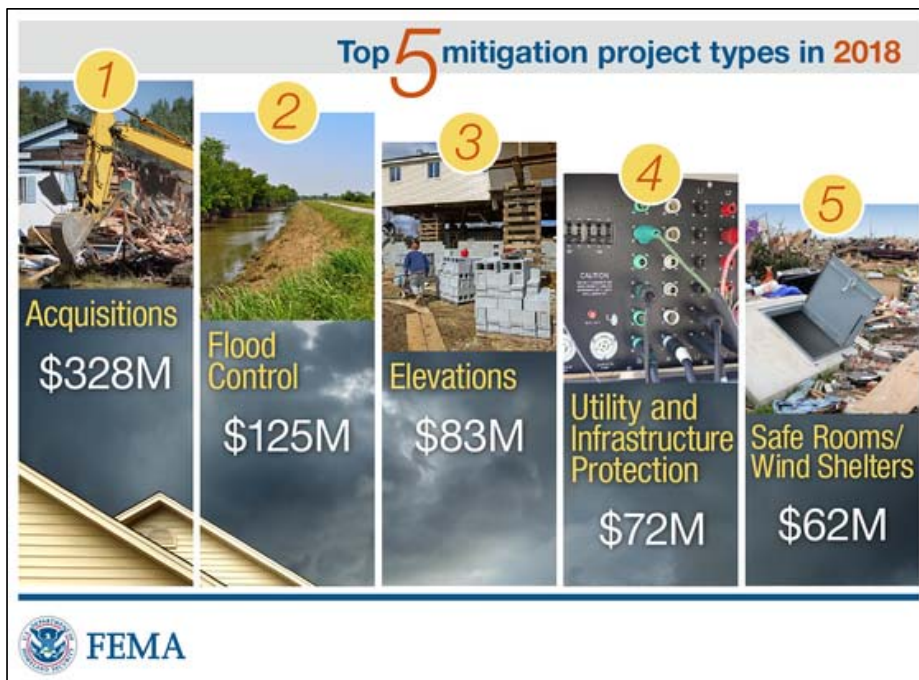
UPDATE ON HAZARD MITIGATION GRANT PROGRAMS

- Communities must have a FEMA-approved Hazard Mitigation Plan in place to receive Federal Grant Funds for Hazard Mitigation Projects
 - HMGP (Hazard Mitigation Grant Program)
 - FMA (Flood Mitigation Assistance)
 - BRIC (Building Resilient Infrastructure and Communities)
- Next opportunity for FMA and BRIC grant applications is Fall 2020
- Connecticut has allocated its HMGP funds from the tornadoes and flood of 2018
- **Presidential Disaster Declaration for COVID-19 (DR-4500) – we expect money will go into HMGP but we don't yet know implications for natural hazard mitigation**
- **Presidential Disaster Declaration for Tropical Storm Isaias is anticipated – this would place funds into HMGP**



HOW CAN A PLAN BE USED?

- Local communities must have a FEMA-approved Hazard Mitigation Plan in place to receive Federal Grants for Hazard Mitigation Projects



Graphics courtesy of FEMA

HOW CAN A PLAN BE USED?

Grants can be used for:

- Building acquisitions or elevations
- Culvert replacements
- Drainage projects
- Bank stabilization
- Landslide stabilization
- Wind retrofits
- Seismic retrofits
- Snow load retrofits
- Standby power supplies for critical facilities

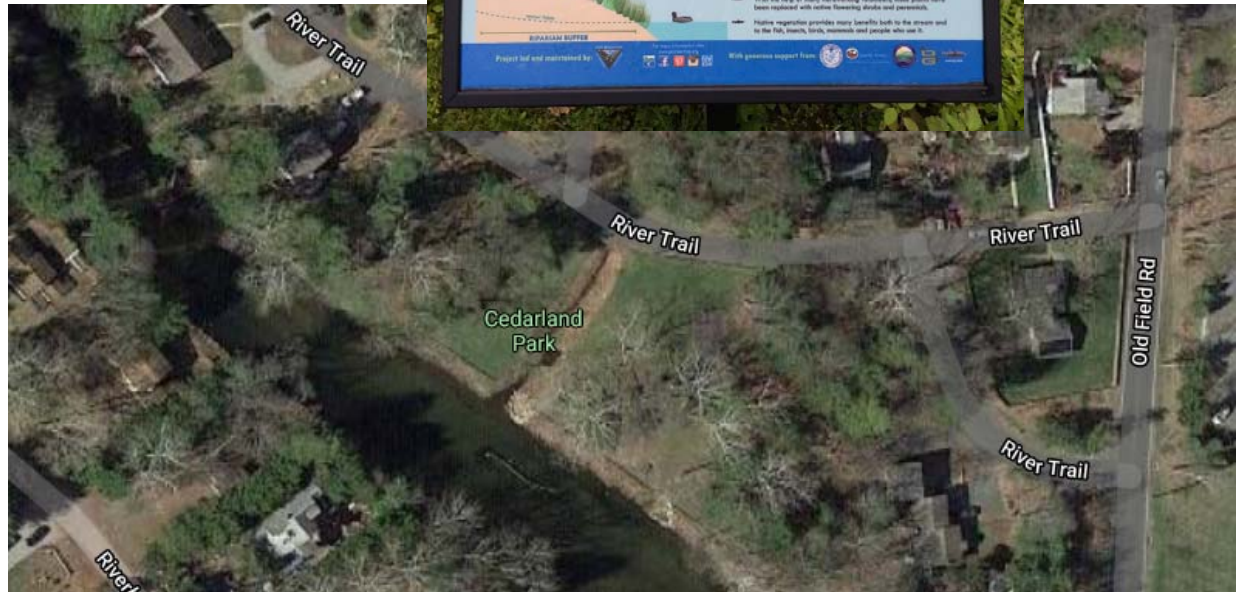


This home in Trumbull was acquired and demolished using a FEMA grant



HOW CAN A PLAN BE USED?

PROPERTY ACQUISITIONS LIKE THOSE IN SOUTHBURY



HOW CAN A PLAN BE USED?

DRAINAGE PROJECT IN BROOKFIELD

- Brookfield
 - Meadowbrook Manor
 - \$1.3 M
 - New system to alleviate drainage and conveyance problems from Lime Kiln Brook. Flooding has led to flooded septic systems, wells, and homes.



HOW CAN A PLAN BE USED?

CULVERT REPLACEMENT FUNDED BY HMGP IN BUCKLAND, MA



Floyd 1999



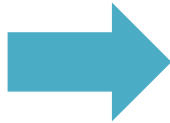
Irene 2011

HOW CAN A PLAN BE USED?

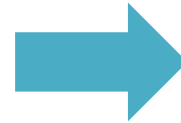
RIVERBANK STABILIZATION FUNDED BY HMGP IN HAWLEY, MA



Irene 8/2011



Post-Irene 9/2011



Construction
August 2017



BRIEF QUESTIONS ABOUT GRANTS?

STATUS OF EXISTING PLANS

Status of Plans in Connecticut

- Most initial plans developed 2005-2011
- Local plans are updated every five years

Status of Former Plans

- The VCOG multi-jurisdiction HMP was approved in February 2012
- The second editions of the Watertown, Woodbury, and Oxford plans were approved in 2014
- The second editions of the remaining former COGCNV plans were approved mainly in late 2014 and 2015
- The former CCRPA multi-jurisdiction HMP (Bristol and Plymouth) was approved in 2016 under contract to CRCOG
- ***All 19 municipalities will now share one multi-jurisdiction plan***

LOCAL PLAN EXPIRATIONS

- Submit plan to FEMA prior to the former CCRPA expirations
- Submit plan to FEMA prior to availability of HMGP funds in 2021

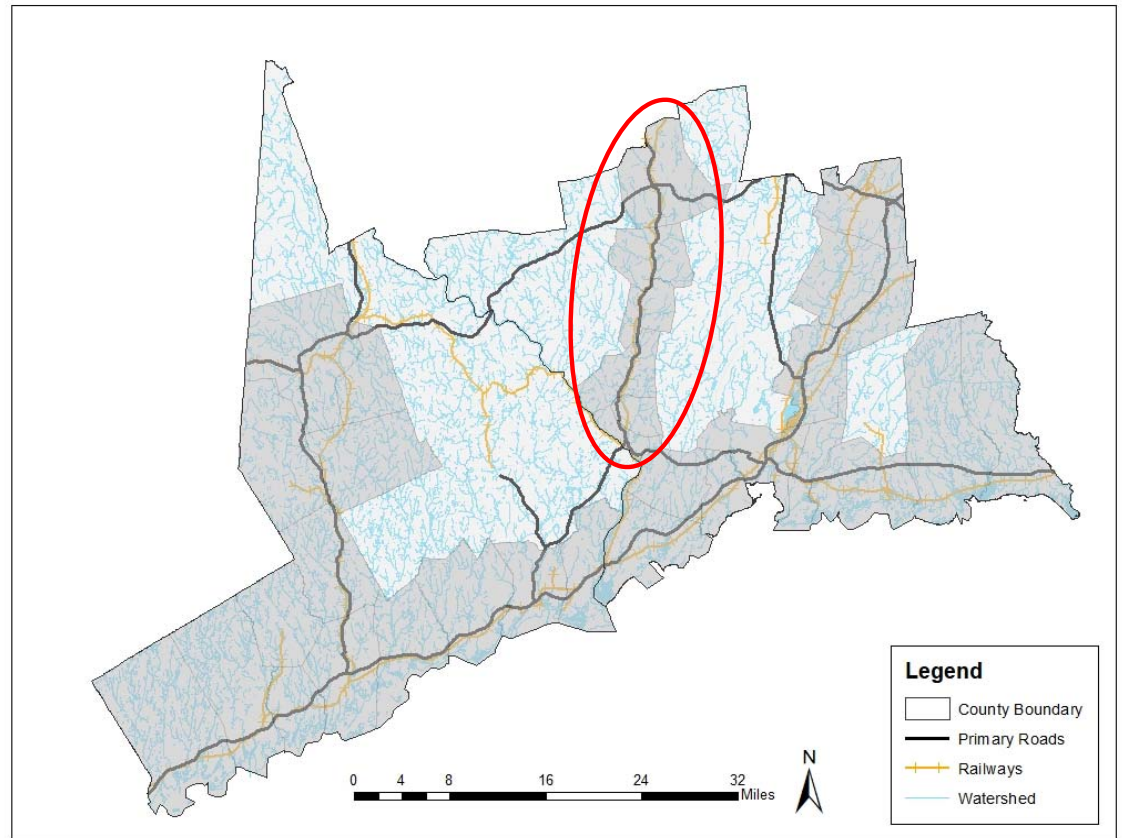
Municipality	Plan Expiration
Ansonia	2/12/2018
Derby	2/12/2018
Shelton	2/12/2018
Seymour	2/12/2018
Watertown	6/1/2019
Woodbury	6/2/2019
Oxford	8/18/2019
Cheshire	12/18/2019
Southbury	12/29/2019
Middlebury	12/29/2019
Thomaston	2/8/2020
Prospect	2/25/2020
Wolcott	2/25/2020
Waterbury	2/26/2020
Naugatuck	2/29/2020
Bethlehem	11/7/2020
Beacon Falls	1/3/2021
Plymouth	9/12/2021
Bristol	9/12/2021

OVERALL SCHEDULE OF THE UPDATE

[illegible]

COORDINATION WITH *RESILIENT CT*

- *Resilient CT* is the planning process administered by the Connecticut Institute for Resilience and Climate Adaptation (CIRCA)
- Focused on New Haven and Fairfield Counties (areas of funding eligibility)
- Goal is to foster resilience, adapted development along major transitways which will allow evacuation from the shoreline and make all communities more resilient



BRIEF QUESTIONS ABOUT SCHEDULE?

PUBLIC ENGAGEMENT APPROACH

Public Meetings

- Up to 19 in-person or web-based for the region, allowing one per town, but we have flexibility to group geographically and “save” meeting time for follow-ups
- Tailored to the phase of State re-opening occurring at the time
- NVCOG and municipalities will post informational notices (not legal notices)
- We will post notices on Patch.com and some social media
- So, how is this going?
 - The assumption of higher attendance because people can “login from anywhere” is not playing out; this is likely “Zoom fatigue”
 - People are using their smartphones and iPads, limiting our reliance on graphics
 - Attendance is lower – not higher – after severe storm events

PUBLIC ENGAGEMENT APPROACH

Public Survey

- A SurveyMonkey survey will be used to gather comments
- Publicized simultaneously with public meetings

Story Map

- ArcGIS based, interactive platform
- Provide landing spot for project related documents, updates, maps, etc.

PUBLIC ENGAGEMENT APPROACH

Story Map for Northwest Hills COG Hazard Mitigation Plan

Northwest Hills COG Hazard Mitigation Plan Update

The Plan | The Planning Process | **Floods** | Hurricanes and Tropical Storms | Summer Storms and Tornadoes | Winter Storms | Earthquakes | Dam Failure


The Northwest Hills Council of Governments has enlisted the help of Milone & MacBroom, Inc. to prepare a multi-jurisdictional Natural Hazard Mitigation Plan for all member towns including:

- Barkhamsted
- Burlington
- Canaan
- Colebrook
- Cornwall
- Goshen
- Hartland
- Harwinton
- Kent
- Litchfield
- Morris
- New Hartford
- Norfolk
- North Canaan
- Roxbury
- Salisbury
- Sharon
- Torrington
- Warren
- Washington
- Winchester

Funding for the update comes from the Federal Emergency Management Agency (FEMA) Pre-Disaster Mitigation grant program.

The plan is developed with the primary goals of:

- Reducing** economic losses, property damage, and loss of life by identifying implementable strategies to mitigate natural hazard impacts.
- Educating** residents and policy makers.
- Connecting** hazard mitigation planning with other municipal planning efforts.



Northwest Hills COG Hazard Mitigation Plan Update

The Plan | The Planning Process | **Floods** | Hurricanes and Tropical Storms | Summer Storms and Tornadoes | Winter Storms | Earthquakes | Dam Failure

Flooding is a common natural hazard throughout Connecticut, and often very costly to residents and municipalities. Floods are typically experienced in early spring because of snowmelt and spring rainfall, or late summer/early autumn as a result of seasonal and tropical storms. However, floods can occur at anytime throughout the year as a result of ice jams, dam failure, summer or winter storms, thunderstorms, or hurricanes.

There are several types of flooding that can occur.

Riverine Flooding: Also known as overbank flooding, occurs when a channel receives more water than normal or becomes blocked by debris (ice or vegetation) and excess water spills out of the channel into the floodplain area.

Flash Flooding: This is when there is a rapid rise of water in a channel in a low-lying area. This type of flooding is usually the result of a large amount of rain or a high velocity of water flow (particularly in hilly areas) within a short amount of time. A flash flood can occur very quickly with limited warning.

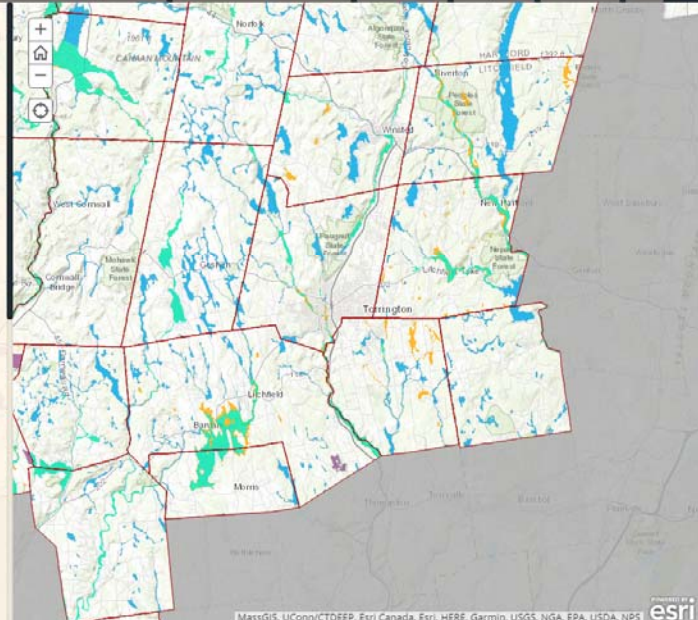
Shallow Flooding: Occurs in flat areas where water is unable to drain because there is no water channel. There are three types of shallow flooding:

- Sheet flow: Water spreads over a large area at a uniform depth.
- Ponding: Runoff collects in low-lying areas or depressions with no drainage ability.
- Urban flooding: Occurs when man-made drainage systems are overloaded by more water than the system can accommodate.

To take a closer look at the flood zones in your town, just click on the on the name below.

[Barkhamsted](#)

[Burlington](#)



BRIEF QUESTIONS ABOUT PUBLIC ENGAGEMENT?

SCHEDULING OF LOCAL MEETINGS

- MMI will coordinate with a “local coordinator”
- Meetings will be in-person or web-based
- To review:
 - Vulnerable and at-risk areas
 - Critical facilities
 - Impacts of events that occurred after your last plan, including:
 - *Tornadoes of May 2018 (disaster declared in SW CT)*
 - *Flood of September 2018 (disaster declared in SE CT, but damage spanned state)*
 - *Tropical Storms Isaias of August 2020*
- Noah Slovin and Victoria Brudz will likely be the MMI person who meets with you

All meetings should be complete by October