



RiverCOG Natural Hazards Mitigation Plan 2025-2026 Update Kickoff

May 28, 2025

Via Zoom

RESILIENT
Land & Water



Lower Connecticut River Valley Council of Governments

145 Dennison Road Essex, CT 06426 | +1 860 581 8554 | www.rivercog.org

RiverCOG

Chester | Clinton | Cromwell | Deep River | Durham | East Haddam | East Hampton | Essex | Haddam | Killingworth | Lyme | Middlefield | Middletown | Old Lyme | Old Saybrook | Portland | Westbrook

Agenda



Welcome and Introductions



NHMP Overview and Update Process

Discussion of existing plan



Updating the Hazard ID and Risk Assessment

Hazard Selection and Ranking



Discussion of Current Plan Status and Changes

Capabilities Assessment Update
Mitigation Strategy Update



Next Steps

Schedule



Questions & Wrap-up

Introductions



Name



Department/Role



What is your goal for this project?



What issues are you concerned about?



What information / expertise can you contribute?



Introductions

The Decision Makers

- Hazard Mitigation Planning Committee (HMPC)
- Local Planning Teams (LPTs)
- CT Division of Emergency Management and Homeland Security (DEMHS)
- FEMA Region I

Dewberry Team

- Scott Choquette, Project Manager
- David Murphy, Deputy Project Manager (RLW)
- Julia Bontempo, Sr. Planner
- Jesse Nelson, GIS and Risk Assessment
- Victoria Vetre, Sr. Planner (RLW)
- Scott Bighinatti, Sr. Environmental Scientist (RLW)



It's Your Plan!

We are here to:

- Facilitate the process
- Lend technical expertise & consultation
- Do the heavy lifting

You are here to:


- Participate and contribute hazard information
- Make the final decisions
- Help ensure that we collectively create a plan that the COG and all participating jurisdictions can and will use to reduce future losses



Participating Jurisdictions:



Chester
Clinton
Cromwell
Deep River
Durham
East Haddam
East Hampton
Essex
Haddam
Killingworth
Lyme
Middlefield
Middletown
Old Lyme
Portland

2021 Lower Connecticut River Valley Hazard Mitigation Plan Update
Volume 1: Planning-Area-Wide Elements

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May 2021

With Contracted Support From:

 **Dewberry**  **MILONE & MACBROOM**



Plan Overview and Update Process

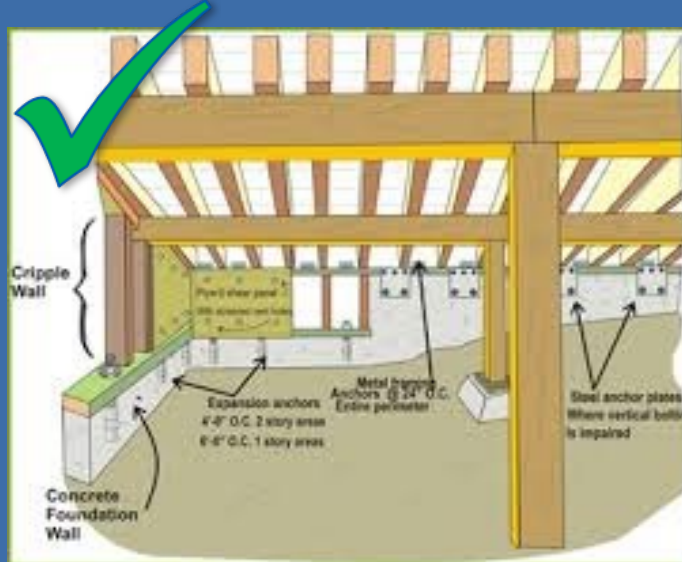
Overview

What is **hazard mitigation**?

Any sustainable action that will **reduce or eliminate injury** to citizens, damages to structures and allow continuity of critical society functions



Mitigation
Defensible Space for
Wildfire Mitigation



Mitigation
Earthquake Retrofit



Preparedness & Response
purchase of a police
command vehicle

Why have a hazard mitigation plan?



- Reduces or eliminates the need to respond (Lessens resource burden)
- Creates resiliency and sustainability
- Promotes Data sharing between different levels of government and academia
- Supports decision-making
- Disaster Mitigation Act of 2000
 - Certain FEMA Public Assistance (State Plans)
 - FEMA's Hazard Mitigation Assistance Programs

Hazard Mitigation Grants

- Local 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)
 - **HMGP Post Fire**
 - **FMA** (Flood Mitigation Assistance)
- Other (non-FEMA) funding sources



Plan Update Requirements

- Comprehensive **planning process** / foster relationships
 - Description of who is involved and how the plan is prepared
 - Established method for monitoring, maintaining and updating the plan
- **Hazard Identification and Risk Assessment** update
 - Hazard profiles, vulnerabilities, potential losses, development trends
- Focus on **mitigation strategy and actions**
 - Goals, progress, evaluation of actions, implementation plan
- Improve **mitigation capabilities**
 - Discussion of current policies, programs, and capabilities to support LHMPs and reduce risk statewide
- **Approval by DEMHS & FEMA** and **adoption every 5 Years**

What has changed since 2021?

- May 2023 Local Hazard Mitigation Planning Guidance
 - Includes enhanced consideration of climate change and adaptation
 - Requires inclusion of community lifelines
 - Increased emphasis on future development
 - Increased emphasis on High Hazard Potential Dams
 - Increased emphasis on social vulnerability
- From NHMP to Hazard Mitigation and Climate Adaptation Plan (HMCAP)
- Current Status of 2023 Guidance Changes

Continuous Improvement

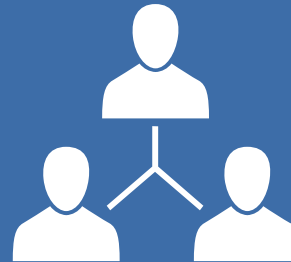
- **Climate change analysis** in relevant hazard sections
- Address **high-hazard potential dams** in the HIRA and Goals, Objectives, and Strategies sections
- Connecting to **public health emergencies** (e.g., COVID-19) and infrastructure mitigation planning
- Incorporating **DEMHS and FEMA Region I review comment** and all updates since the last plan



Are there other concerns?

Public Outreach

- Part of the planning process requirements
- Includes **the public**
 - Residents
 - Business owners
- Includes **stakeholders**
 - Neighboring communities
 - Chambers, neighborhood associations
 - Large employers
 - Federal, state and NGO partners



***We want to
know what
your priorities
are!***



**Are there other
stakeholders?**

Public Outreach Strategy

Public Input



Stakeholder &
Community
Champion
Engagement



Project Website /
Webpage



Online Survey



Virtual Workshops
/ Public Meetings



Neighboring
Jurisdictions
Engagement



Videos



Story Map

Hazard Mitigation Plan

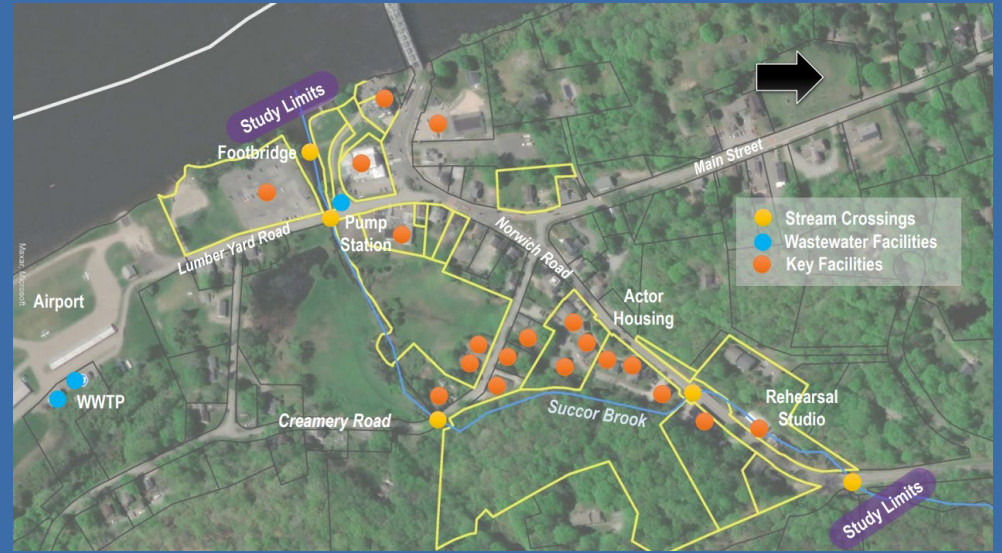


- Expand reach
- Secure buy-in

- Community-based
- Social media

Increase Consistency with Plans and Programs

- Incorporating projects like Resilient East Haddam and Resilient Portland
- Draw from Regional Plan of Conservation and Development
- Sea Grant Resilience Planning
- Regional Climate Action Plan



Are there other efforts we should incorporate?

**The Hazard Mitigation Plan
can help inform, and
include the results of,
other planning efforts**



Are there other efforts we should incorporate?

Other Update Items

- **Address FEMA Local Plan Requirements**
 - Fully integrate NFIP program and FMA Requirements
 - Repetitive and Severe Repetitive Loss properties
 - Describe current status of projects
 - Address changes to critical facilities
 - Address changes to capacity and capabilities

Discussion: Existing Plan

- What do you like about current plan?
- Have the necessary people/departments been asked to participate?
- Are there any specific layout requests / adjustments that would improve usability?
- What would you like changed in the revision?
- Emphasis on Project Development deemphasizing updating lesser hazards in great detail



Current Plan Discussion



Hazard ID & Risk Assessment

Update

Selecting Hazards to Address

- Do the current hazards still make sense?
- Have there been any changes in priorities?
- Rearrange following a climate aligned taxonomy: Atmospheric Hazards, Hydrological Hazards, Wildfire Hazards, Geologic Hazards, etc.

☒ Coastal Storms

☒ Drought

☒ Dam/Levee breaks

☒ Earthquake

☒ Fire



☒ Flood

☒ Hurricane

☒ Severe Ice Storms

☒ Severe Snow Storms

☒ Tornados

☒ Tropical Cyclones

☒ Tsunamis

☒ Windstorms

☒ Invasive Species

Ranking of Hazards

TABLE 4: SAMPLE HAZARD RANKING PARAMETERS				
PRI CATEGORY	DEGREE OF RISK			ASSIGNED WEIGHTING FACTOR
	LEVEL	CRITERIA	INDEX VALUE	
Probability	Unlikely	Less than 1% annual probability	1	25%
	Possible	Between 1 and 10% annual probability	2	
	Likely	Between 10 and 100% annual probability	3	
	Highly Likely	100% annual probability	4	
Impact	Minor	Very few injuries, if any. Only minor property damage and minimal disruption on quality of life. Temporary shutdown of critical facilities.	1	25%
	Limited	Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one day.	2	
	Critical	Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one week.	3	
	Catastrophic	High number of deaths/injuries possible. More than 50% of property in affected are damaged or destroyed. Complete shutdown of critical facilities for 30 days or more.	4	
Spatial Extent	Negligible	Less than 1% of area affected	1	20%
	Small	Between 1 and 10% of area affected	2	
	Moderate	Between 10 and 50% of area affected	3	
	Large	Between 50 and 100% of area affected	4	
Warning Time	> 24 hours	Self-explanatory	1	10%
	12 to 24 hours	Self-explanatory	2	
	6 to 12 hours	Self-explanatory	3	
	< 6 hours	Self-explanatory	4	
Public Sentiment	Not Concerned	Based on Public Survey Results	1	10%
	Somewhat Concerned	Based on Public Survey Results	2	
	Moderately Concerned	Based on Public Survey Results	3	
	Very Concerned	Based on Public Survey Results	4	
Duration	< 6 hours	Self-explanatory	1	10%
	< 24 hours	Self-explanatory	2	
	< 1 week	Self-explanatory	3	
	> 1 week	Self-explanatory	4	

		Hazard Type	2021 Ranking	2026 Consideration Level	Notes
Atmospheric		Extreme Heat	Medium	Medium	
		Thunderstorm	Medium	Medium	
		Extreme Wind	Medium-High	Medium-High	
		Hailstorm	Medium-Low	Medium-Low	
		Lightning	Medium	Medium	
		Severe Winter Weather	High	High	
		Tornado	Medium	Medium	
Hydrological		Tropical Storm / Hurricane	Medium	Medium	
		Drought	Medium	Medium	
		Flash Flood / Flooding	High	High	
		Dam and Levee Failure	Low	Low	
		Wildfire / WUI	Medium	Medium	
Geological		Earthquake	Medium-Low	Medium-Low	
		Landslide	Medium-Low	Medium-Low	



2021 Consideration Level Discussion

Changes in Ranking (sample)

HIRA Update – Data Call

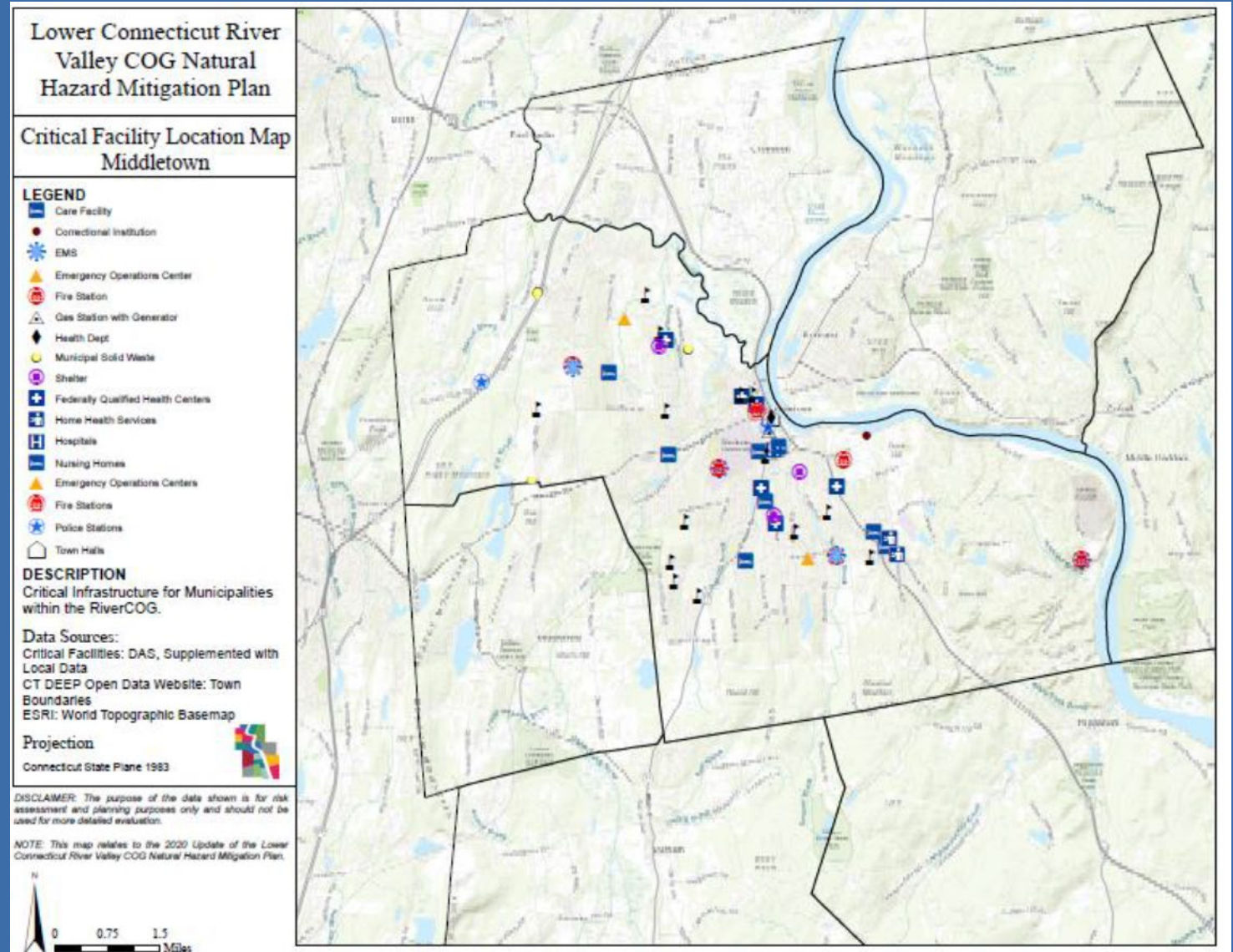
- What **natural hazard events** have occurred since 2021?
- What **specific vulnerabilities** exist in the planning area that may not have been captured in the previous plan?
- Please provide any **updates to areas of concern** noted in HIRA narrative.



HIRA Update Discussion

Critical Facilities

- Existing list from 2021 will be distributed ahead of local meetings
- Deadline will be provided with distribution or at LPT meetings



Loss Estimation Approaches

Hazus Analysis



Flood, Hurricane Wind, and
Earthquakes

(Improved methodology in most recent version)

Non-Hazus Analysis



All Other Hazards

- NCEI, NFIP losses, and Public Assistance reimbursements
- Downscale loss estimates from CT HMP
- Typical losses for the most challenging hazards (i.e., wildfire losses)

Augmented with Exposure Analysis as Needed

National Risk Index

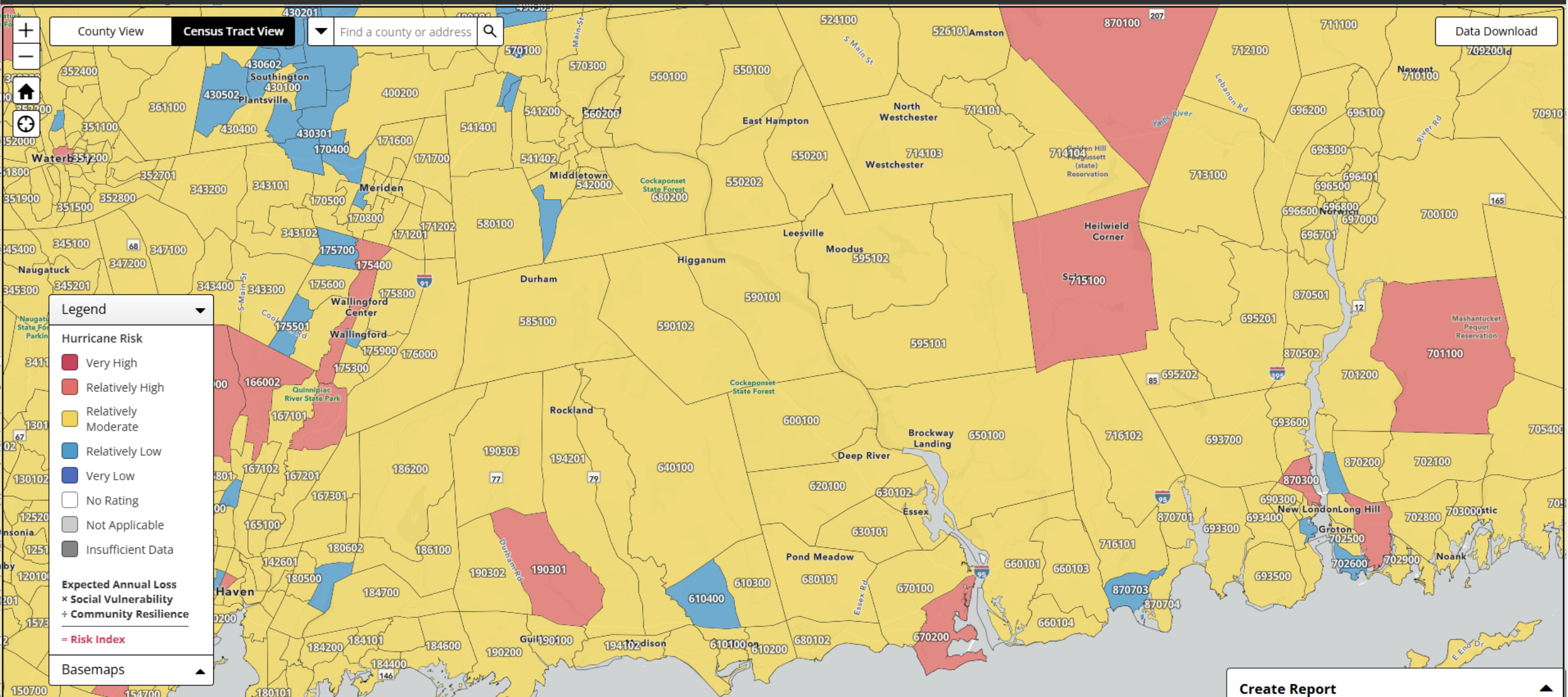
Hurricane (RI)

Coastal Flooding (EAL)

Social Vulnerability

Community Resilience

Help



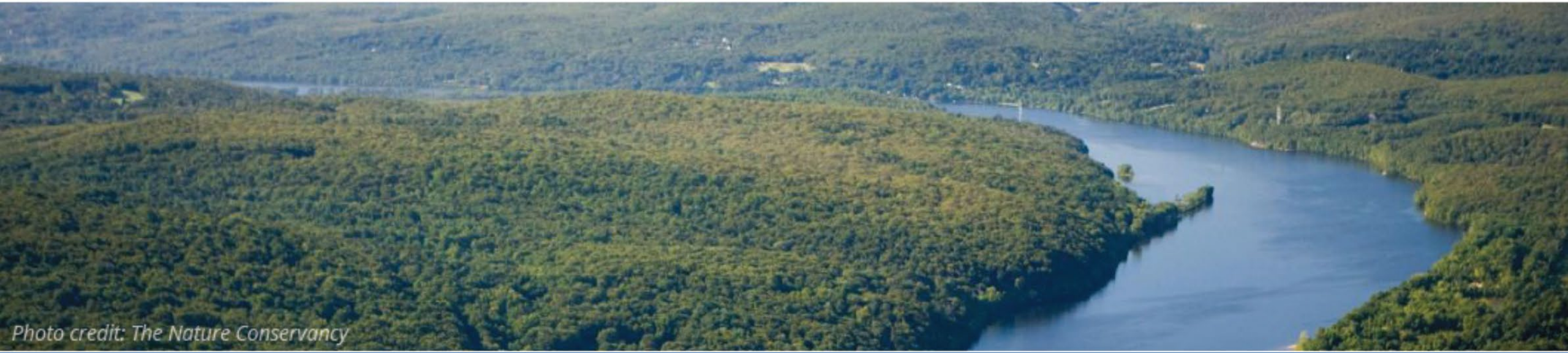


Photo credit: The Nature Conservancy

Capability Assessment & Mitigation Strategy Update

Capability Assessment

- **Update:**
 - Municipal Mitigation Capability and Capacity Analysis
 - Regional Mitigation Capability and Capacity Analysis
 - Federal, State and Other Programs and Resources



Template will be provided



Deadline will be provided
with distribution and
discussed at LPT meetings

Regional Goals and Objectives

Goal 1: Promote implementation of sound flood management and other natural hazard mitigation principals on a regional and local level.

Note: Covers future development through policy, planning, regulation, emergency services, and environmental strategies

Objective for Goal 1: To promote the development, improvement and implementation of programs, policies, regulations and emergency services that result in the reduction of long-term risks to life and property.

Goal 2: Implementation of effective natural hazard mitigation projects at the regional and local level.

Note: Covers infrastructure and building related projects – the existing built environment.

Objective for Goal 2: To enhance the ability of RiverCOG, other regional entities, and local communities to reduce or eliminate risks to life and property from natural hazards through cost- effective hazard mitigation projects, including avoidance.

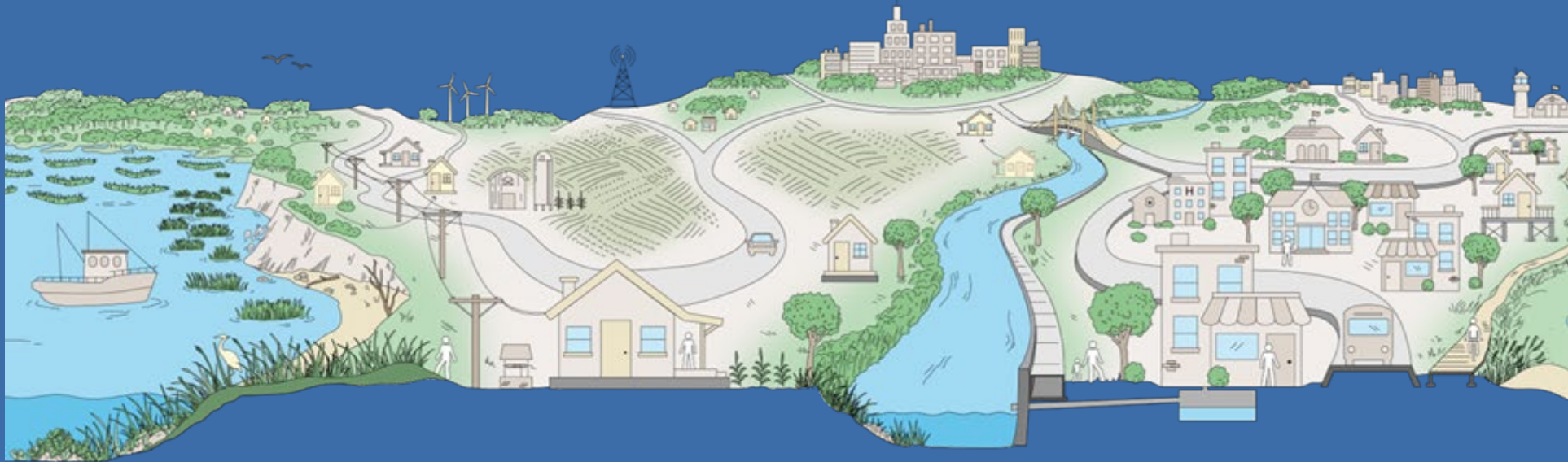
Goal 3: Increase research, planning and outreach activities for the mitigation of natural hazards on a regional and local level.

Note: Covers the people component of mitigation via outreach and education, and integration with other planning and continuous improvement through increased research.

Objective for Goal 3: To increase general awareness of the region's natural hazards and encourage State agencies, local communities, and the public to be proactive in taking actions to reduce long-term risk to life and property.

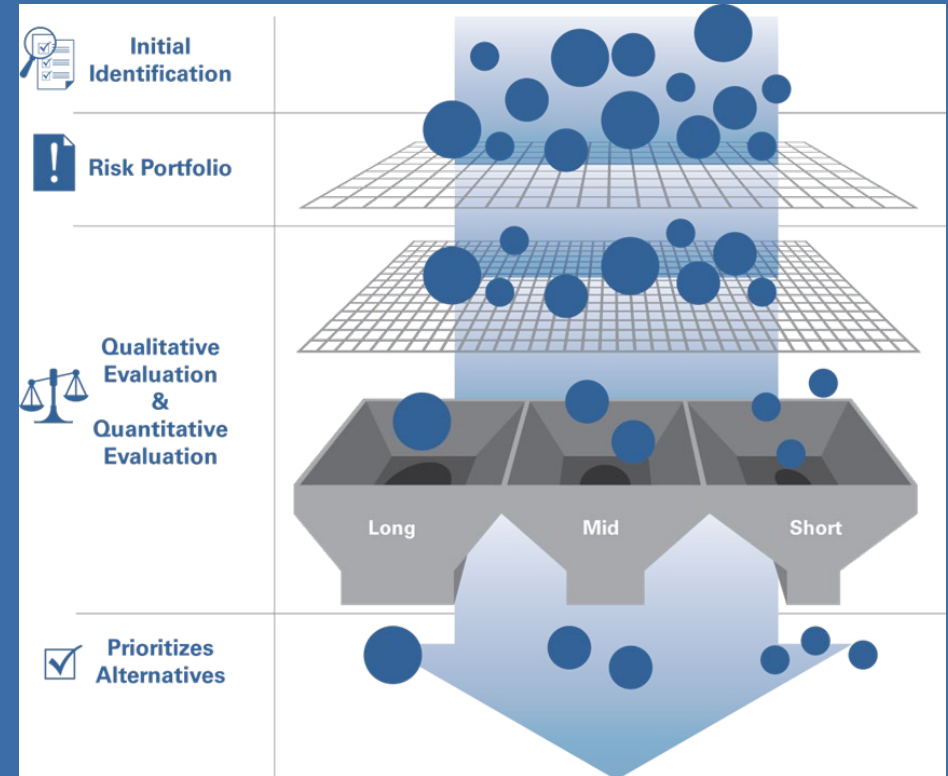
Mitigation Actions from 2021

- Based on Risks and Vulnerabilities Assessment and Identified Gaps in Capabilities or Capacity
- Must identify the **completed, deleted, or deferred actions or activities** from the previously approved plan as a benchmark for progress
- Existing list will be distributed and completed at local meetings



Approach for Mitigation Actions

- Retire “ongoing” and “continuous” actions
- Shift from preparedness to true mitigation
- Break individual projects into pieces such that a reasonable phase is identified for the five-year planning horizon
- Avoid “consider”
 - Bad: “Consider enrolling in the CRS Program”
 - Good: “Quantify the costs and benefits of enrolling in the CRS”
- More focus on project development and implementation
- Informed by risk assessment
- Must address integration with other plans and operations





Next Steps

Project Milestones

We are here



Schedule

		Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-25	May-25	Jun-25	Jul-25
1. Pre-Planning, Data Collection, Planning Process																		
1.1	Internal Kick-Off Meeting																	
1.2	Planning Team Workshop 1 /Public Meeting																	
1.3	<i>Data Collection and Municipal Meetings</i>																	
1.4	<i>Stakeholder and Public Participation</i>					survey	survey	survey										
1.5	<i>Record Keeping and Reporting</i>																	
2. Capability Assessment																		
2a	Complete Data Collection																	
2b	Update Capability Assessment																	
3. Update Risk Assessments																		
3.1	Hazard ID and Prioritization																	
3.2	Hazard Profiles																	
3.3	Critical Facilities and Asset Inventory																	
3.4	Vulnerability Assessment and Loss Est.																	
3.5	Planning Team Workshop 2 /Public Meeting																	
4. Mitigation Goals and Strategies																		
4.1	Update 2021 Actions																	
4.2	Jurisdiction Goals, Strategies, and Projects																	
4.3	Plan Implementation Strategy Refinement																	
4.4	Planning Team Workshop 3 / Public Meet																	
5. Final HMP Submission and Review																		
5.1	Final Plan Adoption and Approval Proc.																	
	DESPP/DEMHS Submittal*													Submit				
5.2	FEMA Final Plan Approval/Adoption*																	
	Final Deliverables																	

Next Steps

- Formalize MAC and LPTs
- Complete LPT in-person meetings
- Prepare, distribute and complete:
 - Capabilities questionnaire
 - Final draft goals and objectives
 - 2016 Mitigation actions disposition
 - Final hazard ranking review
 - HIRA / GIS data questionnaire
 - Updates to critical facilities list
- Create the HMP website, then develop and distribute public outreach materials:
 - Story Map
 - Online Survey

Data Call

1. A list of hazard events that have affected your jurisdiction since the last plan update.
2. Disaster damages from the hazard events described above.
3. State/Federal disaster funding received (e.g., PA payments, grants for projects) since the last plan update.
4. New jurisdictional plans, policies, and regulations since the last plan update (feel free to provide a link if this is available online).

Please email to Julia Bontempo (jbontempo@dewberry.com)

Questions?



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