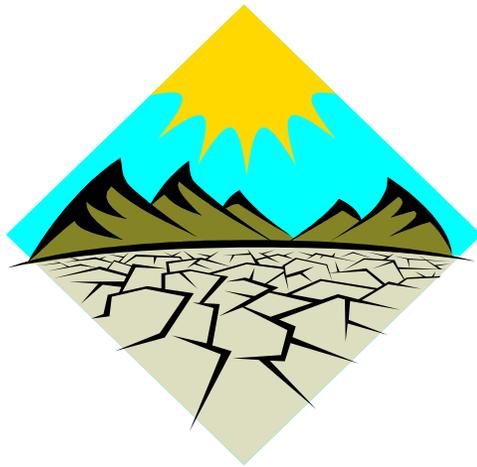


Appendix A: Local Meeting Materials

HAZARD MITIGATION PLAN UPDATE AND “RESILIENT CONNECTICUT 2.0”

Shaping a New Hazard Mitigation and Climate Adaptation Plan (HMCAP) for the Capitol Region



Local Planning Meeting for
Town of Andover
June 22nd, 2023

MEET YOUR PLANNING TEAM



Mary Buchanan, PhD



Nicole Govert, MS



David Murphy, PE, CFM

AGENDA

- Purpose and Need for Hazard Mitigation Plan
- What is a Climate Adaptation Plan and Where Does Resilience Fit?
- Why Expand the Hazard Mitigation Plan?
- *Resilient Connecticut*
- How Does This Affect Hazard Profiles?
- Hazard Mitigation Strategies and Actions
- Review Hazard Mitigation Successes
- Review Hazard Mitigation Actions
- Important Updates from You
- Open Discussion
- Approach for Public Engagement
- Next Steps



Summer 2021 Damage; Photo Courtesy of Town of Manchester

PURPOSE AND NEED FOR HAZARD MITIGATION PLAN

Authority

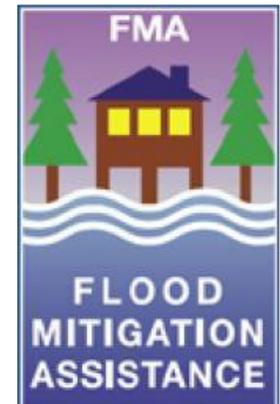
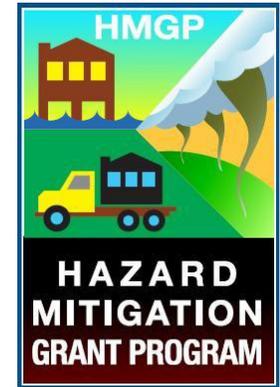
- Disaster Mitigation Act of 2000

Goal of Disaster Mitigation Act

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

Eligibility for Three Primary Hazard Mitigation Assistance (HMA) Grant Programs

- Building Resilient Infrastructure and Communities (BRIC)
- Flood Mitigation Assistance (FMA)
- Hazard Mitigation Grant Program (HMGP)
- Next opportunity for BRIC and FMA grant applications will be fall 2023
- The new DEEP Climate Resilience Fund (DCRF) asks if the application is related to actions in the Hazard Mitigation Plan, demonstrating expanded uses for these plans



This is the Region's 4th Plan

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.



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.



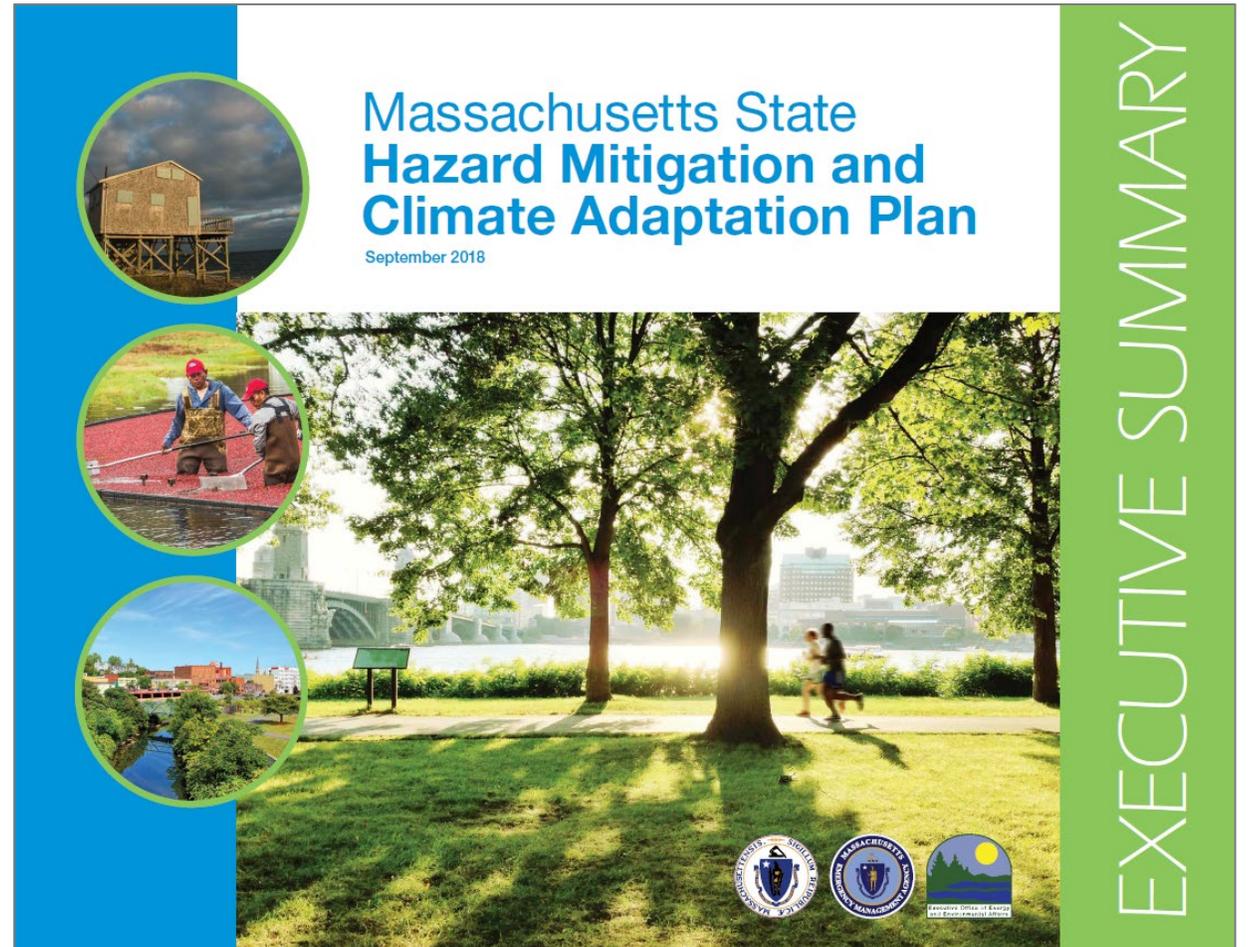
WHAT IS A CLIMATE ADAPTATION PLAN?

Climate Adaptation

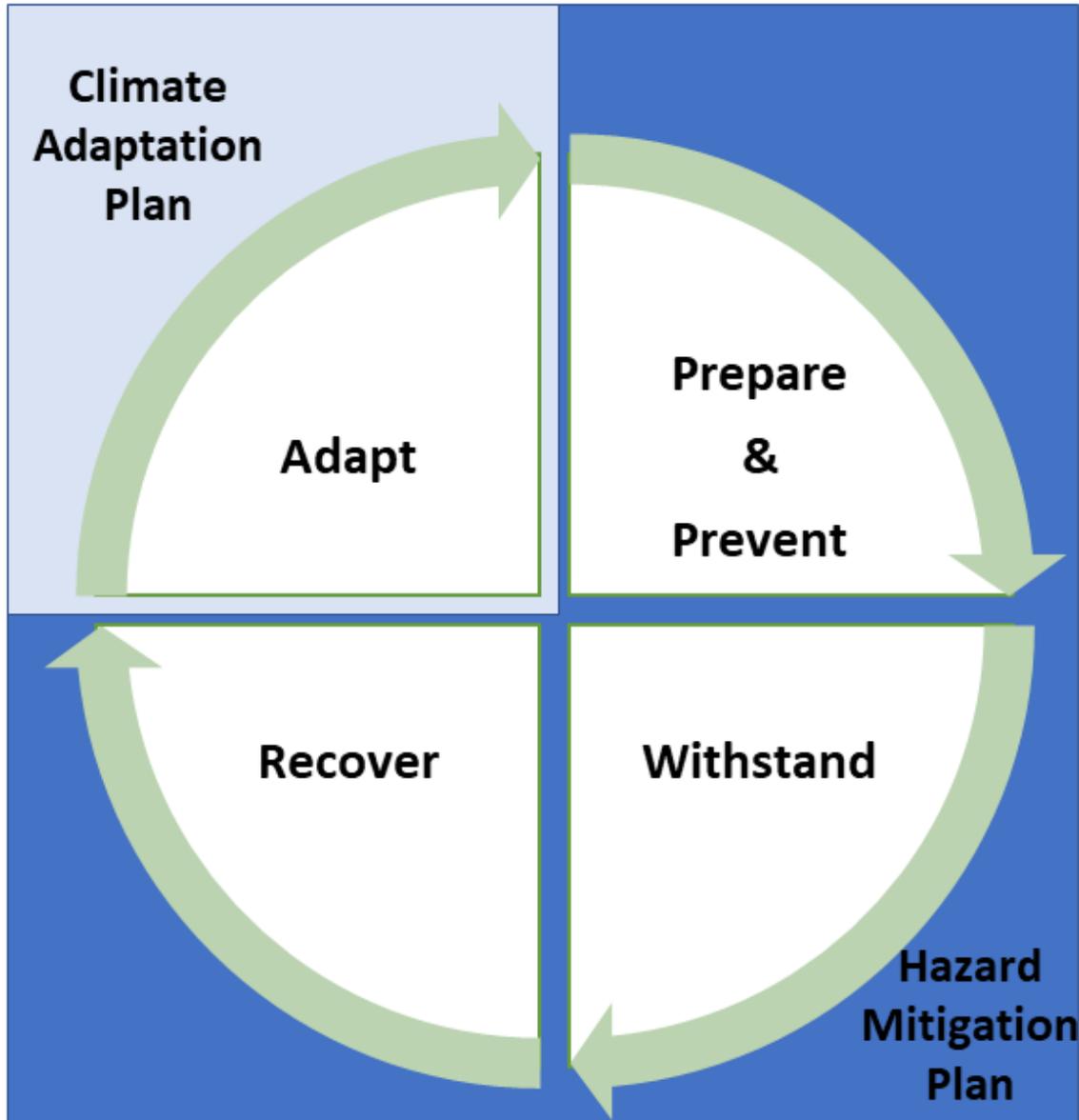
- Adjusting social, ecological, infrastructural, or economic systems to respond to, and manage, risks from climate change

Climate Adaptation Plan (CAP)

- A plan that sets policy and actions for adapting to the effects of climate change
- Not the same as a “climate action plan,” which describes reducing carbon emissions

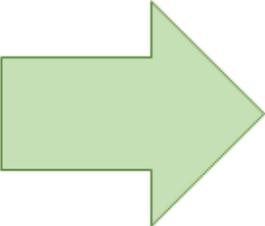


WHERE DOES RESILIENCE FIT INTO THIS?



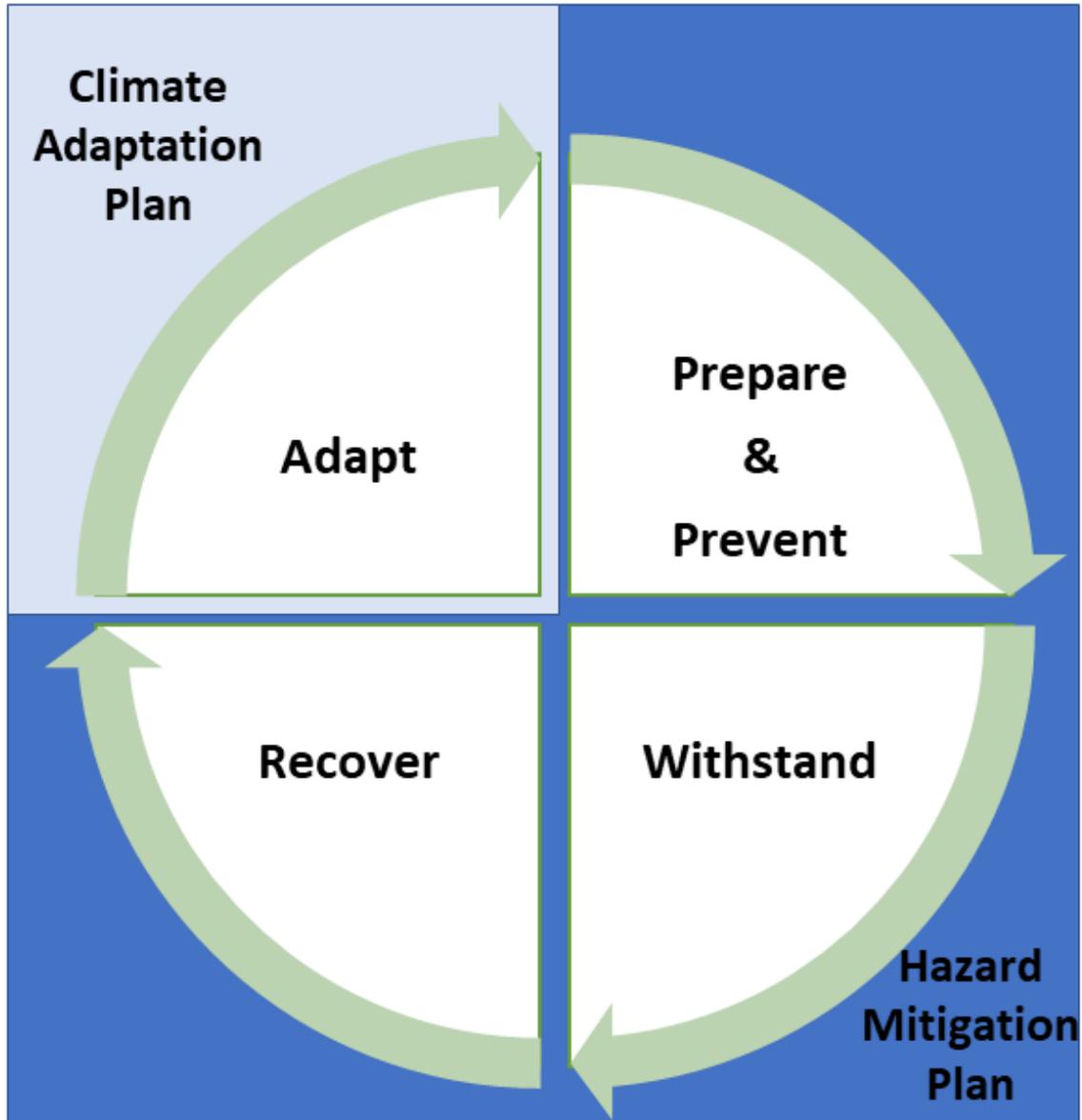
The resilience cycle has four parts

- Prepare to prevent losses
- **Withstand** event
- **Recover** from event
- **Adapt** to ensure that future events are less disruptive

 **HMCAP**

- Three parts are in Hazard Mitigation Plans
- The fourth part is found in adaptation plans
- **Your last Hazard Mitigation Plan included elements of adaptation and therefore, elements of resilience**

WHY EXPAND THE HAZARD MITIGATION PLAN?



1. This is your 4th Hazard Mitigation Plan and it's time for a refresh
2. This will be the second HMCAP in the State, and will align with the goals of the Governor's Office for Climate Change
3. The HMCAP will more ideally position you for new funding sources like BRIC and the DEEP Climate Resilience Fund
4. The HMCAP will more effectively incorporate CIRCA's *Resilient Connecticut* program

Let's talk about that...

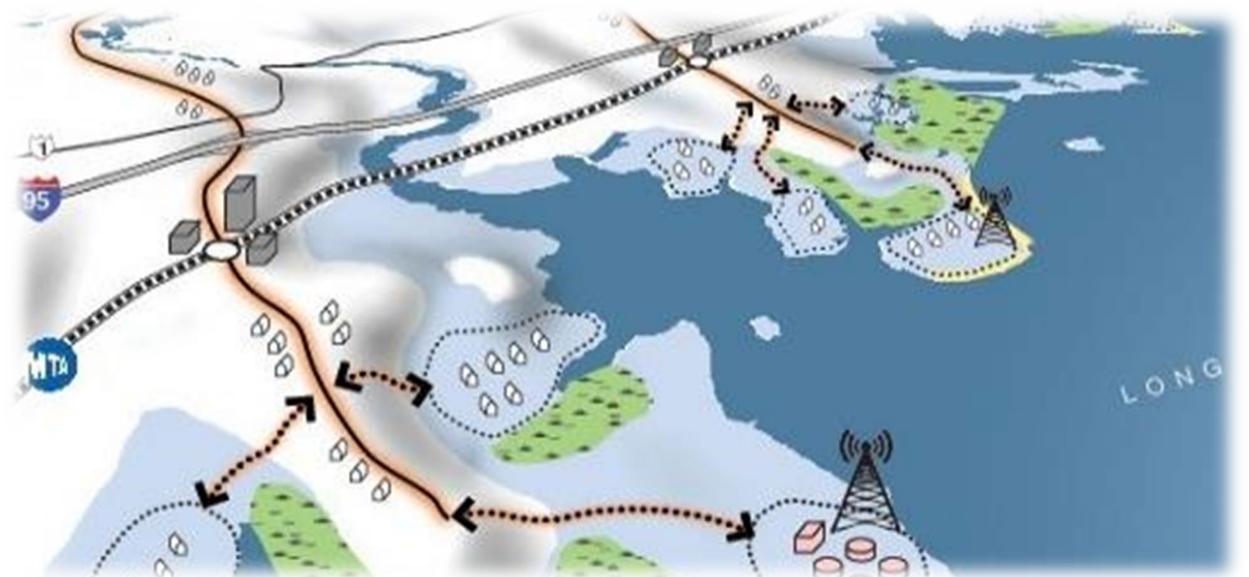
WHAT IS *RESILIENT CONNECTICUT*?

Resilient Connecticut 1.0 was funded by the National Disaster Resilience Competition and focused on regional resilience and adaptation planning for flooding and extreme heat in Fairfield and New Haven Counties.

- Emphasized transit-oriented development, affordable housing, critical infrastructure, and regional assets.
- Developed Social Vulnerability Index (SVI), Climate Change Vulnerability Index (CCVI), Zones of Shared Risks (ZSR), and Resilience Opportunity Areas (ROARs)

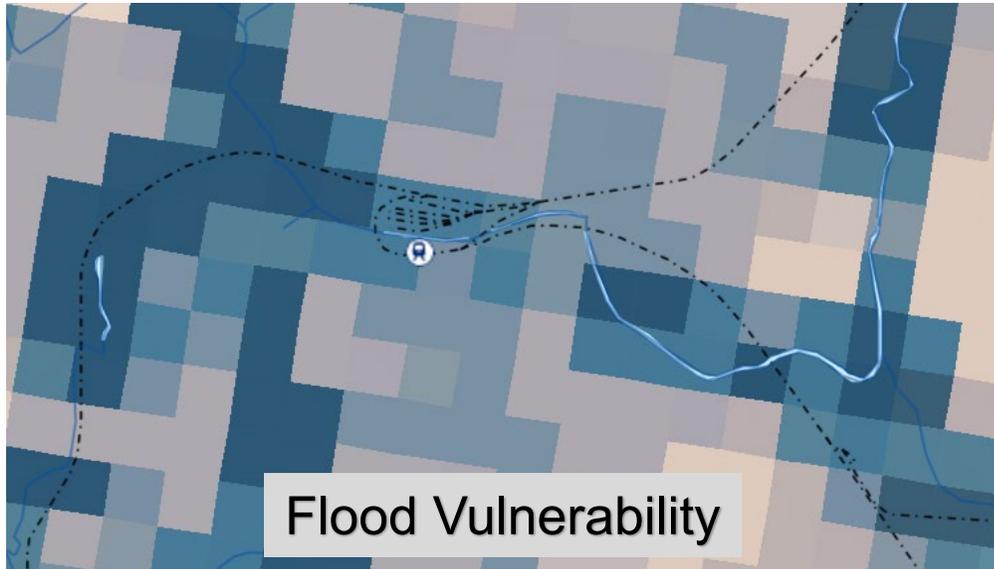
Resilient Connecticut 2.0 extends this effort using State funds.

- Increases flexibility to address the climate concerns unique to other regions.
- CRCOG is a partner in the deployment of the program in north-central Connecticut

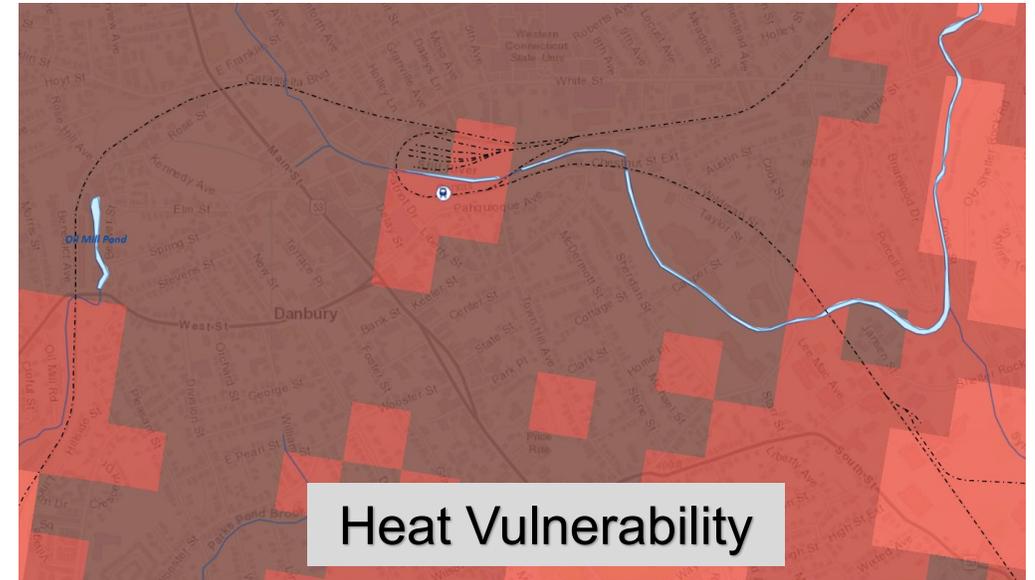


RESILIENT CONNECTICUT 1.0

- A Climate Change Vulnerability Index (CCVI) was developed in the pilot area



Flooding can be coastal, riverine, or pluvial (heavy rain)



Considers where extreme heat is more likely as well as inability to seek respite

$$\text{Vulnerability} = \frac{\text{Sensitivity X Exposure}}{\text{Adaptive Capacity}}$$

RESILIENT CONNECTICUT 1.0

- Climate Challenges were Recognized as Opportunities to Address Unmet Needs

Resilient Connecticut Phase II

Regional Adaptation/Resilience Opportunity Areas

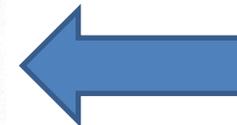
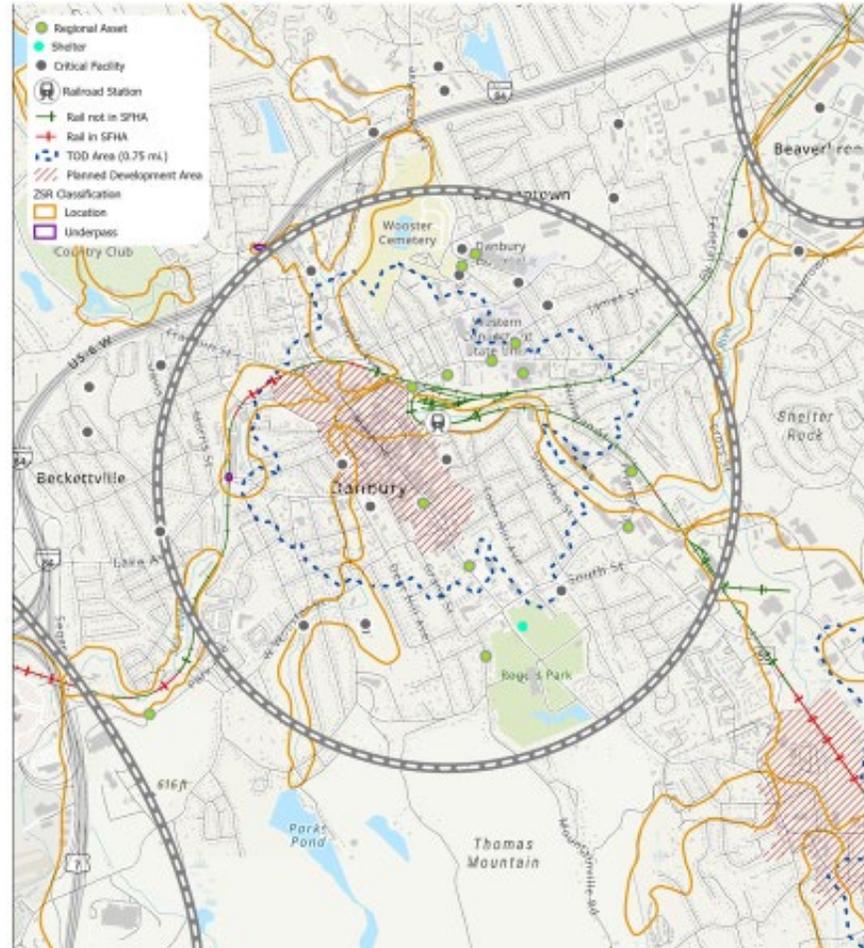
Name: Downtown Danbury

Location: Danbury

Considerations	Characteristics of Area
Flood Vulnerability	●●●●●●●●
Heat Vulnerability	●●●●●●●○
Social Vulnerability	●●●●●●●●

The center of Danbury is characterized by zones of shared risk associated with the confluence of Padanarum Brook, Kohanza Brook, and the Still River. Despite many flood risk reduction projects undertaken over decades, TOD and planned development areas are located in close proximity to – or within – these zones of shared risk. Numerous critical facilities, historic resources, and the terminus of the MetroNorth Danbury line are also located in the area. Downtown Danbury is a regional center for northern WestCOG. Almost all of the downtown area is moderately vulnerable to heat, with the highest vulnerable area concentrate along route 53 commercial properties. Presenting few opportunities for shade or street trees, the area has high heat emittance. In addition, there is high social sensitivity throughout the area.

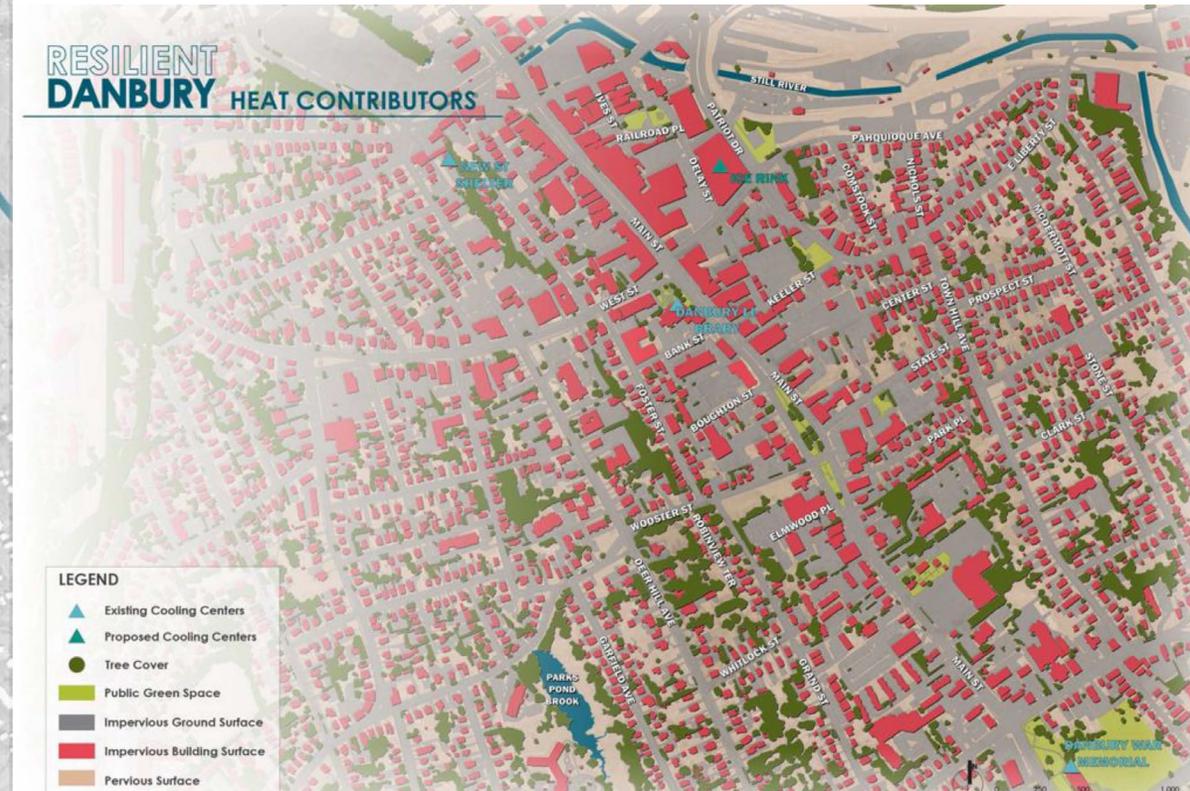
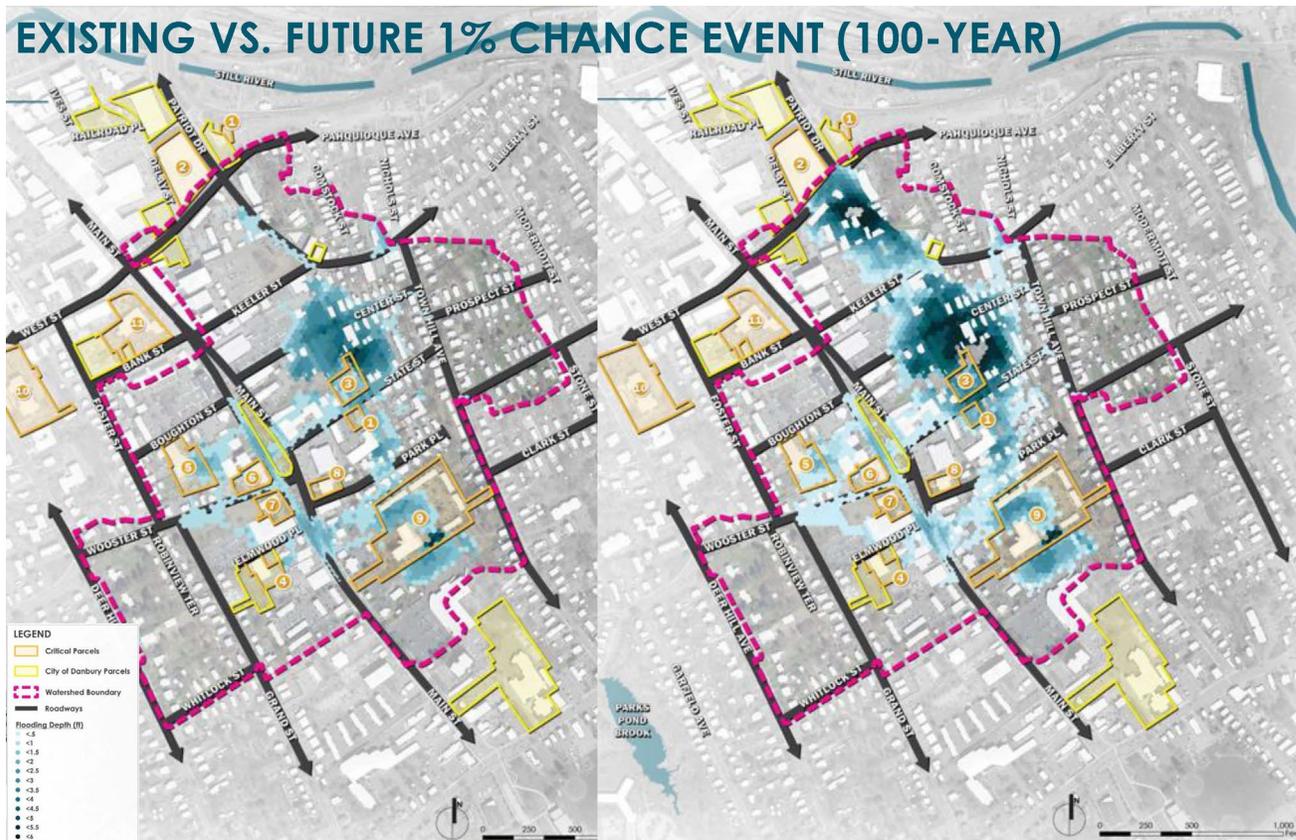
City Hall	Assisted living facilities
Fire headquarters	War Memorial
Hose Co. 5, 6, 7, and 9	Substation
Danbury Hospital	Power plant
Danbury Health and Housing Dept.	Museums
Western CT State College Police	



- Overlapping
 - Social vulnerability
 - Flood vulnerability
 - Heat vulnerability
 - Regional assets
 - Infrastructure
 - Critical facilities
 - Historic resources
 - TOD potential

RESILIENT CONNECTICUT 1.0

- Some of These Opportunity Areas are Proceeding to Studies and Concept Designs



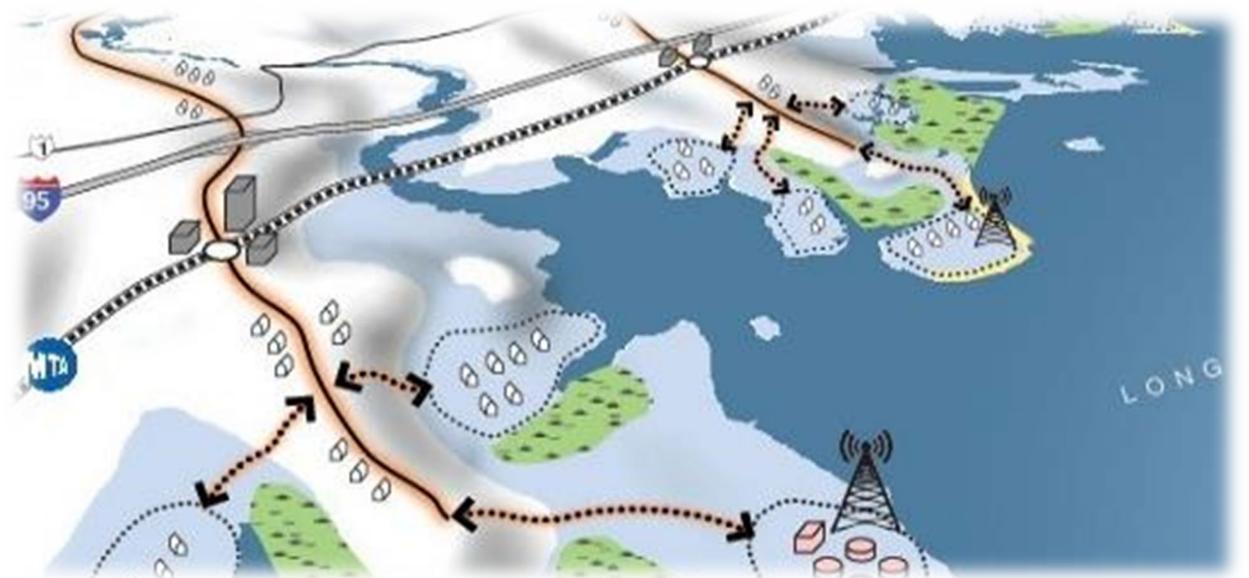
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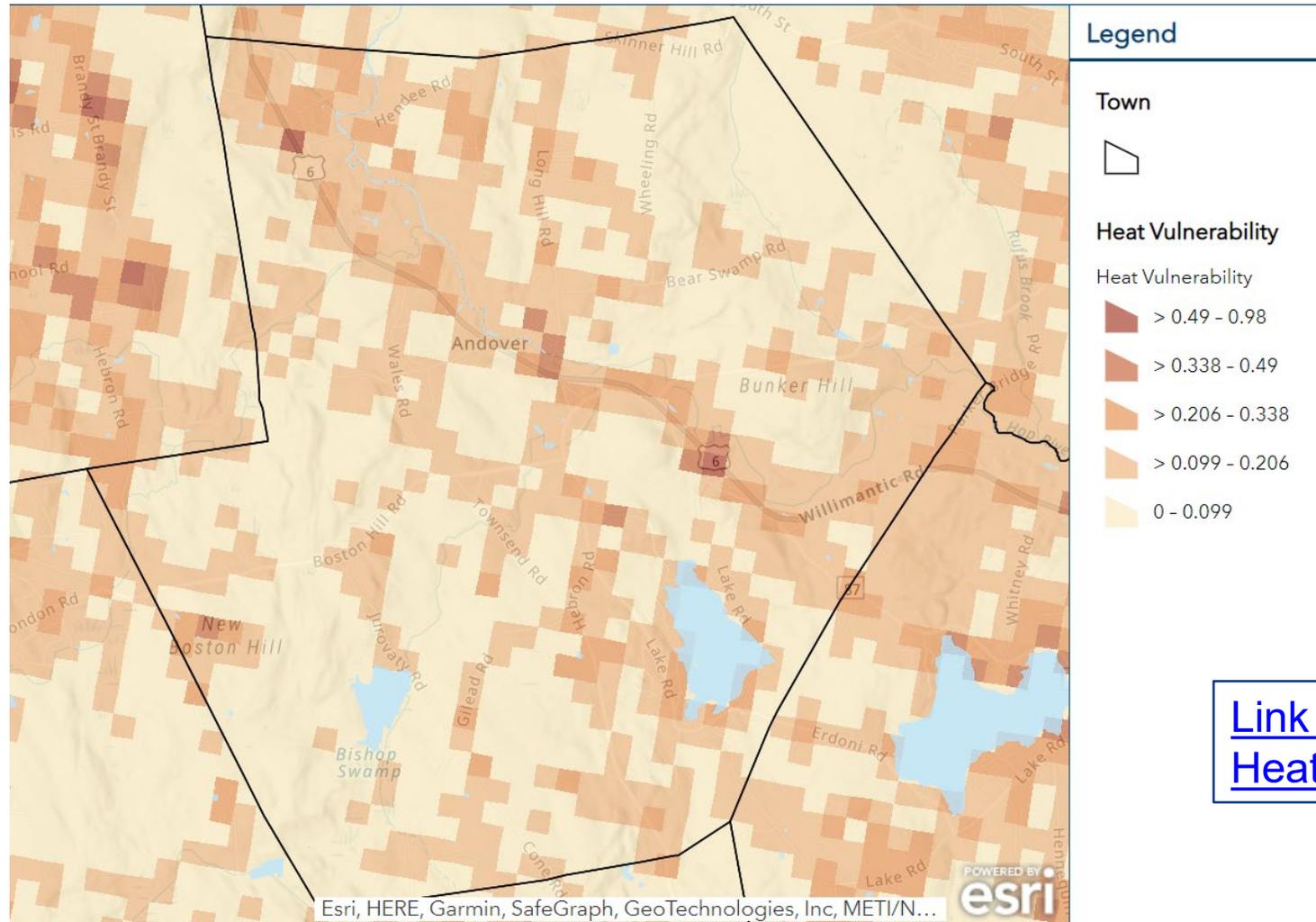
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Resilient Connecticut 2.0 extends this effort using State funds.

- Increases flexibility to address the climate concerns unique to other regions.
- CRCOG is a partner in the deployment of the program in north-central Connecticut



VIEW OF THE EXTREME HEAT CCVI

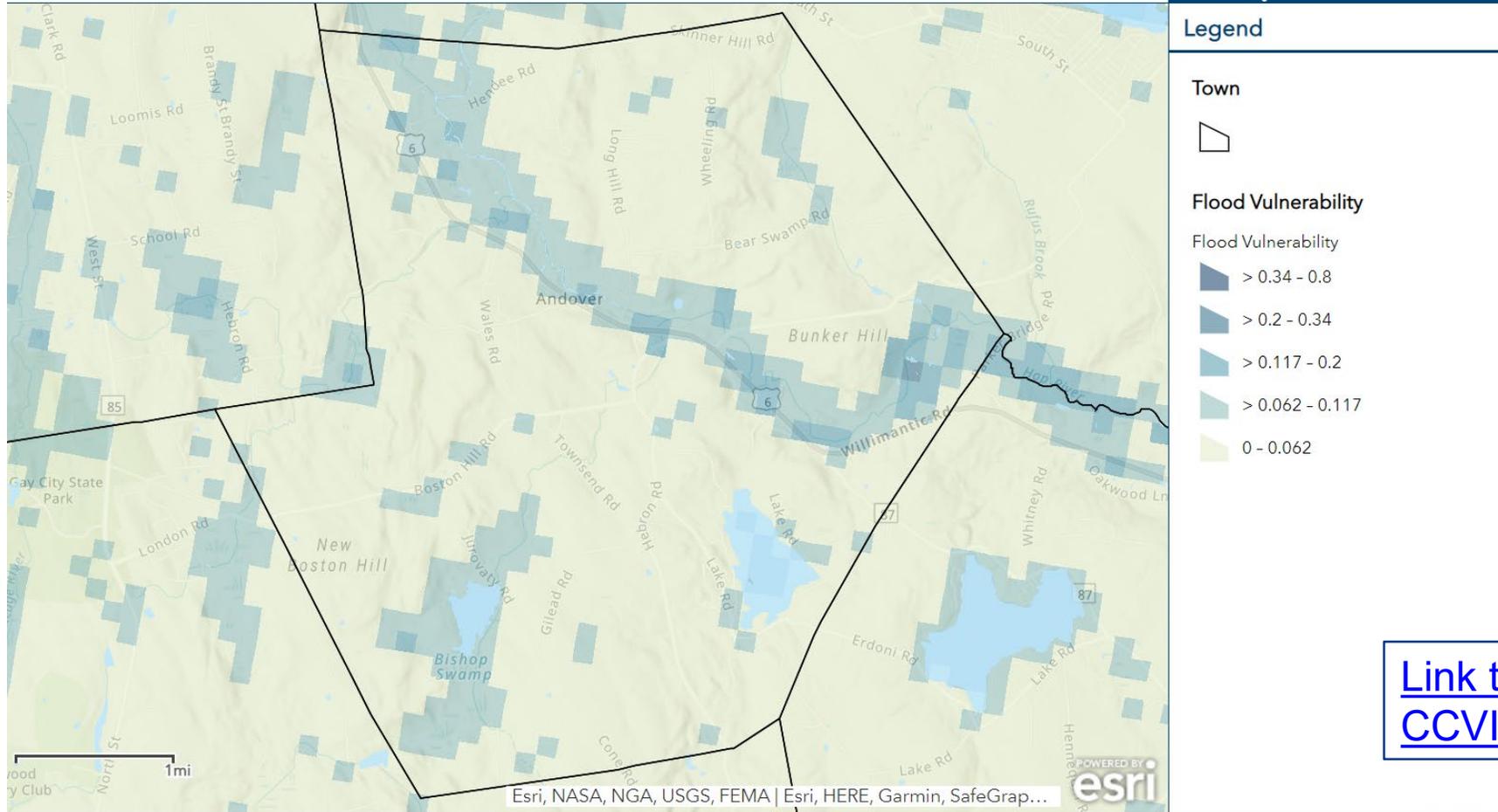


[Link to CRCOG CCVI Heat Viewer](#)

$$\text{Vulnerability} = \frac{\text{Sensitivity X Exposure}}{\text{Adaptive Capacity}}$$

VIEW OF THE FLOOD CCVI

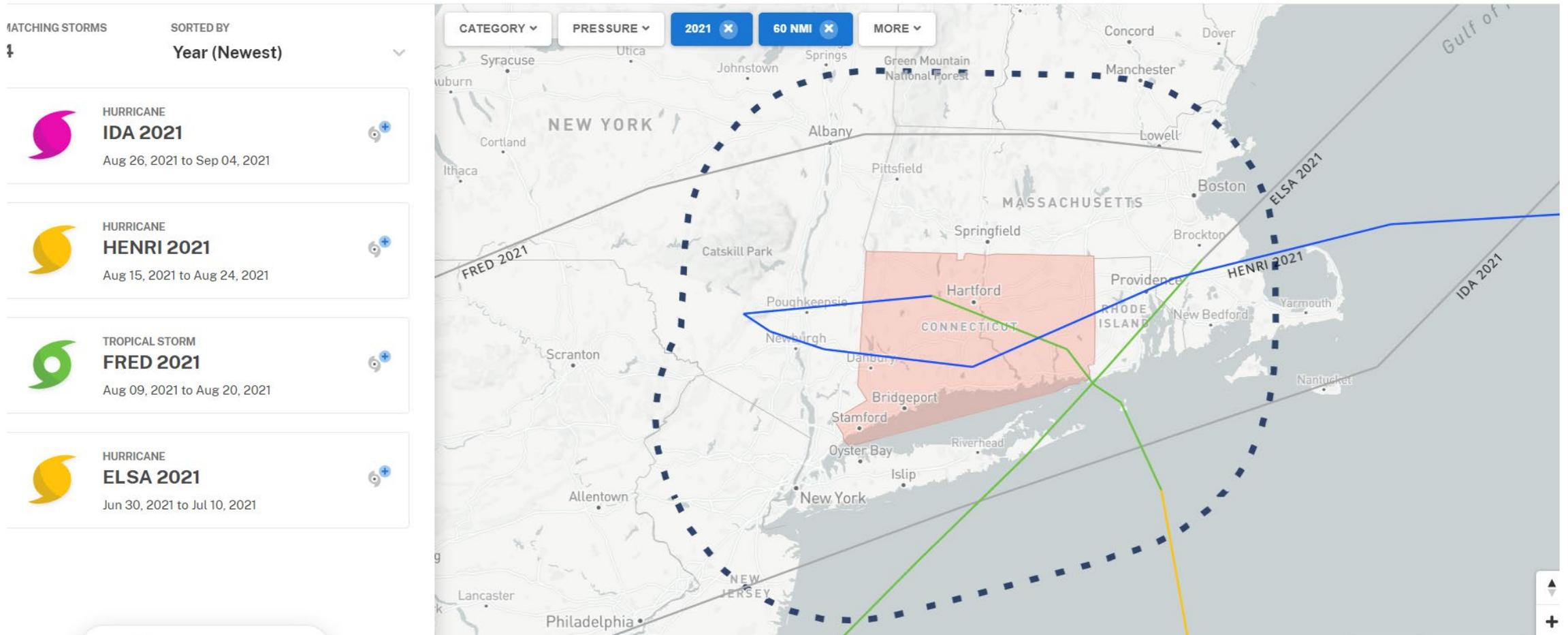
CRCOG Climate Change Vulnerability Index (CCVI) - Flood Resilient Connecticut



$$\text{Vulnerability} = \frac{\text{Sensitivity} \times \text{Exposure}}{\text{Adaptive Capacity}}$$

RESILIENT CONNECTICUT 2.0

- Consideration of recent events



HOW DOES THIS AFFECT HAZARD PROFILES?

Organization in your current plan:

- Hurricanes and Tropical Storms
- Riverine and Pluvial Floods
- Dam Failure
- Severe Winter Storms
- Tornadoes and High Winds
- Earthquakes
- Droughts
- Wildfires



HOW DOES THIS AFFECT HAZARD PROFILES?

Change to organization by climate driver

➤ Extreme and Severe Storms

- Hurricanes and Tropical Storms
- Tornadoes and High Winds
- Severe Winter Storms



➤ Sea Level Rise

- Tidal Connecticut River Flooding

➤ Changing Precipitation Patterns

- Riverine and Pluvial Floods
- Droughts
- Dam Failure



➤ Rising Temperature

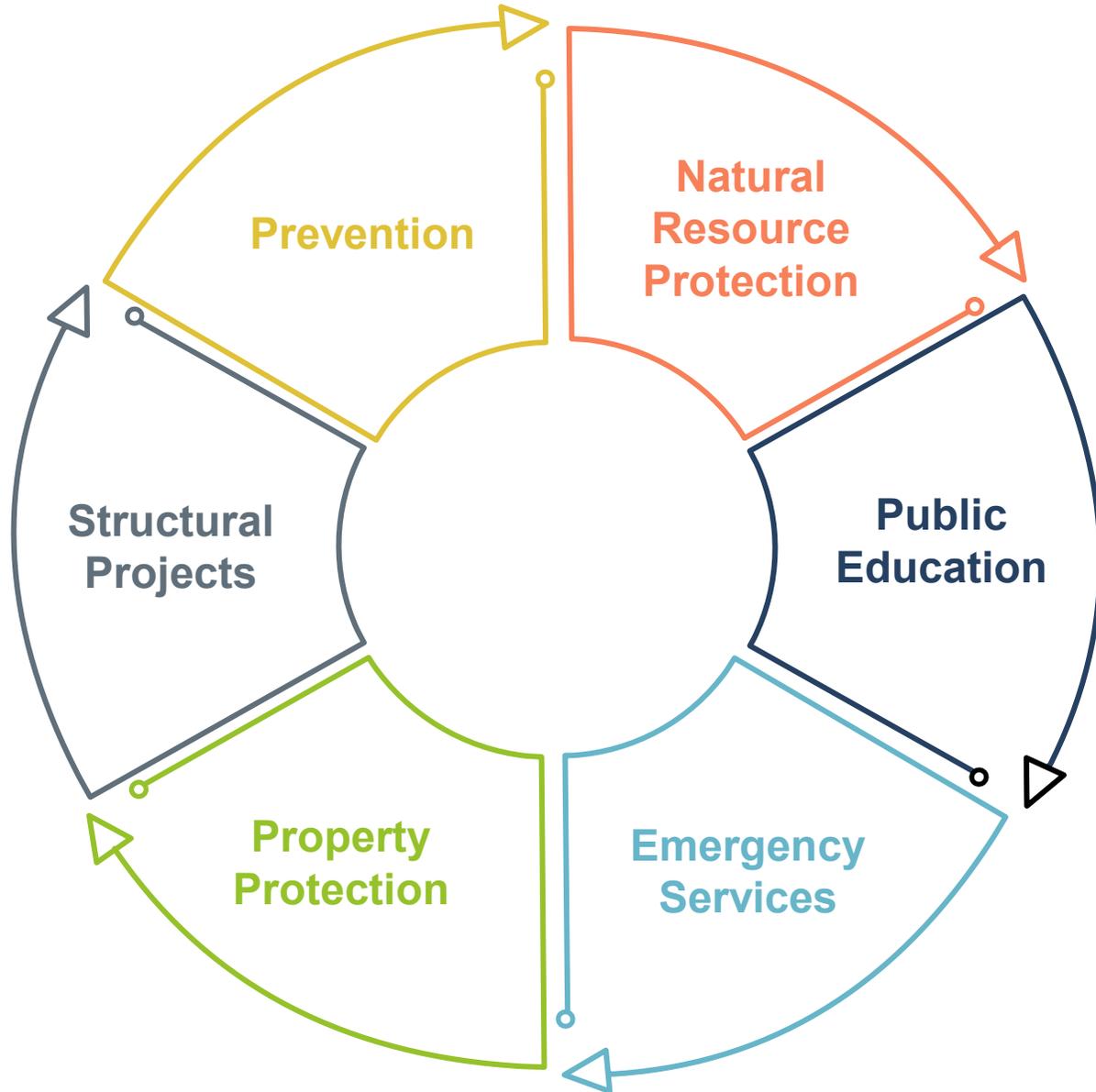
- Extreme Heat
- Wildfires

➤ Earthquakes

- Not affected, but addressed in the plan as always



STRATEGIES AND ACTIONS

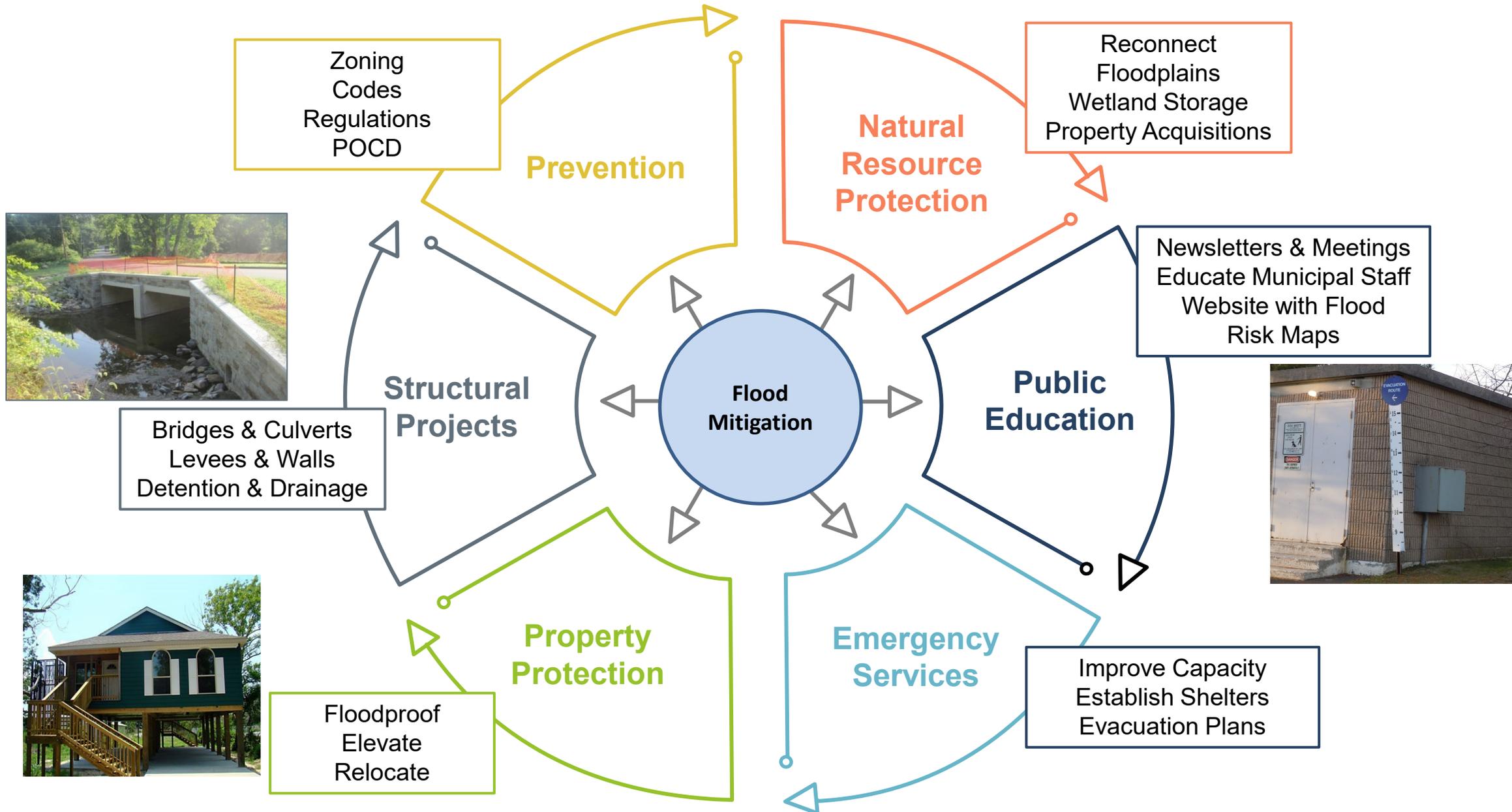


Structural Project



Property Protection through Elevation

STRATEGIES AND ACTIONS



STRATEGIES AND ACTIONS: SUCCESSES IN REGION

Wet Floodproofed Structure: Hartford Boat House



PROPERTY
PROTECTION

Hartford Boat House; Photos found in public domain

STRATEGIES AND ACTIONS: SUCCESSES IN REGION

Pequabuck River Property Acquisitions

- 21 properties acquired in Plainville since 2010



Forestville Avenue



North Washington Street

Photos by David Murphy, 2018



This photo courtesy of the Plainville Citizen



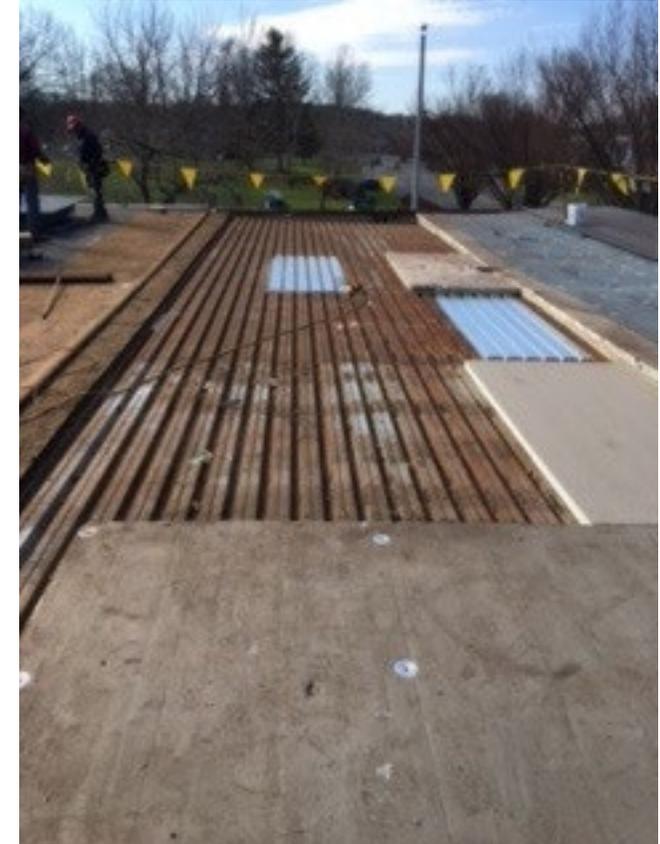
Robert Street Exr. Area



STRATEGIES AND ACTIONS: SUCCESSES IN REGION

South Windsor Emergency Operations Center

- New roof may be designed to withstand a Category 3 hurricane



Ceiling and roof photographs courtesy of the Town of South Windsor

PROPERTY
PROTECTION

EMERGENCY
SERVICES

STRATEGIES AND ACTIONS: SUCCESSES IN REGION

Parkville Fuel Cell and Microgrid – Powering School, Library, Senior Center, and Grocery Store



Parkville Fuel Cell
Photo by David Murphy, 2018



Buildings of the Parkville Microgrid
Photo by David Murphy, 2018

EMERGENCY
SERVICES

REVIEW HAZARD MITIGATION ACTIONS

Review prior actions

- “Ongoing” and “continue” are defined as “capabilities”
- Consolidate actions that are similar

New and continued mitigation actions

- Be judicious about which actions are carried forward
- The goal should be a somewhat achievable list of 10-15 actions
- Actions should be achievable within five years (i.e. “design” rather than “construct” – break up big projects into smaller steps)
- Applicability to address climate drivers of **flooding** and **extreme heat**
- Applicability for the State’s “resilient project pipeline”

REVIEW HAZARD MITIGATION ACTIONS

Community	Action or Strategy Number	Mitigation Actions and Strategies for CROG Communities	Regionalized Municipal Goal	FEMA Strategy Category	Status	Relevance to Climate Resilience and Adaptation
Andover	4	Complete replacement of Bunker Hill Road Bridge	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.	Structural Projects		High
Andover	13	Initiate replacement of Long Hill Road Bridge. Consider impacts of that project on Hop River flooding and road access.	5. Improve the resilience of local and regional utilities and infrastructure using strategies including adaptation, hardening, and creating redundancies.	Structural Projects		High
Andover	12	Perform a study of the Hop River channel and watershed to identify drainage problems and erosion risk zones.	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies	Prevention		High
Andover	8	On an at-least annual basis, check on the status of maintenance of the Andover Lake Dam and determine whether Town intervention is required.	1. Minimize the impact of natural hazards on physical buildings and infrastructure	Prevention		Medium
Andover	15	Investigate the CROG service sharing initiative, especially surrounding tree and other debris removal equipment.	7. Improve the emergency response capabilities of the region and its communities	Preparedness & Emergency Response		Medium
Andover	16	Implement an education and outreach initiative related to the pipeline that passes through town and public safety.	6. Improve public outreach, education, and warning systems	Education & Awareness		Low

REVIEW HAZARD MITIGATION ACTIONS

Community	Action or Strategy Number	Mitigation Actions and Strategies for CROG Communities	Regionalized Municipal Goal	FEMA Strategy Category	Status	Relevance to Climate Resilience and Adaptation
Andover	11	Review the LID Manual developed by the Northwest Hills Council of Governments and determine whether LID can be incorporated locally to increase rural resiliency.	1. Minimize the impact of natural hazards on physical buildings and infrastructure	Prevention		Low
Andover	17	Install emergency generator at the Town Hall Addition to make progress on converting that space into a backup shelter.	7. Improve the emergency response capabilities of the region and its communities	Preparedness & Emergency Response		Medium
Andover	10	Install emergency generator at the elementary school to improve its sheltering capabilities.	7. Improve the emergency response capabilities of the region and its communities	Preparedness & Emergency Response		Medium
Andover	7	Pursue agreement with landowner of the small private pond that is a good location for a dry hydrant to install a dry hydrant at that site.	7. Improve the emergency response capabilities of the region and its communities	Preparedness & Emergency Response		Medium
Andover	6	Develop a formalized procedure for tracking hazard events in Town and passing that information onto new Town Staff. Collecting and tracking information on event costs & losses should be part of that procedure.	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies	Education & Awareness		Medium
Andover	3	Educate the public on new warning notification system, sheltering facilities and other emergency preparedness measures.	6. Improve public outreach, education, and warning systems	Education & Awareness		Low
Andover	2	Coordinate with municipal agent for the elderly to update the special needs population list.	8. Ensure community character and social equity are addressed in mitigation activities	Preparedness & Emergency Response		Low

REVIEW HAZARD MITIGATION ACTIONS

Community	Action or Strategy Number	Mitigation Actions and Strategies for CROG Communities	Regionalized Municipal Goal	FEMA Strategy Category	Status	Relevance to Climate Resilience and Adaptation
Andover	5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	6. Improve public outreach, education, and warning systems	Education & Awareness		Low
Andover	16	Implement an education and outreach initiative related to the pipeline that passes through town and public safety.	6. Improve public outreach, education, and warning systems	Education & Awareness		Low
Andover	9	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	3. Improve institutional awareness and understanding of natural hazard impacts and mitigation within municipal governments and other decision-making bodies	Education & Awareness		Low
Andover	18	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	8. Ensure community character and social equity are addressed in mitigation activities	Property Protection		High
Andover	19	Acquire a bucket truck to use for tree maintenance and removal.	7. Improve the emergency response capabilities of the region and its communities	Preparedness & Emergency Response		Low
Andover	1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	4. Increase the use of natural, "green," or "soft" hazard mitigation measures, such as open space preservation and green infrastructure.	Natural Resources Protection		Low

IMPORTANT UPDATES FROM YOU

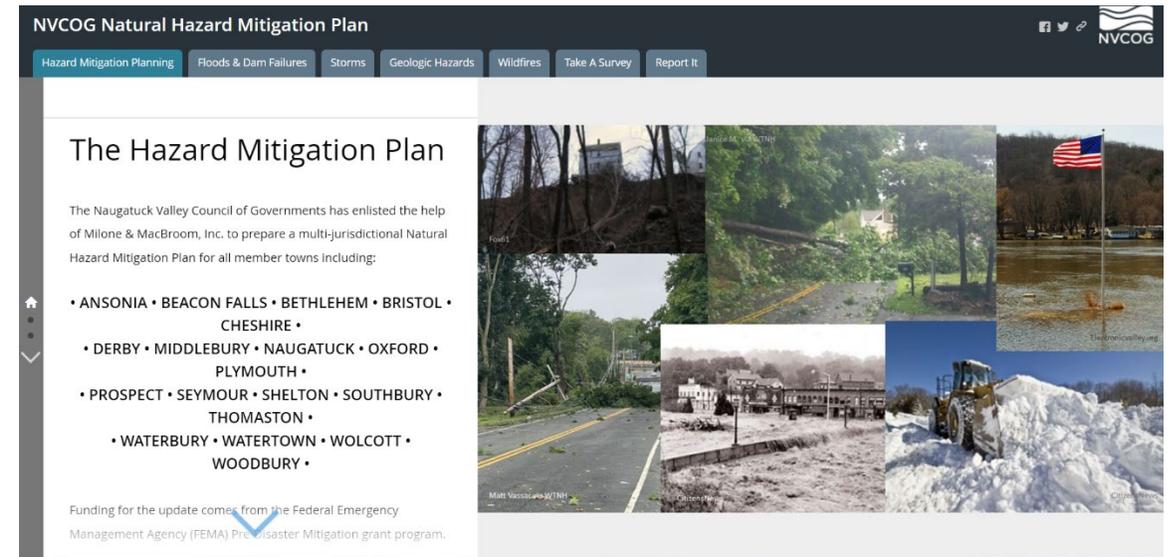
- Describe changes in critical facilities and shelters
- Which facilities are being used, or can be used, as cooling centers?
- Describe development and redevelopment in general terms but also include specific developments – particularly in high-risk areas.
- Comment on the effects of:
 - *T.S. Isaias of August 2020 – wind damage and outages*
 - *Flashy droughts of 2020 and 2022*
 - *Summer Storms of 2021 (Elsa, Fred, Henri, and Ida)*

OPEN DISCUSSION

- Where do you see intersections of community assets and **flood-related challenges?**
- Where do you see intersections of community assets and **extreme heat-related challenges?**
- Do you see examples of unique climate driver typologies and challenges? Examples could include:
 - Stream crossings
 - Clusters of critical facilities with shared needs
 - Vulnerable populations at risk
 - Development and redevelopment pressures in areas with risk
 - Agriculture

APPROACH FOR PUBLIC ENGAGEMENT

- Internet-Based Survey
- ESRI StoryMap
- Coordination with other local planning efforts
- Regional Workshop about Vulnerability and Risk Assessment (summer 2023)
- Regional Workshop about Hazard Mitigation and Climate Adaptation Actions (fall 2023)
- Public Meetings to Present Draft Plan (winter 2023-2024)



WRAP-UP AND NEXT STEPS

- Designate someone to be the primary contact for coordination and meetings
- Maintain a local planning team
 - Planning/Land Use
 - Public Works and Engineering
 - Building
 - Emergency Management
 - Office of the Chief Elected Official
- Let us know what else is going on
 - Engagement with DEEP, Sustainable CT, etc.
 - Applications for funding from FEMA, NFWF, LISS
- Provide any information requested today

CONTACT INFORMATION

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Mary Buchanan, PhD

- mary.buchanan@uconn.edu

Nicole Govert, MS

- nicole.govert@uconn.edu



Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Andover

Date: June 22nd, 2023

Time: 1:00

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Eric Anderson	Andover Town Administrator and Emergency Management Director
Mary Buchanan	CIRCA	Jay Tuttle	Andover Public Works Foreman

Overview

CRCOG and CIRCA attended a meeting with Andover to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Andover and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut* 2.0 future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Andover’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Andover’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Andover 2019-2024	Notes	Current Status
4	Complete replacement of Bunker Hill Road Bridge	This is fully funded as part of the Federal-Local Bridge Program and is at the 75% design phase. Construction will start in 12 months.	Carry forward (although check in with the town to see if this is complete by

			the time this plan is adopted).
13	Initiate replacement of Long Hill Road Bridge. Consider impacts of that project on Hop River flooding and road access.	Also funded by the Federal-Local Bridge Program. At about 30% design phase. The road leading to the bridge will still flood in a major rain event, although the widening and raising of the bridge will reduce the risk. But this action as written ("initiate" and "consider impacts") has been completed.	Complete / Retire
12	Perform a study of the Hop River channel and watershed to identify drainage problems and erosion risk zones.	FEMA is completing an update to the flood study and delineating new maps, and the town is awaiting the new FEMA flood maps. The town is holding off on the study suggested by this action until the new FEMA maps are available.	Revise to indicate that the new FEMA maps should be considered / Carry forward.
8	On an at-least annual basis, check on the status of maintenance of the Andover Lake Dam and determine whether Town intervention is required.	Within the last twelve months, the town met with ALMA, the organization that is responsible for dam maintenance (this is a private dam). An updated flood Emergency Action Plan is available for this dam, along with a plan for lowering the water level prior to any significant storm event to mitigate the risk of dam failure. The town also has a copy of the emergency plan for the dam.	Capability / Retire
15	Investigate the CROCOG service sharing initiative, especially surrounding tree and other debris removal equipment.	The town met with one of the contractors that has a state bid for assisting town with disaster recovery and debris removal. The town is still working on this. The town does not have a staging area or a plan in place for dealing with a significant debris removal need. The transfer station is fairly limited. The soccer field is a less-than-ideal option for additional storage. The town would like to add an action item to sign a long-term contract for emergency debris management when it's beyond the capability of public works.	Revise to the new suggested action from town.
16	Implement an education and outreach initiative related to the pipeline that passes through town and public safety.	The pipeline company was proposing an infusion station in the town 5 years ago which would have involved trucking in liquified natural gas, and this proposal met with a lot of public opposition. This proposal did not more forward. The pipeline runs through town, but the town has not done much specific outreach. There is no longer a need for this action.	No longer a need / Retire
11	Review the LID Manual developed by the Northwest Hills Council of Governments and determine whether LID can be incorporated locally to increase rural resiliency.	The town is not seeing a lot of development. The zoning regulations include LID. The town recently applied for a permit for a new community center	Capability / Retire

		and the zoning commission is requiring LID for this development.	
17	Install emergency generator at the Town Hall Addition to make progress on converting that space into a backup shelter.	This is still a concern. The Town Hall shares a generator with the fire department but it does not cover the entire building and the conduit between the buildings lacks the capacity needed to provide power from the generator. The community center is about to be built behind the town hall, which will also need back-up power.	Revise to include the need for a generator that can fully provide power to the town hall, the new community center, and the fire department.
10	Install emergency generator at the elementary school to improve its sheltering capabilities.	There is an old generator in the elementary school, which is designated as one of the town's emergency shelters. It should probably be replaced at some point.	Carry forward.
7	Pursue agreement with landowner of the small private pond that is a good location for a dry hydrant to install a dry hydrant at that site.	Town staff isn't sure if this is referring to a specific place. The fire department has installed many dry hydrants, and every new subdivision is required to have either a fire pond with a dry hydrant or a 30,000 gallon tank with a dry hydrant. (Not many of these developments, only 3 in about 20 years.) The town has the capacity to keep up with these fire protection needs.	The intention of this has been completed / Capability / Retire
6	Develop a formalized procedure for tracking hazard events in Town and passing that information onto new Town Staff. Collecting and tracking information on event costs & losses should be part of that procedure.	Town staff not sure if this is still a need. It's not a bad idea. The town has all the data needed on hand to document costs related to FEMA disasters, etc.	This is no longer needed / Capability / Retire
3	Educate the public on new warning notification system, sheltering facilities and other emergency preparedness measures.	The town maintains its own notification system subscription, known as Civic. The town grapples with questions like how many times is too many times to notify, what level of storm should result in a notification, and how do they get enough people to subscribe to make it worthwhile. Nevertheless, the intent of this action has been met.	Capability / Retire
2	Coordinate with municipal agent for the elderly to update the special needs population list.	The municipal agent has a list of vulnerable senior population (those that require oxygen, have mobility issues, etc.)	Capability / Retire
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	There are not many small businesses in Andover. A used auto parts dealer is located in a flood zone. The town would work on this on a case-by-case basis. David suggests having town staff view the DEEP webinar or retiring this action. Attendees determined that this can be retired.	No longer a need / Retire
16	Implement an education and outreach initiative related to the pipeline that	This is a repeat and can be removed.	Remove - repeat

	passes through town and public safety.		
9	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Eric has attended some of these, but doesn't have the bandwidth for much engagement.	Revise to include more choices such as DEMHS workshops.
18	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	The town doesn't have any historic structures near the flood zone. The town is swapping out air conditioners at the town hall, and has to get SHPO approval because the building is over 50 years old. Town staff reports that this type of bureaucracy is invasive and time consuming.	This is no longer a need / Retire
19	Acquire a bucket truck to use for tree maintenance and removal.	Town never bought a bucket truck, but has established relationships with private companies for tree maintenance and removal. The town does not have enough staff to practically conduct its own tree work (although they would still like a bucket truck in an ideal world). The intent of this action has been accomplished.	Intent complete / Retire
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	The town is part of Sustainable CT, and is in the process of going for a Bronze Certification. The town has a Sustainable CT Committee.	Complete / Retire

Critical Facilities

- A new community center is being built behind the town hall. This will need a generator. This will likely also serve as a cooling center and shelter.
- The town has joined with the two surrounding towns in the regional district and designated the RHAM high school in Hebron as a region-wide emergency shelter. The three towns pursued a large grant to fund the generator for this facility.
- Most of the town buildings can also be used for cooling if needed. The two obvious choices include the library and the community room attached to the town hall. (When the community center is finished this will be a third option.)

- An elderly community is located off Riverside Drive. This is not town-owned, but is nevertheless considered critical. The access to this facility can be threatened by flooding. An evaluation of options to improve access/egress should be added as a new action in this plan.
- The public works building needs a new generator, as the current generator is at least 50 years old. When they run the generator, they have to shut down all their electronics to achieve the desire voltage, so the generator is basically only running the fuel pump. A new generator should be added as a new action.
- The town has the ability to refuel diesel vehicles in house. But the town owns and relies on many gasoline vehicles, and in the past they have had trouble with fueling these vehicles when gas stations are closed after storms. The town would like an action related to increasing their capacity to fuel gas vehicles during emergencies.
- The public school buses are stored in the 100-year floodplain. This is a town-owned property. In the long term the town might want to move these, although it is not a major short-term concern because the buses can be moved prior to a forecast storm. The town has moved the buses twice in recent years. At some point they will need to add electric chargers for the buses, and they do not want to put electric chargers in the floodplain. So this transition will likely happen as they electrify the buses, but it would be good to have this mentioned in the plan in case funding sources are available. The town has another location in mind, but planning and improvements are needed before it can become the new bus area.

Development and Redevelopment

- Not much development to report
 - One Dollar General was built at the intersection of Lake Road and Rt 6. This is not in the flood zone, but could be potentially cut off from most of the town in the event of a flood emergency. This is not a critical facility.
- One application for a house in the floodplain was denied by the town. The town's policy is to avoid allowing building in the floodplain. The town athletic fields are in the floodplain, and have flooded multiple times in the past. The town has previously lowered and paved the running track on the field so it will be less vulnerable to flooding and erosion compared to the cinder surface track.

Recent Events

- Isaias – The town was out of power for up to a week. “Fairly good beating.”
- Droughts of 2020 and 2022 – four or five residents had issues with their wells. At least two of these have switched from dug wells to drilled wells as a result. In 2022 a few residents used the town hall water while their wells were dry. The town reports that there are probably only a couple residents left who are vulnerable to this.
- Storms of 2021 – Bunker Hill Bridge had to be closed because the culverts on this road failed.
- Numerous culverts are of marginal condition or capacity, and the town staff are concerned about this.

- Bishop’s Swamp Outfall at Jurovaty Road. This was overtopped in 2021. A dam is owned by DEEP and a little bridge may be the town’s. Some uncertainty exists about who is responsible for infrastructure here. The town keeps the inlet side of this clear. When the road is overtopped, the overtopping contributes to erosion in this area.
- Hutchinson Road has a failing culvert that needs to be addressed.
- Lake Road adjacent to Bausola Road – town has applied to State/Local Bridge program for funding – this is another failing culvert.
- Bear Swamp Road has a culvert that is not quite failing but poor (culvert rating of 3). Multiple sinkholes in this road have gotten temporary patches.
- At Merritt Valley Road adjacent to Lake Road, a 130-year old stone arch culvert needs to be addressed.
- Another bridge on Lake Road is a concern, located right off the spillway, on the outfall of Andover Lake.
- Lake Road runs along a steep embankment, along the section of the road between Merritt Valley and Lakeview Road. This is where the stream from Andover Lake goes under and along the road.
- The Lake Road corridor in general seems like it has multiple concerns. The velocity of the water in this area is very high due to the rapid loss of elevation over a short distance. If the water overtops the road here, the road would likely be lost to washouts.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Andover.

- Three big concerns of the town – these are what they envision as the biggest things that could go wrong:
 - Big storm (Cat 3 hurricane) that takes down a lot of tree canopy and makes the town inaccessible.
 - 100-to-500 year flood of longer duration that results in portions of Rt 6 being underwater.
 - Very extensive rain event that causes failure of the dam at Andover Lake.
- The Town’s main concern regarding vulnerable populations is the senior community off Riverside Drive. This facility is very close to the floodplain, and the access road has flooded every few years.
- Parts of Lake Road have been underwater before.
- Development pressure is not a concern.
- A microgrid for the municipal complex could be considered, but the Town is not aware if the State is presently interesting in pursuing/advancing microgrids.

Follow-Up

- The HMP Coordinator will be Eric Anderson.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Avon

Date: July 18th, 2023

Time: 10:00 am

Location: Remote

Attendees			
David Murphy	CIRCA	Grace Tiezzi	Avon Assistant Town Manager
Mary Buchanan	CIRCA	Brandon Robertson	Avon Town Manager
Bruce Appell	Avon Fire Marshal, Emergency Manager		

Overview

CRCOG and CIRCA attended a meeting with Avon to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Avon and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut* 2.0 future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Avon’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Avon’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Avon 2019-2024	Notes	Current Status
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13	Complete the replacement and upsizing of the Farmington River bridge at Old Farms Road	This was completed in 2020 with state funding. There is now no middle support under the bridge to reduce the likelihood of debris getting stuck. Old Farms Road was also raised approaching the bridge, and has stayed dry since.	Complete / Retire
12	Develop a flood mitigation plan for Building 1 at the Town Complex using FEMA historic structure mitigation guidelines and public participation; this process can be used as a case-study for preservation-sensitive flood mitigation of historic properties.	<p>This has not happened. During Storm Ida the meeting room and storage room in Building 1 flooded, and cost about \$40,000 to repair (carpet, drywall, etc.). No documents were lost. The room is still heavily used. Some sediment was removed from the brook outside this building to improve water flow. The town has some conceptual designs to renovate the building. This is an ongoing strong concern due to the heavy use of the building and the important storage space. David noted that a focused study here might be a candidate for future rounds of the DCRF. Town staff asked whether BRIC would be a way to fund this project – David says the BRIC emphasis is currently heavily on EJ communities and is nationally competitive, so is probably not a good fit for Avon.</p> <p>Much of the municipal complex is in the flood zone, but Building 1 is the primary building affected.</p> <p>The buildings are not listed on any historic register, although they may be eligible.</p>	Carry forward with revisions to de-emphasize the historic structure aspect and a focus on resilience of municipal buildings
11	Link properties in areas of flood risk to the Reverse 911 database to enable targeted messages.	The capability is there (Everbridge), although town staff are not sure how often this is used. There was some use during the early days of COVID. Town staff report that this system is somewhat of an “afterthought.” Town staff believe this is used more for town-wide messaging than for targeted messaging.	Consider carrying forward with revisions to encourage more robust use or just retiring if the need is met
14	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Town staff is not sure what has been done on this. The RL properties are likely all near Secret Lake, which is a private homeowners’ association. Town staff will check with the Town Engineer. David explained that this action will remain, as the properties are present.	Carry forward (taking into account follow-up info from Town Engineer)

1	Develop written procedure for relocating personnel to areas at risk of isolation during floods.	The town has an emergency operations plan, although town staff are not sure if specific procedure for relocating personnel is included. Town staff believe east-west access across town is usually pretty good and this is a capability. The valley/wetland area near Lovely Street associated with the stream stemming from Secret Lake might have some access concerns. Town staff say it would be interesting to see maps of projected flooding for different storm events. New FEMA maps are forthcoming, which the town engineer is currently reviewing.	Capability / Retire
2	Develop prioritized list of critical facility generator needs to guide future purchases.	The town has been adding generators to the schools that don't have them, and have been updating some of the sewer pump stations (each update includes a new generator). The town staff don't believe that specific facilities need to be listed in the plan, despite the need for a few more generators.	Complete (as worded); carry forward to indicate a need for a few more generators
4	Install a satellite television system at the new EOC, once it is completed, to allow for monitoring of information when power and cable are out.	Some digital boxes for television are in some of the staff offices although not in the EOC, and the internet capability is strong. Intent has been met.	Intent has been met / Retire
5	Determine level of communication needed for all personnel and provide wireless communication in accordance with findings.	The town has a project pending to update its communication network. The intent of this is complete.	Intent has been met / Retire
16	Complete a feasibility study to determine the effectiveness of implementing a microgrid at the Avon Town Offices campus.	The town did an earlier study with a consultant to consider this question with DEEP microgrid grant funding. At that time it was found that there was no ideal way to address the heat generated by a microgrid. Pursuing a microgrid is not completely off the table, but definitely has not come together yet. The study was completed, so this action is completed. The town would be interested in future opportunities for microgrids, but think it would be more helpful to speak more generally about town facilities rather than the Town Offices specifically. Include an action going forward with that more general language. Town staff note that it would also be helpful to include some commercial facilities important to the town, such as grocery stores.	Complete / But carry forward to address other types of facilities
8	Work with the Connecticut Water Company to designate new areas for fire protection.	No new expansions have occurred. The town has spoken with CWC and in general this is cost-prohibitive if the	Retire

		only purpose is fire protection without gaining new customers.	
9	Work with MDC to determine whether transmission routes can be mapped and used for emergency planning and response in Avon.	There is a major transmission line beneath Route 44 from the MDC reservoirs. This might be a question for Larry or Hiram. Town staff will ask Hiram.	Potentially retire, but see what Hiram says
7	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	The town is compliant with MS4 requirements. This is a capability.	Capability / Retire
6	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff don't think there are many businesses in the flood zone, other than perhaps the golf course and Sub-Edge farm (but the farm buildings are in Farmington).	No longer a need / Retire
10	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	This is a capability – Hiram and Bruce regularly attend events.	Capability / Retire
15	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	The town conducted a comprehensive historic resource inventory in 1998, although town staff are not sure whether this indicated whether the properties were vulnerable. There are not many of these properties along the river or in flood zones. Revise this to instead have staff acquire and review the new SHPO GIS data.	Carry forward with revisions
3	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	The town has joined Sustainable CT and was certified Bronze in 2020. Town staff understand that this is a great program, but each iteration includes revisions to the criteria that get progressively harder to meet. The town will likely not renew its certification because it is reportedly not an ideal use of staff time.	Action Completed / Retire

Critical Facilities

- No changes in critical facilities, except for some updates to the PD and a new generator for the PD.

- Town Office campus does not have generator facilities. Add an action about generators for town facilities.
- Cooling centers – library, senior center. These typically rely on usage during normal hours of operations, although hours could be extended if needed or opened on Sundays, etc. Most people in town have cooling access and there is usually not much demand. The Fire Department could also be used on a more individual basis (people can call the non-emergency number to request assistance), since demand has typically been low. The approach is “if you need it, call us” and the town will work with people on an individual basis.
 - Library and senior centers do not have generators. The fire house has a generator. The action about new standby power/generators can apply to these facilities, as well.

Development and Redevelopment

- Hiram can give more details on this. There have been a couple of multi-family developments planned or in-progress – Avon Mill is off of Waterville Road/Route 10. Some development has occurred in the industrial park area. No new subdivisions are proposed or underway.
 - CIRCA staff will send an action item list with the items that need follow-up, along with the meeting minutes.

Recent Events

- T.S. Isaias – The Route 44 corridor was out of power for about 24 hours. The Town Hall was closed for a day. Parts of the town were out of power for 4-5 days. There wasn’t much damage within town, but the circuits that feed town were believed damaged. There were trees down in roads.
- Town staff can’t recall many concerns related to droughts and private wells. The town did not have to supply anybody with water, but did discuss the possibility during 2020. The town has the capability to supply residents with water if needed.
- Storms of 2021 – Issue on Eddy Street with a sanitary sewer line that experienced erosion under the line and required emergency repairs. Erosion occurred along New Road and Deepwood Drive, and this still needs repair; the town has some ARPA funds that are going toward this. These were probably Ida or Henri, but town staff does not remember exactly which storm events caused the damage.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Avon.

- Tree management / blocked roads – this is a continual battle. Avon has one tree truck. Eversource does do work in the town, but only a fraction of the streets in the town at any given time. Eversource doesn’t prune the trees by secondary lines, choosing to focus on the primary

lines, which means that streets that have only secondary lines don't have much assistance with keeping the trees clear of the lines.

- Most of the community has A/C, so the real concern would be if there was a heat event at the same time as a power outage.
- The town has not seen much demand for shelters, although they did hear from a Granby resident how nice the Avon shelter is. Many residents have other homes or can afford hotels, so they have options for relocating other than shelters.
- The Marriott residence inn in the town lacks a generator, presenting a challenge for displaced occupants.
- Town staff note that there is a long waiting period for generators after they are ordered from distributors. The Town has been waiting over a year for one generator that they've ordered for a school.
- Critical facilities in proximity to streams – town hall complex.

Follow-Up

- The HMP Coordinator will be Bruce Appell. Grace will be back-up.
- Action items:
 - CIRCA will send Avon staff the invitation to the workshop on July 24th
 - Avon staff will check with town engineer to find out if any outreach has been conducted to owners of Repetitive Loss properties and/or if these property owners have done any mitigation activities on their properties.
 - Avon staff will check with Hiram to see if there is still a need for the following action and/or if there have been any updates: "Work with MDC to determine whether transmission routes can be mapped and used for emergency planning and response in Avon."
 - Avon staff will ask Hiram to send CIRCA more information about recent development and redevelopment in Avon in the last 5 years, including areas of new development / descriptions of any new complexes / whether any development has occurred in vulnerable areas.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Berlin

Date: November 6, 2023

Time: 10 am

Location: In person at Town Hall

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Rich Cop	Berlin Fire Marshal/EMD	Jim Horbal	Berlin Deputy Director of Public Works
Wayne Wright	Berlin Facilities Superintendent	Frank Van Linter	Berlin Building Official
Steve Wood	Berlin Parks and Grounds	Steve Waznia	Berlin Fire Marshal
Maureen Giusti	Berlin Town Planner		

Overview

CRCOG and CIRCA attended a meeting with Berlin to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Berlin and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Berlin’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Berlin’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Berlin 2019-2024	Notes	Current Status
4	Complete the Dam Breakage Emergency Plan.	Town staff said the plan has been updated through engineering and has been sent to the insurance carrier and DEEP.	Complete/Remove
12	Explore rerouting of culverts upstream of Becker Avenue to protect Becker Avenue property.	Town staff report that rerouting of these culverts has not been completed. The Becker Avenue property in question is a single dwelling. The town has cleaned out the culvert which has lowered the potential for flooding for the one dwelling. Because of this increased maintenance, rerouting these culverts is not a priority for the town but town staff would still like to carry this action forward.	Carry Forward
14	Relocate gasoline lines feeding the Physical Services Complex to protect from flooding.	Town staff reported that relocation has not been completed. The tanks are all above ground and are not themselves very vulnerable to flooding, but there is an access concern about getting to the site during flood events. If access is blocked by floodwaters, the town can't refill the tanks. The town would need to purchase property to relocate the Physical Services Complex and the town staff report that this is unlikely to happen (See Action 9 for further discussion of this). The town has been working on a back-up plan for augmenting the gas supplies with the gas tanks located at the golf course. Town staff will check on the status of the golf course fuel back-up plan and will follow up with CIRCA about whether to revise or retire this action.	Carry forward with Revisions/Make a separate action
6	Update the local floodplain management ordinance to meet current State guidelines.	Town staff report that this is complete.	Complete/Remove.
10	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Town staff said this has not been completed. This action will be retained since Berlin has multiple RL properties.	Carry Forward
11	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Town staff said this has not been completed. This action will be retained since Berlin has multiple RL properties.	Carry Forward
2	Revise the subdivision/zoning code to offer incentives for low-impact development.	Town staff said the town has substantial requirements for drainage in the regulations related to development. The	Intent is complete / Retire

		town also recently completed a new POCD, which will be incorporated into the zoning. The intent of this action is complete.	
9	Construct duplicate facilities for the Physical Services Complex at the golf course and Sage Park.	(See Action 14 for additional discussion related to the gas tanks at this facility). Town staff reported that the public works facility is located in a floodway and previous flooding occurrences have led to damages and cost the town money. There are four buildings that have been repeatedly flooded. The town has previously discussed relocating this complex, but town staff report that relocation is unlikely because there is no feasible property for relocation. Town staff report that the town has shifted its goal to be floodproofing this facility rather than relocating it. Town staff pointed to the Hartford Boathouse as an example of a floodproof facility. The town has already completed some studies related to this goal, and would be interested in seeking grant funding for this floodproofing project. Revise this action to incorporate this town input.	Carry Forward with Revisions Instead of relocating the facilities, floodproof the facilities.
3	Acquire generators for shelters and other critical facilities. The need for three generators has been identified to ensure that backup power is available for critical town functions. These include the purchase of an additional portable for the Town for general use, an additional portable generator for the Water Control Department to ensure that sewer pumping stations can be maintained during outages, and a new generator for the senior center.	Town staff reported that a generator has been installed for the Water Control Department well site. The town is in the process of transferring an extra generator from the high school to the senior center, which involves working with the housing authority. There is still interest in additional generator power for pump stations, as well as a generator for the library. CIRCA will follow up with town staff about the status of the generator for the senior center, and will update this action accordingly. Carry forward this action with revisions.	Carry forward with revisions based on the facilities that still need generators
7	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said they are compliant with MS4. This is a capability.	Capability/Re move
8	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff reported that this has not been completed but they would like to carry this action forward.	Carry Forward

5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said they ensure that all potentially hazardous chemicals are stored out of floodplains. This is a capability.	Capability/Re move
13	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Town staff would like to revise the action to “Acquire and review the new SHPO inventory layer”, as recommended by CIRCA to other towns.	Carry forward with Revisions
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town staff said they have not joined SCT. The town does not currently have the capacity to enter the program but would like to keep this action for the future.	Carry Forward

Critical Facilities

- Change to the EOC: Town Hall is no longer the EOC, now the Fire Department is the EOC.
- Generators:
 - All the fire stations and police department have generators.
 - Marjorie Moore Village Housing has a generator.
 - Add action to get additional generator for the sewer pumping stations.
 - Add an action to acquire a generator for the library.
- Shelters: No change since previous plan update, the shelters are still the high school and the middle school. The primary shelter is Berlin High School (which has a generator) and the secondary shelter is the middle school (which has a portable generator).
- Cooling Centers: Senior Center, Library.
 - Senior center does not currently have a generator (but may be receiving one soon, see Action 3 in the above table).
 - The library does not have a generator, and the town is interested in acquiring a generator for it, as the library also serves as a back-up to the Town Hall if needed.

Development and Redevelopment

- The town discourages new development/ redevelopment in floodplains. Town staff are not aware of any development in areas vulnerable to flooding.

- Several mixed-use and apartment complexes have been recently added along the Berlin Turnpike and by the train station.

Recent Events

- T.S. Isaias – The town staff reported some scattered power outages but no substantial or widespread impact. Town staff reported some wind damage in the park facilities and sporadic wind damage elsewhere that caused some private and public damage, but no significant concerns.
- Flashy droughts of 2020 and 2022 – The town staff do not recall receiving any complaints related to drought. The south end of town has private wells, but the town did not have any reports of the wells drying up.
- Summer storms of 2021 – Town staff reported sporadic power outages, some trees down, and minimal flooding. No road wash outs.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Berlin.

- The town does not see much demand for the cooling centers.
- The town reports that Berlin has been called “the great swamp”, so the entire town is damp, but town staff do not have any specific concerns related to floods (other than the Physical Services Complex discussed previously).
- The town said they have seen an increase in people living in hotels and motels along the Berlin Turnpike. Within Berlin several hotels and motels will be converted into permanent housing in the future. None of those facilities have generators.
- Senior Housing complexes are near the Town Hall Complex and at Colonial Heights, but town staff do not report any specific concerns related to the senior population.
- The well site has a permanent generator.
- The town has several culverts that are in the design phase of reconstruction. The town is working with CRCOG on this. CIRCA will follow up with town staff to get a list of the specific culverts in question.

Follow-Up

- The HMP Coordinator will be Rich Cop
- Within the text of the Berlin municipal annex, CIRCA will replace “Everbridge” with “CivicReady”
- Within the text of the Berlin municipal annex, CIRCA will correct the number of underground storage tanks (four, not three).
- CIRCA will share meeting notes and slides with Rich to share with the group.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Bloomfield

Date: August 7th, 2023

Time: 1 pm

Location: Remote

Attendees			
David Murphy	CIRCA	Justin LaFountain	Bloomfield Director of Building and Land Use
Mary Buchanan	CIRCA	Philip Schenck	Bloomfield Interim Town Manager
Jon Colman	Bloomfield Assistant Director of Building and Land Use	Dan Carter	Bloomfield Public Works Director
Paul Hammick	Bloomfield Police Chief		

Overview

CRCOG and CIRCA attended a meeting with Bloomfield to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Bloomfield and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Bloomfield’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Bloomfield’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Bloomfield 2019-2024	Notes	Current Status
18	Perform a town-wide drainage study to identify and prioritize stormwater drainage system improvement and replacement needs.	The town has an outdated drainage study from 1977. Public Works floated a proposal during the last fiscal year to update this study, but the town council did not have adequate funds to support it. Carry forward.	Carry forward.
3	Review maps of flood risk associated with failure of the Hartford Flood Control System and determine needs for additional education or action.	<p>The needs in this area include ongoing maintenance (for example, mowing) and renewing appropriate leases. The town does not have maintenance responsibility for the flood control structures and outlet structures. The public often uses these areas as open space providing passive recreation opportunities, so the town would like to maintain these areas as viable usable open space for residents. The town has tried to get changes made to the long-term leases during the renewal process but has encountered delays with DEEP and the Attorney General's office and the other bureaucratic steps of this process. So updating the leases to include changes to maintenance and changes in use has been a challenge. The initial leases reinforced the idea that these areas should be mowed annually; the town would like to change this. Town staff suggest revising action to be "continue coordination with the state of Connecticut regarding updating the leasing and maintenance of these properties." The town staff reports that the state may not be providing enough resources to maintain these areas adequately.</p> <p>David's recommendation appeared to have general concurrence: Develop one action related to risk communication (consistent with the three actions from 2019), one new action related to leasing, and one new action related to maintenance.</p>	Carry forward with revisions
1	Provide information about the risks of living near the Flood Control System to individuals considering purchasing property in that area.	See above.	Carry forward with revisions – see above

11	Conduct public outreach and education campaign to residents living near the Flood Control System about the risks of living in that area.	See above.	Carry forward with revisions – see above
5	Conduct public outreach and a cost-benefit analysis to determine a preferred flood mitigation measure (from those determined through previous studies) to implement at the library.	Regarding the library: A referendum approval in Nov 2021 authorized funding for a new library and the Building Committee moved ahead. The project was put out to bid and the bids came in a few weeks ago at about \$10 million over the previous cost estimate. There is an upcoming meeting in August 2023 which may provide more direction for how the town will move forward. Regarding the sources of flooding: there have been improvements made to Filley Pond north of the library, and this has reportedly helped to mitigate some of the flooding potential downstream in front of the library, which was one of the major flooding concerns. This work included removing a dam, installing a fishway, dredging Filley Pond, and putting rip-rap and supporting material around the edge of the pond.	Carry forward with revisions?
21	Develop an ordinance related to maintenance of and removal of debris from stream channels on private property. The ordinance should consider the importance of large woody debris in streams to the health of the river habitat.	The town staff is not aware of any ordinance related to this. Town staff report that debris is not a big challenge, and they will work with property owners on this as needed. Refer to the next action (below) for more about interacting with the public about flooding.	No longer a need/Retire action
16	Complete a public campaign to educate property owners about the importance of maintaining and clearing debris from stream channels. The campaign should result in permanently available educational materials, such as through links on the Town website. The campaign should consider the importance of large woody debris in streams to the health of the river habitat.	There is a lot of concern related to flooding in town, and so any information that can be pushed out to property owners would be helpful. Some property owners are reporting flooding on their properties/basements that has increased in recent years. Nevertheless, a public education program has not been developed regarding debris removal, or regarding flooding in general.	Carry forward with revisions to indicate role of the Department of Communication in communicating flood risks townwide
10	Develop a simple guide for property owners laying out whether or not they should remove debris from their streams, and providing contacts for contractors that can assist them.	As suggested above, nothing has been done on this. There is now a department of communication in the town, so there is renewed likelihood that this could be done. Revise to indicate department of communication's role.	Carry forward with revisions to indicate role of the Department of Communication

13	Identify funding sources and personnel to complete an urban tree canopy inventory and study.	The town has funded a consultant to do a study in the rights-of-way. This will be done by the time this plan is adopted.	Complete / Retire
19	Increase budget for tree maintenance and urban forestry.	There was a nominal increase. The conservation and energy committee along with the Bloomfield Beautification Committee has a tree planting program that has planted approximately 100 trees in areas with little tree canopy. This is a capability.	Capability / Retire
23	Identify site for debris storage. Purchase a bucket truck for tree trimming and maintenance.	One of the state flood control areas was utilized for debris storage in 2011. In more recent years there have been a few additional areas considered for storage. The town does have many options of open space, even though they are not explicitly listed in the plan. The intent has been met on this action.	Intent has been met / Retire
4	Assess vulnerable population disaster preparedness and emergency assistance protocol to identify opportunities for improvement.	The town has a designated emergency shelter in one of the middle schools with cots, food service, and generator. The senior center is also very active and has many connections to the senior residents in the town. The senior center (330 Park Avenue) is used as heating/cooling center as well. The senior center does not have a generator – add an action for this.	Capability / Retire
6	Replace Police Department emergency generator.	Complete.	Complete / Retire
7	Upgrade or supplement Public Works emergency generator to expand its backup power capacity.	In 2020 there was a Public Works facility renovation, including a new larger-capacity generator.	Complete / Retire
8	Improve/replace existing Town communication system in favor of one that is more reliable and has better coverage during storm events. Implement 2020-2021.	This is complete; the town is reportedly now participating in the state's communication system.	Complete / Retire
17	Conduct annual outreach campaign to educate residents on signing up for emergency alerts, building and maintaining disaster plans and kits, and improving their disaster readiness.	The town has an outreach campaign related to encouraging residents to sign up for CodeRed system, plus the CRCOG Everbridge system. Both of these notification systems are in place, so this is a capability.	Capability / Retire
12	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	The town is compliant with MS4. The town does not make much use of outside resources. The town staff would like to carry this forward.	Carry forward with revision to update available resources.

15	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	CIRCA will list MDC facilities in the Bloomfield annex in this HMP update. Whenever there is an extreme weather event predicted, Bloomfield participates in the MDC preparation meetings. Bloomfield also participates in their training exercises.	Complete with this plan / Retire
20	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	This needs to be carried forward for FEMA requirements. Town staff note that it is an arduous process to get FEMA funds, and it can take years to get funds back for emergency activities.	Carry forward
9	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff are not aware of anything that's been done on this. The related DEEP program has ended. Replace this action with having town staff watch the DEEP webinar.	Carry forward with revisions to watch the DEEP training webinar
14	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	The town has various operations plans that get activated depending on circumstance. Town staff say to keep this action, especially given that there will be more staff turnover in the future.	Carry forward
22	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Nothing has yet been done related to this. There is a push to have a Historic Commission, so the town staff would like to keep this action.	Carry forward
2	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	The town joined and were certified in 2019, and then the certification lapsed last year. The town is working to restore the certification, so would like to keep this action.	Carry forward (perhaps with revisions to reflect the recent history).

Critical Facilities



- Middle school is the emergency shelter (Carmen Arace Middle School). This is used if there are any overnight sheltering needs.
- The senior center (330 Park Avenue) is used as the heating/cooling center.
 - The senior center does not have a generator – add an action for this.

Development and Redevelopment

- Bloomfield has had a lot of apartment development as well as some industrial development. Huge influx of apartments in the past 5-6 years, in the downtown area (Jolley Drive), and the town is still getting applications for new development.
- Industrial development includes a warehouse that is currently on hold but will likely go through.
- Not much commercial development or single-family development.
 - These are near, but not in, floodplains.

Recent Events

- Bloomfield did experience flooding during the 2021 storms. Town staff note that smaller unnamed intense events that occur over a short amount of time are resulting in flooding, sometimes as much as the larger named events.
- The town previously experienced communication issues with Eversource in 2020, but this has significantly improved in the last few years since Eversource rolled out its municipal hub.
- No concerns related to drought. The domestic water service is through MDC.
- The town has more RL properties now than in the previous update. Town staff are interested in seeing this list. Town staff are also interested in learning how much the claims were for.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Bloomfield.

- Increased precipitation / associated drainage-related flooding within the town.
 - Town staff report that they will likely be able to identify where problem areas are (see first row in action table above), but are not sure they'll have funding to fix the problems once identified.
- Some of the drainage problems in the town are in the denser areas of older housing built before many land use regulations were in place.
- The town-owned golf course (Wintonbury Hills) depends on a reservoir for irrigation. When the reservoir gets low, the town is unable to pump for irrigation supply. Going forward this may be a more frequent concern.
- There is some agriculture in town. Farmers have reported that this year has been particularly tough because of how much rain has occurred. Town staff report that climate change is definitely affecting agriculture.

Follow-Up

- The HMP Coordinator will be Justin LaFountain.
- CIRCA will send the HMP press release to irodgers@bloomfieldct.org
- CIRCA will share the Repetitive Loss payments summary table along with the notes from this meeting.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Bolton

Date: May 25th, 2023

Time: 1:00 pm

Location: Virtual via WebEx

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Jon Treat	DPW Maintainer III	Rich McKinnon	Chief Building Official/Land Use Department Head
John Butrymovich	Building and Grounds Supervisor		
Jim Rupert	Town administrator		

Overview

CRCOG and CIRCA attended a meeting with the Bolton to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to the Bolton and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary emphasized that CIRCA is identifying projects to bring onto the State’s resilience project pipeline and described how some communities have been able to use this pipeline concept to address unmet needs and advance long-desired projects as well as addressing new/emerging concerns. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed the Bolton prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about the Bolton needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Bolton 2019-2024	Notes	Current Status
1	Consider and document the labor resource needs and benefits of participation in the Sustainable CT program.	Complete. The town joined Sustainable CT in 2020	Completed/retire
2	Assess vulnerable population disaster preparedness and emergency assistance protocol to identify opportunities for improvement.	Happens on an ongoing basis. Capability. Retire	Intent is Completed/retire
3	Develop informal arrangements with private contractors for emergency tree/debris removal and evaluate these arrangements on an annual basis.	Have had some conversations. Have this under control. When the town is expecting a heavy storm with tree damage, they have a relationship with tree care vendors and get them on the schedule to be out here before the storm hits. Retire	Intent is Completed/retire
4	Adopt a regular maintenance schedule for keeping drainageways and drainage structures clear, especially following flood events.	Before or after every rain town staff check drainageways and make sure everything is clear. This regular maintenance is a capability. Retire.	Completed/retire
5	Monitor and maintain drainage and flood control systems through the completion of annual inspections.	Town staff asked how much of this monitoring/maintenance happens when completing the MS4 paperwork every year, as the town is on track with its MS4 requirements. Will check on but likely a capability. Retire	Intent is Completed/retire
6	Update Everbridge system participant list and perform tests on an annual basis.	The town has an Everbridge system (separate from CTAlert), which is used multiple times a year. They do not perform tests, but because they use it regularly they are sure it is working; the town employees use it themselves. At regular intervals, the town reminds residents that they have this system and to sign up. Retire.	Intent is Completed/retire
7	Develop and implement a tree trimming program for Bolton Notch to reduce fuel loads for wildfires, in addition to building a fire break for this area.	The town has been working with Eversource since this last year to do a lot of cutting in this area, focusing on vegetation in and around power lines. The primary goal here is	Carry Forward with Revisions

		to reduce power outages from vegetation falling on the power lines, with less of a focus on fire management. But they have had two wildfire events there. The terrain is very difficult but DEEP is reportedly resistant to removing trees. This property is owned by DEEP, which limits directly undertaking Town actions. There is a large rock with an American Flag painted and attendees believe that people would prefer some visibility from the Greenway, which would require more tree trimming. Have taken the trimming as far as they can given DEEP ownership. Keep but rewrite. This is an ongoing area of interest for the town/still an area of concern.	
8	Implement the recommended improvements as identified in the plan to power residential grinder pumps during prolonged power outages.	A plan is in place and grinder pumps have been powered multiple times. The town staff don't believe further improvements are needed. Capability/retired.	Completed/retire
9	Develop and implement, in conjunction with DEEP and DOT, a solution for the Notch Pond Dam issues and address silting of Notch Pond to reduce flood risks and provide a possible firefighting water supply.	This dam is owned by DEEP. DEEP wants to transfer ownership of the dam to the Town of Bolton, but town staff are concerned about the state of the dam and whether they would be in violation of DEEP standards once they owned it. Not much movement here. They would like DEEP to clean/maintain the dam more than the present level of maintenance. Keep	Carry Forward
10	Make information about available assistance for property acquisition or relocation available at Town Hall and on the Town website	Town staff can't think of any properties in Bolton that are built in a flood plain. New construction is not permitted in a flood plain. One neighborhood has a private bridge that is vulnerable and washed away. No house has complained of flooding	No longer needed/retire

		issues. Look into but likely retire	
11	Develop written protocols for optimal communications with new gas company.	The company in question is CT Natural Gas. The town regularly communicates with CT Natural Gas with no issue. Their contacts have been added to dispatch center so during emergencies they are easy to communicate with. Complete.	Complete/retire
12	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	The LEPC reportedly reviews manufacturing with hazardous chemicals. Retire.	Complete/retire
13	Conduct a review of the Everbridge system and conduct a test to ensure its effectiveness.	This was covered in Action 6. Capability/retire.	Complete/retire
14	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Bolton's MS4 is all set and they do not need further coordination here. Complete	Complete/retire
15	Pursue agreement with landowner of the small private pond that is a good location for a dry hydrant to install a dry hydrant at that site.	Complete. The dry hydrant went in two years ago.	Complete/retire
16	Work with the local electric utility (Eversource) to identify opportunities for improving the resilience of the power grid through tree trimming, hardening, burial, and response training	This is ongoing. Trimming 21 miles of road this year. Bolton has also had a very robust tree trimming budget. Bolton has been hit hard with the Emerald Ash Borer. Bolton has been ahead of the game with tree trimming so will begin to cut their budget. \$50,000 a year was being spent on tree trimming. Capability/Retired.	Complete/retire
17	Educate private property owners on how to properly maintain culverts, spillways, and other drainageways to prevent obstructions, especially as related to beaver activity.	Not much has been done with the education focus of this action. The town does work to manage beaver activity. The town has put some effort into trying to educate individuals but reportedly does not get a lot of cooperation. Combine/rewrite the beaver actions.	Carry forward with Revisions
18	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff does not consistently attend the conference by the Association of CT Flood	Intent is completed/retire.

		Managers, but the flood manger does participate in ongoing training. Retire.	
19	Conduct public outreach on the safe operation of generators, including posting information to the town's website, and enhance permit enforcement for the correct installation of generators.	This happens regularly and is an ongoing concern. The town has not had any deaths or carbon monoxide poisonings but they have still seen generators operating in people's garages. Anytime the town is expecting outages, the town distributes generator safety information. There are always new people moving into town, so education needs to be ongoing work. Keep because it is a concern but revise because the public outreach piece is well-handled.	Carry Forward
20	Develop a beaver monitoring and management program to address damming issues, specifically at Notch Pond Dam and Sperry Pond Dam.	Observe and take action when necessary. The Notch Dam is operated by DEEP and the Sperry Pond is owned privately. When they are clogged, the town communicates with DEEP/homeowner that the Dam needs to be cleaned. The town prefers to trap beavers but this is not always possible. The town has a beaver prevention structure at one site that requires maintenance (Follow-up research suggests that this structure is at Deming Road Culvert). Keep the action but combine with 17. Revise to reflect the ownership issues for Notch Pond and Sperry Pond.	Carry Forward with Revisions
21	Review the Low Impact Development (LID) Regulations periodically and update as needed. Utilize the LID Manual developed by the Northwest Hills Council of Governments.	Ongoing by planning and zoning commission. Capability/retire	Completed/retire
22	Study Lyman Road culvert associated with Blackledge River and recommend improvements.	The town recently completed an inspection of the culverts and has an engineered plan to replace it. The remaining challenge is funding the project. Rewrite to implement.	

23	Conduct a study of the Hop River downstream of the Johnson Road culvert/dam to determine the feasibility and effectiveness of upsizing culverts to prevent flooding of private lands.	The town staff are not aware of any progress on this item, but it is still a goal. Carry forward. Keep	
24	Coordinate with CT SHPO to conduct additional historic resource surveys to support identification of vulnerable historic resources and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide CT SHPO initiative.	Rewrite. New action should be similar to "acquire the new SHPO GIS layer and review Bolton properties included in this inventory to identify vulnerable properties"	
25	Conduct a wildfire vulnerability and needs assessment to guide mitigation actions in the northwest corner of Town, near Bolton Notch and Freja Park.	Addressed this with their earlier comments related to the tree trimming.	
26	Develop a scope of work document to implement any actions recommended by the Hop River/Johnson Road culvert/dam flood mitigation study.	This study hasn't happened yet, but this is still a goal for the town. Keep and perhaps move next to Action 23.	
27	Implement improvements recommended in above Lyman Road study. Because this is expected to be a long term, multi-year project, the action to be taken is to develop a scope of work for implementing the recommended improvements.	The town has the scope of work defined and are putting funds aside so they can afford to do it. The town is putting aside money from their capital fund. Combine with action 22. Keep and revise to indicate that the project has progressed past the scope of work stage.	
28	Conduct an evaluation to identify specific opportunities to update and/or underground transmission lines.	The town has discussed this possibility with Eversource, but Eversource is resistant due to the expense. Retire.	

Critical Facilities

- Primary shelter - Bolton High School
- Secondary Shelter – Herrick Park, which is also the pet friendly shelter
- Town hall, library, senior center – cooling centers
 - Only the Town hall has a generator.
 - Perhaps add new actions to provide generators to the other facilities.

Development and Redevelopment

- No significant development in Bolton since 2019

Recent Events

- Isaias was one of the most impactful events that they have had in many years

- At one point 90% of the town was out of power.
- Lots of tree damage occurred, and the Town had to put debris management protocol in place.
- Had impacts for about 5 months
- The droughts didn't affect Bolton too much – most people are on wells. The water table is reportedly very high. They did have a handful of well failures but those were mostly old, dug wells. The folks impacted by those issues worked closely with the health department to address the specific problems. The farmers in town were not significantly impacted.
- Not aware of any repetitive loss properties. CIRCA will get list from CRCOG. If you didn't have a rep. loss action from last time it's likely that repetitive loss properties are not located in Bolton.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Bolton.

- Mark Anthony Lane (private road) with private bridge that was washed out during Isaias. (Updated note: This might have been during Henri, according to a Journal Inquirer article about the washout.) The bridge has been replaced but not certified. This bridge is the access point for 7-8 houses. The town cannot access these houses with a firetruck because the bridge isn't certified for a firetruck to cross it. It's possible to get a pick-up truck over the bridge but it's a challenge. Town staff are concerned about the ability to access this neighborhood with emergency vehicles during an emergency.
- Bolton Pond Brook flooded and is the outfall from Lower Bolton Lake which has a dam controlled by DEEP.
 - Whoever is in control of that dam may be able to be part of the solution. The watershed area from the Lower Bolton Lake is tremendous.
 - New action to reflect this neighborhood concern and the significance of Lower Bolton Lake – open dialogue with DEEP to open the dam when severe rainfalls occur to prevent some of the flooding.
- A homeowner's association reportedly owns a dam on Tinker Pond Road. There appears to be some small leaking in the Dam and if not addressed, there could be a dam failure. The town staff are concerned about what would happen downstream in the event of a dam failure.
- The town staff have noticed multiple extreme and sudden weather events, and think that this is a primary climate concern for the town.
- Attendees do not observe much use of cooling centers. Not much concern about extreme heat reported.
- On-going project to identify vulnerable populations through senior center, tax collector, and fire. Town will call the folks and check on them to make sure that they have water, if they need transportation, etc. – they know everyone and believe that they can take those tasks on.

Follow-Up

- The HMP Coordinator will be Patrice Carson

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Canton

Date: June 23rd, 2023

Time: 10:00 am

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Chris Arciero	Canton Police and Emergency Management Director

Overview

CRCOG and CIRCA attended a meeting with Canton to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Canton and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Canton’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Canton’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Canton 2019-2024	Notes	Current Status
6	Receive and file current dam failure analysis and EAP for all upstream MDC reservoirs.	The town has all the EAPs.	Complete / Retire

11	Conduct an assessment of the Farmington River and Nepaug River to identify possible flood mitigation activities in this area.	Modify or remove this – not a lot of development has happened along the river. David noted that new FEMA maps are forthcoming for the Farmington River basin, so the Town will be reviewing changes in the maps in 2023.	No longer a need / Retire
2	Conduct outreach and education campaign to residents and property owners downstream of large dams (Goodwin, Nepaug, and Barkhamsted) about risks and emergency alert systems. Work with MDC if possible.	While the dams mentioned in this action are closely monitored by MDC and have been subject to periodic EAP updates and drills, only one (Goodwin) was subject to a drill in 2023. Meanwhile, the owners of the two dams in Collinsville on the Farmington River are in Austria, and Chris worries about the ability to get in touch with them quickly in the event of a catastrophic breach. They are not part of this action, but the Town remains concerned. The outreach to residents part of this action has likely not been done.	Carry forward
10	Conduct annual exercise with MDC that specifically includes the Nepaug and Barkhamsted Reservoir dams.	There has previously been an annual training related to the Goodwin Dam, although this was not held this year. Trainings for Saville/Barkhamsted and Nepaug have not been held, but Chris thinks these dams would be more relevant to the town of Canton. Revise this action to encompass more dams while ensuring that Nepaug and Barkhamsted are included.	Carry forward with revisions
12	Complete relocation of Town Garage outside of flood zone.	The current Town Garage building is less than 5 years old and is still next to the river. Chris thinks this is unlikely to be relocated. The building may have been floodproofed during its reconstruction, but this needs to be checked.	No longer a need / Retire
13	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Still needed	Carry forward
15	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Still needed	Carry forward
8	Approach homeowners in Dowd's Corner, in particular on Old Canton Road, to offer assistance if they are interested in property acquisition.	Chris is not aware of any progress on this. Neil Pade might know – follow up.	Follow up with Neil.

5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Chris is not aware of any progress on this. Neil Pade might know – follow up.	Follow up with Neil.
3	Complete a study of existing municipal communication capabilities to determine opportunities for building resilience into the system.	The money is in place and a vendor has been identified. This will be complete within the next year, and can be listed as complete because this plan will be adopted in mid-2024.	Complete / Retire
4	Acquire updated radio communication equipment for municipal departments to use for emergency response.	Same as previous action.	Complete / Retire
7	Coordinate with NEMO and CROCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Chris isn't aware of NOT being in compliance with MS4, but doesn't want to definitively say the town is in compliance. Check with Public Works Director Robert Martin.	Follow up with Robert Martin.
14	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Neil Pade might know – follow up.	Follow up with Neil Pade.
9	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Chris just went to the Silver Jackets Flood Awareness. When the Goodwin Dam training is held, Chris attends that as well. The intent of this action is being met.	Intent is complete / Retire
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Chris doesn't know whether the town is part of Sustainable CT. CIRCA	Check on this

Critical Facilities

- The town is building a new fire department right next to the police department, where there used to be a softball field. Separate generators will be used, but might be a good place for a microgrid because five critical facilities are reportedly (fire, police, community center, town hall, DPW) in a cluster.
 - Let's include an action about microgrids in case funding becomes available.
 - CIRCA staff follow-up: It looks like the town hall is actually located in Collinsville, whereas the police/fire/community center cluster is more north. Let's ask for clarification.
- The shelter is co-located at the community center. There is no true showering capability facility at this shower, so people have to be bussed to the recreation center. However, the recreation

center is not open in the winter. The town has previously asked for funding to turn two un-used rooms into ADA-compliant showering facilities. This would be less than \$75,000. Let's add an action related to this.

- The cooling center is the town library / community center. People can also come to the police station if needed.
- All the buildings have generators, although Chris would like to see updated generators at the schools so that the entire buildings can be powered if needed.
- Canton residents are reportedly self-sufficient.

Development and Redevelopment

- A large residential complex on Rt 44 and 179 has been completed. The address is
 - 5 Cherry Brook Road
- Another complex has been constructed on Rt 44 near the community center, near Daynard.
- Large residential complex in progress on Old Canton Road, although Chris thinks it's further east than the part of this road that experiences flooding.
- Another development on Lawton Road.
- Another development is being discussed for Dowd's Corner.
- CIRCA will reach out to Neil for a list of recent and upcoming developments

Recent Events

- T.S. Isaias – the town experienced power outages, and has since worked with Eversource to discuss how they assign and deploy their recovery liaison. Not a lot of flooding occurred. A lot of tree trimming has occurred since 2020, although Chris notes that this mostly involves trimming branches rather than cutting down whole trees, so this needs to be repeated often.
- Flashy droughts of 2020 and 2022 – not much to report from Chris for this.
- 2021 floods from the tropical systems – some basements needed to be pumped

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Canton.

- Flooding is always a concern
- Trees on the power lines is a concern
- There are a lot of redundancies built into the upstream dam systems to avoid catastrophic events
 - A lot of work was done on a dam on West Street (?) – let's look into this further
- Chris thinks the heat risks are well handled by the community center and police department.

Follow-Up

- The HMP Coordinator will be Chris.
- CIRCA will reach out to additional town staff (Neil Pade and Robert Martin) for more information.
- Local emergency operations plan (LEOP) submitted to DEMHS – this gets updated every two years. The town is currently working on one that allows them to get a reimbursement, although the changes in format are reportedly more cosmetic than content-related.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Columbia

Date: June 21st, 2023

Time: 1:00 pm

Location: In-person at town hall

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Maureen Goulet	CRCOG	Jerry James	Columbia Emergency Management Director
Mark Walters	Columbia Town Administrator	Beth Lunt	Columbia Public Works Director
John Guskowski	Columbia Town Planner	Dan Johnson	Columbia Facilities Maintainer

Overview

CRCOG and CIRCA attended a meeting with Columbia to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Columbia and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Columbia’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Columbia’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Columbia 2019-2024	Notes	Current Status
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4	Install bypass culverts and perform culvert repairs and replacements on the Hop River, as described in the permits granted by the USACE.	Town staff said the bridge on Hop River Road is being replaced now. Coventry is the lead town on the replacement. The project will start in Spring 2024. There will also be a dry hydrant added at the Hop River Bridge at the bridge for Columbia and Coventry. Revise to "Complete the bridge repair project on Hop River Road."	Carry Forward with Revisions
8	Progress through planning phase for drainage system upgrade at Parker Bridge Road. Road should be elevated with cross culverts to mitigate against flooding.	Town staff said this is an issue but nothing has been done. The road leading up to the bridge floods. The funding is an obstacle here. Might break this action up into more achievable action. The town's proposed temporary solution is to put road closure gates to block the road near the bridge, but it does not sound like they have implemented this yet.	Carry Forward with Revisions
9	Replace culvert pipe and perform basin retrofit, if necessary, at Macht Road.	This is on the town's list of culverts that need to be repaired but nothing has been completed yet. When replacing culverts, the Town does a hydraulic analysis on the culverts to see whether they need to be upsized or not. This culvert is near Cherry Valley Rd area. There is also a culvert on Edgerton Rd that is of concern and might need to be replaced. Include this culvert in an action or have a separate action for it.	Carry Forward with Revisions
10	Complete drainage upgrade on Hennequin Road: upgrade/retrofit all culverts on the west side of Hennequin Road, from Recreation Park to Lake Road.	Town staff said this is in progress.	Intent is complete/Remove
2	Identify location for secondary access to Island Woods Subdivision and prepare and file map of proposed street in the office of the town clerk in accordance with CT General Statute Section 8-29.	Town staff said this is an ongoing concern, but the town has not yet come up with a solid solution. One of the previous properties being considered for secondary access has recently been sold and will be developed into a house	Carry Forward

		instead. This could be a land locked area in a storm if a tree falls; one road provides access and if it was blocked off by a fallen tree, there would be hundreds of houses without emergency access. This is high priority for the town.	
7	Review the LID Manual developed by the Northwest Hills Council of Governments and determine whether LID can be incorporated locally to increase rural resiliency.	Town staff said they would like to revisit this. LID is incorporated in subdivision regulations and zoning regulations. Town would like to look to continue to make regulatory adjustments so this action should be revised.	Carry Forward with Revisions
3	Assess vulnerable population disaster preparedness and emergency assistance protocol to identify opportunities for improvement.	Town staff is constantly updating the vulnerable population list via the senior center and social services. The town now has a full-time social worker who is charged with creating lists of people in need and that list is made available to Fire/Emergency management. This is an ongoing capability for the town.	Complete/Capability/Retire
11	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	CIRCA will check to see if Columbia has RLP. Town staff said the package store on Route 66 East might be the RLP referenced on the past FEMA list (which only listed one RL property for Columbia), as the parking lot has flooded from Hop River.	Carry Forward
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said this is not a concern for the town. There is one business in town which is a pool service, Calypso Blue, but town staff are confident that they have their chemicals stored properly.	No Longer needed/Retire
12	Increase the annual-budget for preventative tree maintenance.	Town staff said the annual tree maintenance budget went from \$10,000 - \$100,000 in the last three years. Town is actively removing dead trees.	Complete/Retire

		Would like a new action related to tree management.	
14	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Revise to "Acquire SHPO point data and overlay with flood vulnerability layers and review." Town staff mentioned there are some members of town who are concerned about historic buildings. SHPO granted a CT Historical Preserve title for the mill site on Hop River. Another culvert is on hold because SHPO is doing an analysis related to historic resource significance.	Carry Forward with Revisions
13	Distribute informational materials regarding emergency preparedness through social media and the Town magazine.	Town staff lets residents know when an event is about to occur. Before a natural disaster, there is a warning banner on the website about what needs to be done. Have materials from Eversource that residents can pick up from the town hall. This is a capability.	Complete/Capability/Retire
6	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff have not completed this but don't believe it is needed, as very few properties are in areas of flood risk.	No Longer Needed/Retire
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town staff started this before Covid but haven't completed any applications. However, they are still interested in getting certified from SCT.	Carry Forward

Critical Facilities

- New DPW building is being built but it is not in high-risk area.
- Primary Shelter - Middle School which has a generator. Has air conditioning in library and administrative offices.
- Cooling centers:
 - Senior center. The town is in the process of getting a generator for the senior center using ARPA money. HVAC update is also happening at the senior center so it will have fully functional AC.
 - Library. The library does not have a generator. Town staff said that getting a separate generator for the library could be an action and also suggested that connecting the Library to the Town Hall generator might also be an option. The library is located very

close to the town hall, and town staff believe that the town hall generator would be able to power both buildings if the library was connected.

- Town Hall. Has a generator and AC.

Development and Redevelopment

- No new development along the Hop River, which is the main vulnerable area in the town.

Recent Events

- The most significant recent event for the town was Ida in 2021, which led to major flooding in the town. There were two road washouts.
 - Pine Street flooded. The town had an engineer look at the culvert and it was found to be undersized and consisted of two corrugated metal culverts. The town would like to put in a box culvert and would like to have this funded with hazard mitigation funding; therefore, an action should be added to reflect this need. Mark shared the engineering report with Nicole, and the following quote is taken directly from the engineering report: “The twin 60 in diameter CMP are in poor conditions. There is a major section loss to the culvert barrels primarily along the water line but is present in various areas throughout the culvert. The asphaltic coating is also missing along the waterline and deteriorated throughout the entirety of the culvert barrels.”
 - Thompson Hill road also flooded but this culvert hasn’t been looked at it by engineers so they town is unsure if it was clogged or if the culvert is undersized. This culvert should be included in an action in the HMP table.
 - The other storms in 2021 were not as significant for Columbia as Ida.
- Small power outages occurred during the 2020 and 2021 storms but nothing major. Flooding was the main concern.
- Flashy droughts were not an issue, as the town did not hear of any residents’ wells going dry.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Columbia.

- Parker Bridge Rd is another area of concern for the town. The road is at or below the water table and floods. The town is unsure of how to remedy the flooding here.
- The town is worried about the access to the Island Woods Subdivision (which is already referenced in action 2 of the table). The concern for road obstruction is trees falling, not flooding.
- Town staff mentioned that the drainage infrastructure is a concern as it was designed for 25-year floods and with more intense and frequent rain events, the drainage systems are not adequate.
- The town mentioned they would like an analysis of the inflow to Columbia Lake.

Follow-Up

- Town Staff mentioned there will be a pedestrian walkway behind The Main Moose on King Road.
- Town staff mentioned that a culvert on Flander’s Road is being expanded to a walking culvert and will be large enough to be drivable by a truck. The state is carrying out this project.
- The town has set aside \$200,000 to engineer the most problematic culverts, but has not yet determined which culverts will be addressed first with these funds.
- The HMP Coordinator will be Jennifer LaVoie

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Coventry

Date: June 29th, 2023

Time: 1:00 pm

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Eric Trott	Coventry Director of Planning and Development	Tim Brennan	Coventry Building Official
John Elsesser	Coventry Town Manager	Bill Watkins	Coventry Director of Public Works

Overview

CRCOG and CIRCA attended a meeting with Coventry to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Coventry and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Coventry’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Coventry’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Coventry 2019-2024	Notes	Current Status
11	Replace culvert at Jones Crossing over Clark Brook, which drains to the Willimantic River.	Town staff said this is complete.	Complete/Retire

12	Complete improvements to the DeCew Dam park property, considering dam safety.	Town staff said not a lot has been completed. Carry forward	Carry Forward
13	Increase funding to identify and address bridge scour problems.	Town staff said they have made progress and completed the intent of this action, which was to identify and address.	Complete/Retire
3	Develop a process, to be built into DPW operations, to identify, evaluate, and address bridges with scour problems.	Town staff said they have made progress. Have done a bunch of bridge replacements and have grants for 5 bridge replacement in the near futures. When a bridge is replaced, they meet new standards and address scour. See action above. CIRCA will get a list of bridges from town	Complete/Retire
27	Determine whether it is more preferable or cost effective to replace the culvert on Pucker Street that is contributing to flooding of hay and cornfields or to acquire the at-risk land.	Town staff said this culvert goes under Pucker St and emerges from a stone wall. Attendees said this needs some work.	Carry forward
1	Work with FEMA to map the Mill Brook floodplain in Coventry Village.	Town staff said they have asked FEMA for detailed mapping but this has not been done. David noted that updates are underway for the Thames River basin so it's possible this is coming in the next few years.	Carry Forward
32	Acquire the Schmidt and Streude-Decew parcels, which are flood-prone.	Town staff said that they acquired the Schmidt property which is now open space for the land trust. Town also acquired DeCew but not Streude. Revise to leave Streude on.	Carry Forward with Revisions
5	Develop a prioritized list of needed road improvements around the lake area where flash flooding is an issue.	Town staff said they are doing this this year. Improving a lot of roads and drainage. The intent of this action has been met. Revise to continue efforts on this.	Carry Forward with revisions
8	Complete the stormwater collection system improvements along Mill Stream in Coventry Village.	Town staff said a lot of this has been completed. Worked with DOT on Route 31 curve project.	Complete/Retire
23	Apply for State and Federal funding for drainage improvements to the intersection of South Street, Swamp Road, and Swamp Road Extension.	Town staff have a preliminary plan and grants for this. This is underway with construction scheduled for next summer. Carry forward to be constructed	Carry forward with revisions or complete/retire
4	Complete an inventory and vulnerability analysis of trees along municipal rights-of-way (ROW), with a particular focus on tree death due to invasive pests and blight.	Town staff said an inventory and analysis was not completed, but this is no longer needed because the Town is judiciously trimming as needed.	No longer needed/Retire
2	Develop a dry hydrant maintenance plan to guide hydrant cleaning, dredging, and replacement.	Town staff said they try to install one dry hydrant a year and conduct annual maintenance.	Complete/Retire

18	Conduct a wildfire vulnerability and needs assessment to guide construction of additional dry hydrants and/or cisterns.	Town staff said that the intent of this action is complete and they are installing dry hydrants as needed.	Complete/Retire
10	Construct a water tower or cistern to serve Coventry Village to improve firefighting capacity in that area.	Town staff have received funding but carry forward to construct	Carry Forward to construction phase
20	Remove 100 to 150 hazardous trees, as identified in the hazardous tree survey completed prior to the previous HMP, over the next five years.	Town says they have removed over 500 trees this year, including about 169 in one week. New action should be broader and suggest methods of hardening the grid. Work with Eversource to modernize the electrical grid. As an example, the explained that they had 22 power outages (Silver St, South St) in a 6 month period. Eversource put in power poles, tree wire and new crossbeams and the power has not gone out since. This is a local example of success in reducing outages, and it shows the methods can be used elsewhere.	Carry Forward with Revisions to reflect methods of hardening and protecting utility lines
21	Increase funding for Right of Way tree removal.	Town staff said they have increased the funding for tree removal.	Complete/Retire
25	Acquire a forestry truck with a water tank to assist with fighting fires in areas remote from water sources.	Town staff said they have modified a truck to serve as a forestry truck	Complete/Retire
26	Acquire all-terrain firefighting trucks and open accessways to fight fires in forested areas.	Town staff have modified a different truck to be an all-terrain truck	Complete/Retire
22	Develop an Open Space Plan to guide acquisition and preservation; ensure hazard mitigation is considered in plan development.	Town staff said this is done and incorporated in the POCD.	Complete/Retire
17	Review the LID Manual developed by the Northwest Hills Council of Governments and determine whether LID can be incorporated locally to increase rural resiliency.	Town staff said this has not been done but would like to keep. Remove reference to NHCOG. David noted that the new DEEP stormwater manual is being released in 2023.	Carry Forward with Revisions
24	Upgrade all town plows to have magnesium chloride tanks.	Town staff said this is no longer needed, as the chemical has caused problems and it is not relevant to hazard reduction.	No Longer Needed/Retire
31	Complete the Regional Sheltering Plan.	Town staff said this is underway but not complete. A regional shelter would be with Mansfield and Ashford	Carry forward with revisions or complete/retire?
9	Assess the needs, and develop a cost-estimate, for retrofitting the new High School gym to ensure it is up to seismic and wind code and can be used as an emergency shelter.	Town staff said this was complete. They reinforced the walls, and put steel bracing in to reinforce the facility for the wind code. The town utilized the California earthquake code	Complete/Retire
19	Develop a plan for implementing lightning protection for the town-wide communication system.	Town staff said this is not complete but not needed.	No Longer Needed/Retire?

6	Complete upgrade of town-wide communications system.	Town staff said that public works and police joined the state radio network. This is the same network as state police with statewide coverage. Coventry is only the second town in the state to do this. The sole cost to the Town is the purchasing of the radio units.	Complete/Retire
7	Develop a micro-grid for municipal facilities around, and including, the Town Hall. Ideally the microgrid will service the high school (shelter), middle school, fire department, town hall, fueling station, and elderly housing complex.	Town staff said this is underway with the same buildings listed here.	Complete/Retire
14	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said nothing has been done here. Town would like to keep this in. CIRCA suggested revise to watch the virtual DEEP training	Carry Forward with Revisions
15	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said EMD has participated in ongoing trainings. This is a capability.	Capability/Retire
16	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff are not in MS4 since it ends at the Bolton town line.	No Longer Needed/Retire
28	Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting their properties to be more hazard-resilient while maintaining historic character.	Town staff said they have lot of historic structures in flood zones. Historic houses are in unmapped FEMA zones, but the houses have never been flooded.	No Longer Needed/Retire
30	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	See action 28. Revise to Use SHPO maps to understand the number of historic buildings in flood zones and if present, educate them on methods of retrofitting or protecting their properties.	Carry Forward with Revisions
29	Make progress with the hazard mitigation goals associated with SustainableCT certified actions.	Town staff said the town is Silver Certified.	Complete/Retire

Critical Facilities

- Shelter – high school for overnight shelter.
- Looking at a regional shelter as noted above in the table.
- If there is a small event, the town uses Mansfield Community Center
- Cooling center – Library and Senior center.
 - The library does not have a generator. Add an action to get a generator.
 - Senior center has a generator.

Development and Redevelopment

- The route 44 corridor hosts small-scale, slowly paces, incremental development.

- The town hosts a new Anaerobic digester that has used some of the farmland but will support continued farm use.
- There is no high risk areas that the town would have development in

Recent Events

- Isaias – the town had some outages.
- Flashy droughts- were worse in terms of damage in relation to the farms. Private wells were reportedly okay
- Storms of 2021 - The town lost three culverts during these storms
 - Broadway which has a temporary repair
 - Bunker Hill Rd Culvert (grant to repair this was received today)
 - South Street culvert.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Coventry.

- During the discussion about extreme heat, Town staff explained that Coventry Lake is not freezing anymore. This has emerged as a major climate-related concern.
 - Last year, the lake did not freeze and subsequently, for the first time, there was blue-green algae in the lake. The town believes that this is a negative trend. The town has therefore needed to modify its water monitoring approach and systems. They have created a community water monitoring team and are increasing education. The town is spending \$30-50 thousand on enhanced monitoring and are worried about the economic consequences of the lake quality decreasing (both property values and recreation-based economic benefits). Secchi disk visibility has decreased from seven feet to three feet. In one swim area on the lake, the on-call limologist has proposed solar powered water turbines to circulate the water. This could be used elsewhere to stir the water column. The Town may purchase one or two of these devices for about \$18,000.
 - The town recently participated in a multi-town lake study with the Upper and Lower Bolton Lakes, and the watershed for the Bolton Lakes is largely in Coventry. Algal blooms are occurring in these lakes.
 - The town is also working with the Town of Mansfield on Eagleville Lake to address water quality issues related to aquatic invasives.
 - The town has regional initiatives to create a solution. The town was not talking about these lake management issues a few years ago, but they are creating economic and budget concerns.
- Detailed FEMA flood mapping is lacking in Coventry.
- Town staff believe land invasive species such as bittersweet and Russian olive are more pervasive due to warmer temperatures, which causes a cost to the Town for addressing these.
- Town staff said the whole community is aging.

- Town staff explained that their unique sewer system is reaching capacity and some of the challenges may be climate-related.
 - The treatment system relies on infiltration basins. The town has a study now where they might add additional basins.
 - Nitrogen control is a challenge.
 - An alternative solution might be to pursue connection to Windham which is only at 30 % capacity right now.
 - The limitations are impacting affordable housing projects.
 - The system experienced its first overtopping event during an intense rain event 5-6 weeks ago; this is an example of potential climate change affecting the system.
- Agriculture is at risk. The town has lost two dairy farms. Coventry has a large dairy farm where the main owner is aging. Town staff are worried about losing this farm.
- water supply concerns are varied.
 - PFAS is an emerging issue for private wells and Connecticut Water Company.
 - The town has 5 contaminated private wells due to winter icing, and Connecticut Water Company might extend a water main to these properties.
 - The town reported that CT Water Company has indicated that PFAS issues may emerge in its public water supplies.
 - The town received funding through the CT Drinking Water Assistance Program to start addressing some challenges.

David attempted to frame the top three climate related challenges and attendees reported that they are:

1. Lake-related challenges
2. Trees and power outages that can be addressed through hardening as they have observed
3. Stream crossings and stormwater management.
 - Crossings are being addressed when able. The DEEP Climate Resilience Fund grant (not awarded) would have helped identify others.
 - The town would like more vortech units under the metal grates under stormwater system. This can be a new action.

Additional information, Capabilities, and Successes

- The town is poised to receive a \$1.2 million BRIC grant for a microgrid and a \$4-million DEEP grant for the microgrid as well.
- Federal grant coming from Congressman Courtney for \$1.2 million dollar water tower which will be built in conjunction with Connecticut Water Company who will own it.
- The town submitted a grant to DCRF (mentioned above) which the town did not get.
- The town received a grant to repair the Bunker Hill Rd Culvert.
- The town received funding for nine EV charging stations and two are installed
- Coventry is rated 5 or 6 on the BCEGS rating, which demonstrates that the Town has a high capacity for building code administration. Coventry also has an ISO rating for fire of 3 or 4. These lowers homeowners insurance rates.
- The 2019 edition of this HMP was directly incorporated into Coventry's most recent POCD.

- Regarding the CIRCA Heat CCVI, the town staff said North Coventry is the largest area of impervious surfaces and development along Route 44. The town would expect a little more darkness around Coventry Village with a fair number of impervious surfaces.
- Regarding to the CIRCA Flood CCVI, the town mentioned that there are many unmapped FEMA areas which may not be picked up in the methodology.
- Attendees noted that Mansfield reportedly has the least earthquake risk in the state and that is why the state EOC was located in Mansfield at one point.

Follow-Up

- The HMP Coordinator will be John Elsesser. John is retiring but will remain involved.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting East Granby

Date: 8/29/2023

Time: 9 am

Location: Virtual Via Zoom

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Eden Wimpfheimer	East Granby First Selectperson	Robin Newton	East Granby Director of Planning
Kenneth F. Beliveau	East Granby Fire Marshal and Emergency Management Director		

Overview

CRCOG and CIRCA attended a meeting with East Granby to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to East Granby and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed East Granby’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about East Granby’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for East Granby 2019-2024	Notes	Current Status
10	Construct an access road across the Farmington River at Tunxis/Spoonville to provide an additional access/egress route.	Town staff reported that there is a dirt road maintained by DPW that can provide secondary access to this neighborhood. The town staff report that constructing a road across the river would be cost prohibitive. Town staff report that they believe the DPW road adequately addresses this concern.	Intent is complete/Retire
11	Construct a secondary access route to Cowles Park.	Town staff reported that there are currently 2-3 access routes from Cowles Park. The Fire Department has also purchased a UTV that helps with access in this area, so the town feels that this concern has been addressed and this action can be removed.	Intent is complete/Retire
3	Conduct a stormwater management study to determine local best management practices to reduce runoff.	Town staff reported that they do have a storm water management plan but are unsure if this plan was based on a study. CIRCA will follow up	Follow up to check with town engineer to see if current stormwater management plan is based on a study
7	Install a dry hydrant or cistern at Hatchett Hill.	Town staff reported that they have not heard any concerns related to this action. The town has a tanker strike team that could get water to the area if needed. CIRCA will follow up with the Fire Department in town to see if they would like this carried forward as an action, if they would like to retire it because the tanker is sufficient to address this need, or if they would like to add any additional fire-related actions.	Carry Forward – follow up with Fire department for additional revisions
2	Install a generator at the High School to make progress on creating a primary shelter there.	Town staff reported that converting the high school into a shelter would be very costly, with an estimated cost of over \$200,000. The town would need to install hook-ups and may need more than one generator to power the whole facility. However, the town is still interested in this as a potential shelter because of the building capacity and showering facilities. This action should be carried forward.	Carry Forward
9	Install a generator at the Congregational Church to make progress on creating a backup shelter there.	Town staff reported that they have regular discussions with the church about obtaining a generator, and this is still an interest. The church is a private entity so the town's authority is limited in this matter.	Carry Forward
12	Educate land use officials on low impact development techniques. Consider contacting UConn Extension for assistance.	Town staff reported that they have low impact development regulations.	Capability/Complete/Remove

13	Develop a formal process of tree evaluation and overhead wires. Consider collaborating with Eversource.	Town staff reported that Eversource is clearing the areas on their own without the need for the town to be involved.	No longer needed/Retire
15	Develop an open space plan, with special attention paid to land along rivers and streams not only because of flooding concerns, but also for recreation and wildlife management interests.	Town staff reported that this has not been complete and is still of interest.	Carry Forward
16	Acquire equipment necessary to maintain and remove large trees.	Town staff reported the DPW has some equipment for tree maintenance and removal, and the town also has relationships with private contractors in the area that assist with the removal of large trees.	Capability/Remove
5	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff reported that they are compliant with MS4.	Capability/Remove
8	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	Town staff reported that MDC might have a couple pump stations that might be in hazard zones, but are not aware of any other MDC facilities in East Granby. CIRCA will follow up with MDC directly.	CIRCA will Follow up with MDC
4	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff reported that they are capable of outreach as needed to any businesses that may have chemicals that could be released. This may be relevant for trash collecting company	Capability/Remove
6	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff reported that they attend trainings and conferences regularly, including the CAFM conference and dam failure exercises.	Capability/Remove
14	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to	Town staff reported they do not need additional surveys. CIRCA suggested to change this action to "Acquire and use the SHPO layer". Town staff agree with this revision.	Carry Forward with Revisions

	support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.		
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town staff reported that they are not active in the SCT program. Town staff will discuss internally whether this is still of interest and will let CIRCA know whether to carry forward or remove this action.	Follow up

Critical Facilities

The town staff reported no change in critical facilities.

- Shelters
 - Community center. Has generator and cooking facilities. Can be an overnight shelter if needed.
 - High school/Middle school are back up shelters but do not have power.
- Cooling centers
 - Community center
 - Library (no generator)
 - Congregational Church (no generator)

Development and Redevelopment

- Town staff reported that they have not seen much development in recent years. The town reported that that have applications coming in for multi-family development, but nothing has been developed yet. The Village center is where most of this development is proposed.

Recent Events

- Isaias – the town reported that they fared well. The town did not have major power outages and felt that they were well prepared for this storm.
- Flashy droughts - The town does have residents on private wells but town staff were not aware of any concerns related to flashy droughts in 2020 or 2022.
- Summer storms of 2021 – no significant flooding happened in East Granby during these storms. There were no road flooding or washouts. The town had sand bags ready if they were needed but they were not.

- Rains in July 2023 – again, the town reported that they fared well. There were some areas where the water level rose and the town kept an eye on but there were no road closures or washouts.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in East Granby.

- The town keeps an eye on two stream crossings when there are rain events but no flooding has occurred in the below areas in the previous couple years.
 - Tunxis/Spoonville – There is a culvert here that goes under the road. This has flooded in the past many years ago but has not been a problem lately. The town monitors this area when there are rain events.
 - Floydville Rd and Wolcott Rd in the vicinity of Hartford Ave – There is a small stream that floods occasionally. The town also monitors this area during rain events but has not experienced flooding here recently.
- The town does not see a large demand for the cooling centers when they are open.
- The town reported that Route 20 is a wind corridor. This has caused damages in the past. There was a tornado a few summers ago that took some trees down. The town did not lose facilities but there was debris.
- The town reported that they are sufficiently able to handle their vulnerable populations.
- The town will be doing a study of their sewer system with MDC. They do not have any concerns about the sewer system at the moment but are required to do the study. Town staff note that it is possible concerns may be revealed by the study.

Follow-Up

- The HMP Coordinator will be Kenneth Beliveau

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting East Hartford

Date: 8/17/2023

Time: 9 am

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Mike Walsh	East Hartford Mayor
Brian Jennes	East Hartford Emergency Management Director	Steve Hnatuk	East Hartford Deputy Director of Development
Eileen Buckheit	East Hartford Development Director	Connor Martin	East Hartford Mayor’s Chief of Staff
Douglas Wilson	East Hartford Town Engineer		

Overview

CRCOG and CIRCA attended a meeting with East Hartford to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to East Hartford and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed East Hartford’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about East Hartford’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for East Hartford 2019-2024	Notes	Current Status
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13	Complete a drainage study of Burnham Brook.	<p>Town staff reported that this has not been completed. David notes that the DEEP Climate Resilience Fund</p> <p>One neighborhood along the brook near University Drive has experienced flooding. The town will be repaving some of the roads in this area and wants to know whether they should do additional drainage work while repaving.</p>	Carry forward.
20	Replace the McAuliffe Park culvert, repair the Porter/Main Street culvert, repair the Arbutus Street outfall.	<p>Town staff reported that these are all drainage related, and were grouped together because all three areas experienced flood loss. McAuliffe Park culvert (Goodwin Brook) has not changed. Porter/Main Street culvert were cleaned and repaired years ago, but perhaps this needs to be redone because there is heavy siltation here. Arbutus Street has three outfalls, and this has not been done. Carry forward.</p>	Carry forward
12	Initiate a vulnerability and adaptation study of critical facilities located within the flood zone protected by the Flood Control System; the purpose of this study would be to determine the need for and feasibility of floodproofing or relocating critical facilities that would be affected by flooding if the Flood Control System failed.	<p>Town staff reported that this action came from the previous Director of Public Works. The PW building is located within the flood zone. The transfer station can get cut off due to flooding. The community cultural center and the town hall would also be vulnerable if the levee was breached. Carry forward with revisions to be more specific.</p> <p>Doug notes that there was previously some consideration of relocating the PW building, but this did not occur. The town is currently considering using bond funding to update the PW building. Doug suggests that upsizing the culvert and raising the road near the PW and transfer station would be useful for reducing the flood isolation risk. Pull this out as a separate action.</p>	Carry forward with revisions.

8	Review maps of flood risk associated with failure of the Flood Control System and determine needs for additional education or action.	Town staff reported that a review of the maps has been done, but the turnover in town directors and decision-makers makes this an ongoing need.	Carry forward, note the reason why this needs to be ongoing
15	Develop a list of specific upcoming actions as part of the multi-year Flood Control System modification and reconstruction project to and include in the next HMP update.	Town staff reported that there has been turnover in the team managing the Flood Control System. Doug is not aware of any specific action needs here. David notes that needs associated with the Flood Control System are included as a matter of course in the Capital Improvement Plan, so this action's intent is addressed through the CIP.	Intent of action has been accomplished / Retire
17	Monitor impacts on the Flood Control System and other flood control infrastructure of any CSO separation work in the Region.	Town staff reported that the town does not have many combined sewers. This can be retired.	This is no longer a need / Retire
16	Develop a list individual drainage improvement projects from the CIP to include in the next HMP update.	Town staff reported that the Burnham Brook design need noted in Action 13 There is also a low area on Daniels Street, but this could just be a pipe that needs to be located and repaired, so this does not need a separate action. Many of the other issues are small and localized and be can dealt with by the town.	Intent has been met / Retire
1	Pursue accreditation of the Senior Center as an emergency shelter.	Town staff reported that this was considered, and the town decided against it, as the facility was not built to the standard needed for accreditation.	Revise to incorporate the later discussion about sheltering/cooling center needs in general
3	Complete a needs-assessment study to determine what would be needed in a new EOC facility, and to preliminarily identify existing facilities that could house that use.	Town staff reported that this should remain in case funding becomes available for a new EOC.	Carry forward
4	In conjunction with the East Hartford Board of Education Facilities Department acquire an emergency generator for the Middle School as a step towards making it a sustainable emergency shelter.	Town staff reported that that this was not yet explored and they would like to keep this.	Carry forward
5	In conjunction with the East Hartford Board of Education Facilities Department acquire a	Town staff reported that this was completed.	Complete / Retire

	true back up generator or improve the capabilities of the current cogeneration system at the East Hartford High School to improve its capabilities as a regional shelter.		
11	Have the Town's Community Emergency Response Team run public education and training forums on personal emergency planning at least once annually.	Town staff reported that the town explored this, but the CERT is unable to meet this obligation at this time. Town staff is comfortable removing this.	No longer a need / Retire
7	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff report that this is a capability: the town maps all of the catchment areas, and any new developments have disconnected impervious areas. This is a capability.	Capability / Retire
10	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	Town staff said this has not been done. This action will likely be removed from most town annexes.	Remove?
14	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	This action needs to remain per FEMA requirements. Town staff said they are not aware of working with any RL property owners.	Carry forward
18	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	This action needs to remain per FEMA requirements.	Carry forward
9	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they are comfortable removing this action, although they do note that they need to identify who the floodplain manager is. The town staff do some education related to their flood management plan actions.	Capability / Retire
6	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said they would like to keep this action.	Revise to include watching the DEEP training
19	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing	Town staff reported that the town has not done any historic resource surveys in the last five years, but in the 80s there were extensive surveys done. Eileen notes that historic resources are still a concern for the town.	Carry forward, with revisions to include the new SHPO layer.

	resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.		
2	Consider and document the labor resource needs and benefits of participation in the Sustainable CT program.	Town staff notes that discussion around this possibility has been helpful for the town and would like to keep this action.	Carry forward

Critical Facilities

- East Hartford has low building stock. There are no standing shelters.
- There are two locations (the library and the lobby of the Public Safety Complex) that can be used as cooling centers but do not offer any services and are not sustainable long-term.
- Town staff says they'd like to add an action to do a study for the types of accommodations needed for shelters and cooling centers, and where they could be located.
- Generators:
 - The high school and the town hall have generators.
 - Library does not have a generator.
 - The senior center has an undersized generator that does not power the entire building, which is one reason it cannot operate as a long-term shelter. There has previously been a great deal of town discussion about this.
 - Add an action to say “pursue generators for critical facilities”, which would include adding a generator for the library and replacing the senior center generator with a larger generator.

Development and Redevelopment

- Eileen notes that the town may have some development in flood zones (Silver Lane Plaza, which will likely be redeveloped, overlaps with a very small part of the flood zones), but whenever this happens the town follows the state building codes for floodproofing and/or raising.
- The town is working on the 2024 POCD update.
- The CIRCA team will follow up with Eileen to decide on the wording for this section based on the new POCD.

Recent Events

- Isaias, 2020: This was the most significant tree damage / power outage faced by the town in recent years. East Hartford drove the FEMA reimbursement process – had over \$1 million in expenses related to this storm.
 - After Isaias, the town did a lot of tree trimming and removed hanging branches up in the treetops. In later storms when neighboring towns experienced a lot of tree damage and power outages, East Hartford did not experience much damage.

- Hockanum River is very flashy and rises quickly. This caused flooding on Arbutus Steet, Cummings Street, and Labor Field during an unnamed storm in 2022, in the storm that hit Manchester very hard (the storm that caused the Ambassador Drive washout).

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in East Hartford.

- Town staff note that a large amount of rain in a short amount of time will overwhelm their stormwater systems (see the note about flash flooding near the Hockanum River).
- Heat concerns: Downtown and along Burnside Avenue, Park Avenue, and along railroad tracks. These areas have a lot of pavement and not much tree cover. The people living in these areas may also not be able to provide their own cooling.
 - Town staff believe that equitable distribution of cooling, whether through cooling centers or more open space, is a need. Town staff note that due to the socioeconomic status of East Hartford, many people won't be able to access resources unless they're on a bus line.
- Flooding concerns:
 - Flashiness of Hockanum River, east of Scotland Road where there are several dams. There are not a lot of residences in the low-lying areas in this neighborhood, except Arbutus, Cummings, and Burnside Avenue.
 - The Connecticut River has the flood protection system.
 - There are neighborhoods to the north of the levee that were built in the flood zone before regulations were in place.
 - In the southwest corner there's the Porter Brook neighborhood and the Mill Brook area near the senior center. These experience backwater flooding from the Connecticut River because they are low-lying. In this area the houses are higher but the roads are low, so there is an isolation risk. This is a different type of flood risk than the one-off issues around town due to culverts, etc.
 - The town has been in talks with FEMA to apply for funds to improve the levee, but it will likely be too cost-prohibitive to ever extend it north.
- Brian notes that the town has limited capacity for emergency response, could use training for swift water rescue or small-scale flooding where you can't launch a jetboat. There should be an action in the plan for increasing the town's capacity for emergency response, both in terms of training and assets.

Follow-Up

- The HMP Coordinator will be Lewis Tamaccio (nominated in absentia), or Doug as a back-up.
 - This role would include attending the fall workshop (virtual), receiving the draft plan and distributing it to other town staff, coordinating the town adoption of the plan in the spring, etc.

- CIRCA staff will send meeting notes to everyone who attended today, and will ask for Lewis Tamaccio contact information, as the town website doesn't seem to have him listed.
- The mayor's office will likely be the best office to get the press release and Story Map up on the town website.
- CIRCA staff will follow up with Eileen to get a summary of the recent development in town.
- Other notes: Doug pointed out that the Flood CCVI is not sufficiently taking into account the flood protection system. David suggested an overlay could be added to the map. Brian notes that he would prefer an overlay rather than adjusting the scores, as it is useful to know where the vulnerable areas would be if the pumping stations weren't working. CIRCA will look into the best way to display this.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting East Windsor

Date: May 30th, 2023

Time: 1:00 pm

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Len Norton	East Windsor Director of Public Works / Town Engineer
Ruthanne Calabrese	East Windsor Director of Planning and Community Development	Roger Hart	East Windsor Deputy Chief of Police / Deputy Director of Emergency Management
Matthew Carl	East Windsor Chief of Police		

Overview

CRCOG and CIRCA attended a meeting with East Windsor to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to East Windsor and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed East Windsor’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about East Windsor’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for East Windsor 2019-2024	Notes	Current Status
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1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	East Windsor has entered the program but has not yet pursued any certifications. The town is assessing things in-house first. This action can likely be retired, but Ruthanne suggested checking back on this question.	Completed/retire
2	Assign maintenance of special needs population list to specific department to ensure annual updates.	Roger Hart - This has been done but "could use a little work." Consider removing this action but keep a note saying that this list should be kept updated.	Intent is Complete/retire
3	Hire an electrical engineer to wire the High School for a permanent generator.	Roger Hart - This has not yet happened. Carry forward. This need is an important step in making the High School a shelter as noted later.	Carry Forward
4	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	The state program related to this is complete and materials are available on the DEEP website. This can likely be removed, but Ruthanne will check to see what previously happened on this.	Completed/removed
5	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Len Norton - East Windsor is an MS4 town and is compliant with annual reporting. There are still items in the program that the town has not had the funds or ability to complete, but the town does report every year what has been completed and what still needs to be done. David notes that if there are specific infrastructure projects that remain to be done, we should make them their own actions.	Intent is complete/retire.
6	Increase use of social media to communicate with the community on planning for emergencies.	This is a capability and can be removed. Roger Hart said the town is doing this.	Complete/retire
7	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	It's unclear who the floodplain manager is for East Windsor; Ruthanne hasn't been told this is part of her responsibility but there are floodplain regulations in the zoning regulations. Consider keeping this action or revising.	Carry Forward with Revisions
8	Improve ability of emergency responders to prepare and respond to wind events through training drills.	Roger Hart says East Windsor participates in the state's annual hurricane drill. This can likely be retired as a capability.	Completed/retire
9	Conduct an outreach program to recruit volunteers to staff emergency shelters.	Roger Hart - There was previously a good roster of volunteers but this group no longer exists due to people moving and/or retiring. Keep this action.	Carry Forward
10	Replace the emergency generator at the WPCA	Town staff is unsure whether or not this has been done – check back.	
11	Develop an Open Space Plan to guide acquisition, preservation, and efforts to incentivize redevelopment and infill over development of new land. Consider hazard mitigation is in plan development.	Ruthanne - A separate Open Space Plan has not been developed. Open space is addressed in the POCD and the town has an Open Space Fund. This action can likely be removed because the town is handling open space through the POCD and Fund.	Intent is complete/retire
12	Implement the recommendations of the study of the dam on Main Street near Depot Street intersection.	Len Norton - The dam has been updated through a major reconstruction. Specifically, the town modified the dam and broadened the spillway about 4 years ago, increasing spillway capacity.. This is a mitigation success story.	Complete/retire

1 3	Implement recommendations of NRCS, including installation of a detention basin in Rockville Road/East Road area to reduce road closures and washouts.	Len Norton - This is still needed. There's a culvert under the road and during severe rain events (4 inches in an hour, etc.), the area upstream has a tendency to erode and bring debris downstream, which clogs the culvert, which causes water to run down Rockville Road and East Road. The town has been looking into the possibility of doing a project here, but this would require easements or property acquisition. Design is still needed. This action should be reframed to advance the concept design to position this project better for funding.	Carry Forward with revision
1 4	Increase the public works staff and equipment availability.	Len Norton - During the past year the town has obtained a new loader and a new backhoe. Compared to five years ago, the town has more staff and more equipment. This action can be removed, as it has largely been completed.	Complete/retire
1 5	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Replace this action with one that says to use the new SHPO layer to understand where vulnerabilities are. The town has 4-5 registered historic structures but no historic district.	Carry forward with Revisions
1 6	Install a hookup at the Middle School to allow a portable emergency generator to be connected.	Roger Hart - This has not been completed. David explained that FEMA funds fixed-in-place generators but not portable generators, and suggested a modification. This action can be changed to focus on getting a generator for the Middle School, not necessarily a portable generator.	Carry Forward with Revisions
1 7	Conduct a study to identify appropriate flood control measures and monitoring regimes for the WPCA and surrounding area, including Blue Ditch.	Len Norton - There was a Blue Ditch study, which means the intent of this action has been completed. There are issues both upstream and downstream by the wastewater treatment facility. It's very flat in the downstream areas, with nearby ballfields also flooding. Upstream there are two road crossings which need to be improved (these are closer to route 140). The town knows what needs to be done here, but doesn't have the funds to do it. David suggests replacing this action because the study has already been done, and instead articulating a few specific actions. Len specified the following: Culvert crossing on Spring Street, a second culvert crossing Holcomb Terrace, undersized culverts on Route 510 and Main Street / Warehouse Points, and a single action that mentions private driveways that cross the stream (in case future funding sources can be used for driveway crossings).	Intent is completed/retire
1 8	Work with property owners, contractors and the DEEP to regularly remove	Len Norton - The town replaced the East Road culvert with a double culvert to deter beavers,	Completed/retire

	beaver dams causing flooding on East Road and elsewhere.	which seems to be working so far. The action can be retired.	
19	Buyout property on the west side of South Water Street to avoid repetitive flooding in the area.	Len Norton - The town staff thinks that the property on the west side of South Water Street that floods is owned by the town. There may be one other house on the west side closer to Bridge Street, but town staff aren't sure. The town has not yet pursued any funds to purchase any properties. Keep this action.	Carry Forward

Critical Facilities

- Shelters are a major concern of the town. The High School is the main shelter, but it doesn't have a generator. The high school is comprised of multiple buildings connected together, with some electrical issues. The town has not yet been able to get a generator for the high school, because this will require an electrical study and likely an electrical upgrade. Actions for the High School should include the electrical upgrade and a new generator.
- The Middle School is quite a distance away from the High School, and both facilities can be used as shelters. This is intentional so that if there is a power outage on one side of town, the other may still be used as a shelter.
- The town hall and the town hall annex have been used as cooling centers. Both of these facilities have generators. They can be opened on Sundays / evenings if needed.

Development and Redevelopment

- Watermill Crossing/Landing (?) – assisted living 55+ apartment building, hasn't yet opened.
- Warehouses – new warehouse on Rt 5, outside of the flood zone
- The casino-related development is no longer being considered in East Windsor.

Recent Events

- Ruthanne noted that a power outage occurred and the shelter was opened after T.S. Isaias in August 2020.
- A significant washout occurred in a farm field near the intersection of Winkler and Wells, reportedly creating a cavern on private property. Though it is not clear which storm this was, attendees believe it was likely one of the summer 2021 tropical storms.
- There was storm damage in these 2021 storms, but this did not pass the threshold for FEMA.
- Len will look back at his records for any recent damages that the town spent money to address.
- Ruthanne will send some photos.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in East Windsor.

- As noted above, standby power is needed for the High School and the Middle School. This will increase the resilience of East Windsor.
- Ruthanne shared that there may be tidal influence and sometimes stormwater systems surcharge from the Connecticut River. Len stated that this problem might be more due to snowmelt from the north, when the river is high, causing water backing up in the stormwater systems.
 - Len said he's not sure what else can be done about this, as this surcharging of the stormwater systems mostly occurs in extreme conditions.
- The heat vulnerability maps look accurate, and reflect agricultural land.
- Rain has reportedly caused losses for the tobacco farm in town.
 - David noted that we can consult USDA loss records to characterize the losses. David also noted that flashy droughts could be impacting tobacco.
 - Len noted that in the past year there was a major rain event right after the crops were harvested, leaving the fields bare. A lot of mud washed out of the fields and nearby residents were unhappy.
- Rockville Road has had a water problem before. See pdf for more information.
- The WPCF has previously flooded in springtime, due to a combination of snowmelt and rainfall. The inner workings of the plant did not flood, but stormwater may have surcharged around the plant buildings. E. Arthur Enderle III and Edward Alibozek are the two contacts at the WPCF.
 - Len notes that there is a big difference in East Windsor between the town and the WPCF. They operate independently.
- David asked about the Scantic River. Attendees explained that one house is in close proximity to flood risk, although Len does not remember the house actually flooding.
- There are a few driveways between warehouse point that have undersized culverts that impede flow. – Len

Follow-Up

- The HMP Coordinator will be Ruthanne Calabrese.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Ellington

Date: June 22nd, 2023

Time: 10:00 am

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Walter Lee	Ellington Emergency and Risk Management Director
John Colonese	Ellington Assistant Town Planner, Zoning & Wetlands Officer	Lisa Houlihan	Ellington Town Planner
Tom Modzelewski	Ellington Acting Director of Public Works		

Overview

CRCOG and CIRCA attended a meeting with Ellington to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to the Ellington and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Ellington’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Ellington’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Ellington 2019-2024	Notes	Current Status
1	Assess possible alternate routes to Crystal Lake, or other solutions to the risk of isolation in that area (such as stationing personnel there) in order to determine the cost-effectiveness of different options.	<p>Town staff said a section of Schoolhouse Road has been paved. The state is reviewing the intersection of Burbank and Rt 140 and there may possibly be future work where Newell Hill meets Rt 140, but this is in design stages still. The bridge on Rt 140 has been replaced, and the state utilized a detour for that project that was successful for the 8 months the bridge was closed. Furthermore, to address access challenges, the Town added a back-up shelter at Crystal Lake School so that that neighborhood can access this facility even if they lose access to the center of town. This facility could also be a cooling center if needed, and it is served by a generator.</p> <p>Based on the improved transportation infrastructure and the backup shelter, the intent of this action has been met (the Town assessed alternatives) and it can be retired.</p>	Complete / Retire
2	Work with State DOT to advance road improvement and maintenance projects to ensure access to and egress from the Crystal Lake community remains open during and after storms (Routes 140 and 30).	<p>See above action for some of the work that has been done. David suggests revising this action to include more specific actions.</p> <p>Town staff suggest that the Newell Hill revamp would be a good one to list specifically.</p> <p>Revise and carry forward.</p>	Carry forward with revisions
10	Conduct a wildfire vulnerability and needs assessment to guide construction of additional dry hydrants and/or cisterns and fire roads through forested areas.	<p>Town staff said that the town evaluated and replaced one of the dry hydrants in the Crystal Lake area.</p> <p>Although many forested areas are located in Ellington, the town staff believe that their wildfire response capabilities are sufficient, with a mutual aid agreement and the town's own capabilities. No further actions are needed at this time.</p>	Complete/ Retire
7	Explore feasibility and cost/benefit balance of developing a microgrid for the Town Hall / Board of Education / Center School complex and/or the Resident-State-Trooper / Recreation Department / Fire Station 43 / Public Works complex.	<p>Town staff is not aware of any progress with this.</p> <p>The town staff asked if generators "are" microgrids? David clarified that typically microgrids had solar or fuel cell sources, but really generators can count</p> <p>Town staff mentioned a solar project is in the works near the resident trooper/rec department. Center School also has solar panels.</p> <p>The town doesn't believe any further action is needed at the moment.</p>	No longer a need / Retire

6	Perform an outreach effort to private fuel dispensaries encouraging them to install back-up generator power to ensure continued access to fuel for residential and business transportation, heating/cooling, and power needs.	Town staff said the town has done outreach related to this in the past.	Complete / Retire
3	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff aren't aware of any specific outreach related to accidental release, other than communicating with the local Agway. The town has expanded its use of the Everbridge communication system (upgraded to Pro), so the town has more ability to give alerts to local businesses. The intent of this action has been completed.	Intent is Complete / Retire
4	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said they are compliant with MS4. The town has an annual plan and works with a consultant to ensure it remains compliant.	Complete / Retire
9	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Town staff thinks this action can be replaced, as few historic resources are in flood zones. We can revise to mention the new SHPO layer.	Carry forward with revisions.
5	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff have said that they have not attended these specific courses but have attended other wetland and related trainings. The town also recently reviewed the draft maps for the new FEMA mapping of the Crystal Lake region, undertaken with the Thames Basin updates. This can be retired.	Intention has been met / Retire
8	Seek Certification within the Sustainable CT program and make progress with the hazard mitigation	Town staff said the town has established an Ellington Sustainability team which will meet on a monthly basis to work on applying for Bronze certification next spring. Town staff noted that one of the actions they plan to accomplish related to the Sustainable CT actions is having	Complete / Retire

	goals associated with SustainableCT certified actions.	CIRCA complete a “heat assessment” for the town. This will be part of the HMCAP. The certification will likely be complete before this plan is published, so this can be retired.	
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Critical Facilities

- The town has added a back-up shelter at Crystal Lake School so that that neighborhood can access this facility even if they lose access to the center of town. This could also be a cooling center if needed. Has a generator.
- The primary shelter is located at the high school. Has a generator.
- The heating and cooling centers are the senior center and the library, which are both located at the center of the town. Have generators.
- All seven sewer pump stations have generators, but two, Catch Brook/High School, are in need of replacement.
- One of the generators at the sewer pump station has a manual switch, and attendees explained that it would be helpful to convert this to an automatic switch. This generator also powers the DPW complex and may require upgrades.
- Ambulance building also serves as the EOC, and has a generator that should be assessed for possibly needing upgrades.
- The old Crystal Lake Schoolhouse needs a generator to help keep temperatures from freezing inside the building.
- Add actions for all the above-listed generator needs. (all sewer pump station generators could be aggregated into one action.)

Development and Redevelopment

- The town purchased 11 acres for low-income senior housing on 59 Maple Street. This is a potential development, although the area hasn’t been developed yet.
- Three new subdivisions – 10-12 lots each
- Some commercial development on Rt 83, which is the main commercial corridor.
- Oakridge Dairy, the largest dairy in the state, has just commissioned a digester. This is already online and operating.
- Other projects:
 - The town is doing a major upgrade of one of the sewer pumping stations using ARPA funding and the WPCA budget.
 - The town has a new digester which is not in a flood plain
 - Small expansion project on Ellington Avenue
 - Oakridge Dairy has been soliciting WPCA to expand the sewer system into their area and install another pump station, but that hasn’t had any traction in a while.
 - All of these are already well handled, and therefore no actions are needed in the plan.
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Recent Events

- After T.S. Isaias, the town’s power outage was reportedly not too bad, lasting approximately 3 days.
- The health department would have information on wells and droughts – attendees suggested checking with them.
- During the 2021 storms, the town responded to a couple reports of basements flooding.
- All of the dirt roads are vulnerable to flash flooding and washouts. There were some road washouts during the 2021 storms, involving both paved and unpaved roads.
 - Ludwig Road washed out during one of the summer 2021 storms.
 - Ellington Avenue also washed out within the last five years.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Ellington.

- Flood-related challenges for stream crossings that should be evaluated going forward. Attendees agreed to add an action that calls for a methodical approach for looking at a number of stream crossings at once (a town-wide assessment).
- Access to Crystal Lake remains a challenge, despite all the progress reported above.
- Drainage concern from a local farmer near Windsorville and Abbott – stormwater drain empties into one of his fields causing some erosion. The town has already added some infrastructure to slow the velocity, but more evaluation might be needed.
- Abbott and Middle Road – these crossings appear undersized, resulting in road flooding.
- Jobs Hill Road between Tomoka Ave and Muddy Brook Rd also tends to flood, as not much drainage infrastructure is in place here.
- Overall, flooding is the main climate-related concern.

Follow-Up

- The HMP Coordinator will be Lisa Houlihan.
- Other projects:
 - The town is doing a major upgrade of one of the sewer pumping stations using ARPA funding and the WPCA budget.
 - The town has a new digester which is not in a flood plain
 - Small expansion project on Ellington Avenue
 - Oakridge Dairy has been soliciting WPCA to expand the sewer system into their area and install another pump station, but that hasn’t had any traction in a while.
 - All of these are already well handled, and therefore no actions are needed in the plan.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Enfield

Date: July 10th, 2023

Time: 1:00 pm

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	John Cabibbo	Enfield Department of Engineering
Mary Buchanan	CIRCA	Steven Hall	Enfield Department of Emergency Management
Laurie Whitten	Enfield Director of Planning		

Overview

CRCOG and CIRCA attended a meeting with Enfield to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Enfield and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Enfield’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Enfield’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Enfield 2019-2024	Notes	Current Status
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6	<p>Complete and implement Freshwater Brook dam action plan to mitigate flooding on I-91 and Route 5.</p>	<p>Some work has been done on this dam – the wall was damaged and has been replaced in the past year. Flooding in the Freshwater Brook area is still a concern for the town (this is discussed again later in the notes). Town staff report that flooding is not as severe or as frequent as it used to be, and the recent dam repairs have helped this. Thompsonville used to flood and reportedly no longer does so. There are a few low points that are prone to flooding in the Freshwater Brook area – such as Palomba Drive, north of 190. These areas do still flood.</p> <p>Both Freshwater Boulevard and Palomba Drive have culverts carrying Freshwater Brook. Both of these culverts are on the town’s CIP wishlist for replacement.</p> <p>The town is also doing two bridge replacements with state funds. One is on Orlando Drive, and was an upsizing due to DEEP fishery requirements, rather than flooding, and is now a much larger box culvert. The other bridge replacement is the South River Street Bridge. The new design for this bridge is not an enlargement due to FEMA-related challenges– FEMA may require an extensive study for a map change. So a smaller design was selected to avoid the need meet FEMA’s map revision requirements. This bridge will be replaced in the next 4 months.</p> <p>The pinch point for Freshwater Brook is I-91.</p> <p>David asked whether perhaps a new approach is needed for this area, which could be aligned with Resilient Connecticut or, in the future, a DEEP Climate Resilience Fund grant. Town staff report that the CT Dept of Ag Soil Conservation Service did a study of this area and looked at the possibility of retaining water upstream. But because the area is so flat, achieving this would require a lot of private land acquisition. Town staff report this would likely be an uphill battle both monetarily and politically.</p> <p>Town staff reported that overall, “baby steps” are happening along the Freshwater Brook waterway – the town acquired a parking lot that used to be a bus commuter lot (which flooded and led to the loss of cars), which now serves as a “flood compensation area”. Other flood detention or retention has been achieved with tanks underground.</p>	<p>Carry forward, revisions to reflect today’s discussion to suggest a larger study as well as individual projects</p>
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7	Pursue opportunities to bury utilities in appropriate locations and scenarios, such as during a road reconstruction.	<p>The town staff is not aware of any progress on this. No subdivisions require this.</p> <p>The town does give the utilities a list of the roads when they do reconstruction, but putting utilities underground has not occurred. Some replacement of already-underground utilities has happened. The utilities don't get paid or reimbursed for putting utilities underground, so the town doesn't have much ability to promote them.</p> <p>So the town is already working on this when possible, but can't do much more than they're doing. Perhaps retire this action.</p> <p>Town staff report that external funding would be needed to make this happen – town referendums will not be enough.</p>	Retire, as this is accomplished as needed
8	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	<p>Town staff are not aware of any repetitive loss properties or where they might be.</p> <p>One possibility is a property on Lynch Terrace. The town offered to purchase the property a number of years ago but the owner was not interested.</p> <p>Some residential properties sometimes get water in their basement, but town staff surmised that it's more likely that RL properties are commercial properties.</p> <p>There was building near town hall called Laurel House, which had a furniture store and a warehouse behind it that was in the flood zone. This was recently demolished, perhaps a month ago. CIRCA staff will try to get the exact list of RL properties for Enfield, working with either CROCOG or the town to get this list.</p>	Carry forward
10	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	See above.	Carry forward
3	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Attendees reported that this could apply to some businesses, who could follow better management practices. About 2/3 of the town is over an Aquifer Protection Area, so the town conducts detailed reviews with those businesses anyway to make sure that their pollutants don't affect the aquifers. So this is a capability for the town.	Capability / Retire
11	Send information to residents about emergency preparedness and services available in the event	The town website has most of this information somewhere, and sometimes added to social media. Town staff report	Capability / Retire

	of an emergency by mailing out a newsletter and including information in tax bills.	they are constantly updating websites and putting information out.	
4	Coordinate with NEMO and CROCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff are confident the town is compliant with MS4.	Capability / Retire
5	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff have occasionally attended the flood conference. This is a capability.	Capability / Retire
9	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Town has mapped all of the historic resources in town and came up with a "Historic Resources Book," using an economic development grant, but town staff are not sure whether resiliency was addressed in this effort. Historic resources are a timely topic in the town, so town staff would like to keep an action related to this.	Carry forward with revisions (to trim down the text a bit, incorporate resiliency more directly)
2	Implement Vehicle Replacement Plan to upgrade and replace public works fleet.	This is complete. Also acquired some EVs.	Complete.
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	The town went to great effort (4-5 staff members doing hours of work), but the application was rejected due to not meeting criteria (about 3 years ago). Town staff report being devastated by this. Town leadership has since changed and much of the staff who worked on it have also left. The town might consider doing this again, but the experience was reportedly frustrating. Remove this action – the town can make progress in the future if it chooses, but this doesn't need to be in the HMP.	No longer a need / Retire

Critical Facilities

- Cooling centers are the police department, the main library (Central Library) and the Pearl Street library. Previously used the Lamagna Center which has since been demolished and redeveloped, so no longer used.
 - Police department has a generator. The main library most likely has a generator according to town staff, but the Pearl Street library may not.
- The shelter is Enfield High School – this is a change. This has a generator and is very large.
 - Used to be at Fermi High School, but when this school was redone there were no showers put in.
 - JFK Middle School is no longer a shelter, but could be used as a cooling center if needed.

Development and Redevelopment

- Major development with warehouse distribution centers. This is not in the shopping mall area.
 - One warehouse is on 35 Bacon Road – this hasn't started construction (800,000 sq ft)
 - Another is on 113 North Maple Street (480,000 sq ft) – this has been constructed.
 - A third was approved at 0 King Street near the East Windsor line (around 500,000 sq ft) – this one hasn't been constructed but there has been recent interest in this.
- Small infill development in the mall area, but the mall itself is mostly vacant. The footprints aren't changing. The Town assumes that redevelopment or changing occupancy will occur at some point.

Recent Events

- T.S. Isaias – “not pretty” – lots of wind damage and trees down, outages. The town collected wood afterward – DPW was piling it at the town dump so they could measure the piles.
 - Power lines dropped and melted a patch of Brainard Road (40 x 60 ft).
 - A FEMA grant application D-4500 was associated with this afterward – mitigation during reimbursement.
- One recent storm (perhaps in 2021, town staff can't recall) washed out 2/3rds of the right lane along one of the rivers when a drainage culvert ruptured and washed out. This was significant but quickly rectified (4-5 days). Town staff are drawing a blank on the name of this road.
- Farmers have had issues with flashy droughts, particularly tobacco farmers. Some lost some crops, although the town staff don't have specific sites in mind. David noted that CIRCA will check USDA loss data for more information on this.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Enfield.

- David notes that Enfield is somewhat unique among the Capitol Region because of its variety of land uses (agricultural, suburban, densely developed, large retail).
- Freshwater Brook:
 - I-91 creates a pinch point with Freshwater Brook.
 - Freshwater Boulevard is routinely underwater if the town doesn't open the dam at Freshwater Pond in a timely manner when there's heavy rain. This is manageable with the dam, but every now and then there is a sudden storm with a lot of flow which outpaces the dam's ability to manage the flooding. Making the dam bigger would be cost-prohibitive.
 - David asks whether the town has a handle on this or whether more studies need to be done.
 - The town staff report they're trying to do what they can, bit by bit.
 - Funding is the consistent roadblock: "If somebody would like to write a giant check, we'd be more than happy to square it right away."
 - Town staff are of the opinion that this problem is not going to go away until the I-91 culverts are enlarged.
 - Let's keep this in the plan in case the town wants to apply for grants in the future – perhaps DEEP resilience fund.
- In terms of extreme heat, the town has bus lines that can take people to the cooling centers. There is a robust amount of infrastructure related to being able to house people in a cold or warm environment, depending on the need.
 - Many people prefer to shelter in place at their homes.
- Agriculture is a concern for the town.
- Lakes in the east corner of the town – if these get very hot it might add to algal blooms or issues with fish or wildlife.
- The industrial park is all in former wetlands, so putting anything in this area is always a risk.
- Some parts of town have neither public water nor sewer. The town recently updated their POCD and now has an official sewer service map.
 - Also adopted some LID in the POCD. The town is also rewriting their zoning regulations.

Follow-Up

- The HMP Coordinator will be TBD, the town staff will discuss amongst themselves and let us know.
- CIRCA will send all the attendees today the invitation to the July 24 workshop.
- CIRCA will also share today's presentation and notes with the town.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Farmington

Date: June 7th, 2023

Time: 10:00 am

Location: In-person at town hall

Attendees			
David Murphy	CIRCA	Thomas Fitzgerald	Farmington Fire
Mary Buchanan	CIRCA	Michael Grabulis	Farmington Police Communications
Russ Arnold	Farmington Public Works		
Colin Ryan	Farmington Police Chief		

Overview

CRCOG and CIRCA attended a meeting with Farmington to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Farmington and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Farmington’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Farmington’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Farmington 2019-2024	Notes	Current Status
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	The Town Manager would know about this.	Uncertain; Check on this with Town Manager or on Sustainable CT web site.
2	Identify funding sources and requirements to conduct a town-wide hydrologic study.	There is still interest in this type of study. The town put it in for a capital project for funding, but it wasn't as high-priority as some other projects. David noted that other towns are beginning to seek various new funding sources for this kind of study,	Carry forward.
3	Develop a new concept for a permanent erosion prevention measure at the cemetery on Garden Street that will be accepted by regulatory agencies. Complete a grant application to implement the new concept.	Town staff reports that there is definitely still a need for this. The Farmington River heads north and has flat farmland around it. When it floods overbank, the water cuts through the farm fields and hits the subject embankment. This embankment is located close to the cemetery and a 21-inch gravity sewer line. The town previously submitted a grant through DEEP for hazard mitigation. FEMA and the Army Corps of Engineers and a third group (Russ can't recall the name) came to see the site about 7-8 years ago. The ultimate suggestion from these agencies was to plant trees so that the root systems could protect the slope, whereas the town was imagining a solution with sheet piling. The slope in this area is steep and planting trees would be challenging; there was very little follow-up from the federal agencies afterward. The town is somewhat discouraged with the lack of response and assistance on this issue, after multiple years of effort. Town staff notes that if the sewer is undermined through bank erosion and breaks, and sewage gets into the river, the costs of river clean-up would be substantial and many other problems would follow. The Eastern Mussel is also present in the water. Russ reported that about 20 feet of lateral space is left before the sewer line, and David noted that one bad flood could be enough to lose this. Town staff still feel strongly that something needs to be done here. David suggests that FEMA's recent BCA adjustments for progressive hazards (I.e., erosion) might be applicable or helpful here.	Carry forward, perhaps with revisions for a new attempt at addressing this.
4	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	The intent of this has been accomplished, and this action can be retired.	Retire

5	Coordinate with NEMO and CROCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	This is a capability, as the town is up to date on MS4 compliance and knows how to get help if they need it.	Retire
6	Develop a scope of work and Request for Proposals (RFP) for an engineering and feasibility study of elevating Meadow Road and installing culverts to allow flow in both directions.	When Meadow Road floods it creates a “traffic nightmare” because people coming from Bristol use this road on their way to I-84. This road floods every year. Particularly severe flooding occurred in '06 or '07. The town previously discussed elevating the road. There are hydrologic complications here from the Farmington and the Pequabuck Rivers, so a simple road elevation and culvert may not be enough of a solution. However, a need remains.	Carry forward with potential revision.
7	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff routinely attends an annual dam failure exercise with MDC, which is well attended by other municipalities too. This is a capability.	Retire
8	Explore the feasibility of a fourth bridge over the Farmington River. For the current planning period, develop a report of permitting needs and possible funding sources to allow for next steps to be taken during the next Plan period.	This is under way and nearing completion, with SLR as the consultants. The intention of this action has been completed, and the next step is finding funding. The town continues to see the need for this bridge. If the town has to shut down a different bridge – for example the truss bridge in Unionville -- then Rt 4 floods and access to the town shelter would be compromised without another bridge option.	Completed, so revise and carry forward to reflect the next step which is to secure the funding.
9	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	David explained at length why MDC-related actions were in the plan, using GNHWPCA as an example from the SCRCOG Hazard Mitigation Plan. The only facilities that MDC has in town are below-grade water mains and related hydrants. The supply is in West Hartford. The town staff say it doesn't benefit anyone to have an action in the Farmington plan. There are transmission lines in Farmington.	Remove? Town staff say that if it helps the overall program to leave the action in, then leave it in, but they don't think it makes a difference to Farmington either way.
10	Conduct an assessment of the Town's snow-removal capabilities to identify opportunities for improvement.	Town staff believe there is no longer a need for this.	Retire
11	Establish the Southwest Fire Station as a backup EOC.	A backup EOC still of interest to the town. There is a question of whether Southwest Fire Station is equipped for the communications needed, whereas Farmington Fire (76 Main St) has recently received an upgrade in communications systems. Revise to include both stations as options as a possible backup EOC.	Keep with revisions

12	Identify, possibly in cooperation with neighboring watershed communities, funding sources and requirements to conduct a hydrologic study of the Farmington River.	<p>Town staff have seen the new FEMA mapping, and there are some changes for Farmington that put new properties into the flood zone. Russ thinks that some of these revisions are not an accurate reflection of the landscape. Russ will send David the comments he sent to FEMA.</p> <p>The DOT is replacing and upsizing some culverts leading to Roaring Brook. Russ previously asked for the drainage analysis of the downstream piping, and heard back from the DOT that the drainage engineer has not finished this analysis, even though the project is already in construction.</p> <p>This action came about after a particularly severe period of flooding. Russ suggests keeping this action but revising the relevance to be medium or low, because the likelihood of taking action is low.</p>	Keep with revisions
13	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	CIRCA will get the list of current Rep Loss properties from CRCOG to check whether this action is needed; the presence of RL properties will make this action necessary.	Keep
14	Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting their properties to be more hazard-resilient while maintaining historic character.	David notes that there is new mapping from SHPO about historic resources. Russ says that the majority of historic structures in Farmington are not in floodprone areas.	Revise action to suggest acquiring and using the new SHPO data.
15	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	CIRCA will get the list of current Rep Loss properties from CRCOG to check whether this action is needed; the presence of RL properties will make this action necessary.	Keep
16	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	See discussion in Action 14.	Combine with #14.

Critical Facilities

- The senior center, high school, and middle school can all be used as cooling centers.
 - All three of these have generators.

- A new high school is under construction this year and will have full AC – this will become the new primary shelter and a cooling center. The current high school has limited AC.
- The senior center is regularly opened as a cooling center.
- The town doesn't see much use of the cooling centers during hot periods. The main use of shelters is during power outages for charging devices.
- No new critical facilities since the last plan.

Development and Redevelopment

- Multiple new apartment complexes, mostly along Rt 4 (new buildings) or Fienemann Rd (a former hotel). None of these are believed in areas of flood risk.

Recent Events

- There was a three day power outage during Tropical Storm Isaias. The main issue here was wind rather than rain.
- The flashy droughts in 2020 and 2022 impacted Farmington but not significantly. The water companies put restrictions on water use, but this was more of a request than a demand.
- Farmington avoided significant damage during the storms of 2021, except for a few small pockets.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Farmington.

- Town staff don't hear indications of climate-related concerns from residents. David offers some examples from other towns, like small stream crossings, forestry, and (in Windsor Locks), the airport and adjacent hotels without generators.
- Farmington has been replacing and repairing their bridges for decades, with 4-5 replaced so far in just the last few years. A lot of the stream crossing and stormwater systems have been updated using LOTCIP grants. A new LOTCIP grant is in the pipeline for Burlington Road right now. The sewer and stormwater systems are separate, which prevents many problems.
- Traffic is the biggest complaint from residents, but many of these complains are originating from commuters. Town staff note that an extra lane on Route 4 has helped this somewhat.
- The cemetery riverbank erosion concern is the most significant need, although a direct connection between this and climate change is not apparent.

Follow-Up

- The HMP Coordinator will be Russ Arnold.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Glastonbury

Date: June 15th, 2023

Time: 1:00 pm

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Mike Manfre	Glastonbury Superintendent of Sanitation
Shelley Caltagirone	Glastonbury Community Development Director	Jonathan Luiz	Glastonbury Town Manager
Michael Thurz	Glastonbury Fire Chief		

Overview

CRCOG and CIRCA attended a meeting with Glastonbury to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Glastonbury and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Glastonbury’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Glastonbury’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Glastonbury 2019-2024	Notes	Current Status
11	Update the Town-wide storm drainage management program/Master Drainage Studies. Provide recommendations pertaining to the latest innovative techniques to manage stormwater quality and quantity, such as biofilters and rain gardens.	The Town Engineer Dan Pennington is not in this meeting, but might be able to provide follow-up information. Former town staff Mike Bisi can also still be reached.	Follow up with Dan Pennington and Mike Bisi
10	Update the Storm Drainage Management Reports prepared for the Roaring Brook, Salmon Brook, Grindle Brook and Meadow Drain watersheds to ensure their continued use as policy guidelines for development within these areas to prevent downstream flooding, erosion, and property damage.	The Town Engineer Dan Pennington is not in this meeting, but might be able to provide follow-up information. Former town staff Mike Bisi can also still be reached.	Follow up with Dan Pennington and Mike Bisi
5	Apply the same flood damage prevention guidelines to the Connecticut River floodplain and other isolated flood zones not associated with Roaring Brook, Salmon Brook, Grindle Brook, and Meadow Drain.	The Town Engineer Dan Pennington is not in this meeting, but might be able to provide follow-up information. Former town staff Mike Bisi can also still be reached.	Follow up with Dan Pennington and Mike Bisi
1	Complete the Tryon Street and Dug Road drainage project to reduce flooding in South Glastonbury.	This is complete.	Complete/Retire
12	Identify long-term stream channel erosion problems and prioritize for remediation. Include specific remediation projects in the next HMP update.	The Town Engineer Dan Pennington is not in this meeting, but might be able to provide follow-up information. Former town staff Mike Bisi can also still be reached.	Follow up with Dan Pennington and Mike Bisi
2	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	The town staff don't believe there are many businesses in low-lying flood areas for which this would be a concern. Glastonbury has local flood zoning that prevents many uses within a flood zone. This is no longer a need and can be removed.	No longer needed / Retire
3	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Glastonbury is on track with MS4. This is a capability. Five town-owned facilities have new stormwater pollution prevention plans.	Capability / Retire
4	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Shelley hasn't personally done this yet (is new to the position). She can check with the other planner, but they are also new.	Check back
6	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	The town has its own sewer and eight town-owned sewer pump stations.	Add these to list of critical facilities. Maybe revise action?

		For water, the western part of town is supplied by MDC potable water. The eastern section is the Town of Manchester potable water. There are four MDC pumping facilities in town, all water.	
7	Conduct outreach to private property owners encouraging them to remove dangerous trees and branches on their property.	The town has a tree warden and money in the budget to address tree problems that are town-owned. The town also worked with Eversource to coordinate taking out trees in the power right-of-ways. In terms of private trees, the town will sometimes send a letter asking private landowners to take action. So this is a capability.	Capability / Retire
8	Adopt best-practices guidelines for contractors performing major tree clearing projects to minimize impacts on drainage.	The town environmental planner would review any proposals for subdivisions with implications for wetland areas or sensitive areas. Seems like the intent of this action has been achieved.	Complete / Retire
13	Make progress with the hazard mitigation goals associated with SustainableCT certified actions.	The town is certified silver.	Complete / Retire
9	Carry out a campaign to educate property owners on the impact of using water, especially private well water, to irrigate turf during droughts. Include alternative options.	The town has a number of homes with private wells. Drought is still a concern of the town for this reason. Town staff think that messaging would be sent out if there was a drought, but it might be on a case-by-case basis.	Carry forward, perhaps with revisions?
14	Promote the use of drywells and other infiltration structures to direct runoff and precipitation into structures for groundwater recharge	Town staff thinks there is more work to be done here. The land use regulations have some groundwater protection areas	Carry forward, perhaps with revisions to be more achievable?
15	Adopt new Drought Ordinances that reflect and promote the findings and recommendations of the 2003 Connecticut Drought Preparedness and Response Plan (or future updates to that document).	The town does not have a drought ordinance. Revise to something more achievable / useful.	Revise
16	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency	The town has a lot of historic structures. The town already has access to the new SHPO layer, so this can be considered a capability. The town is not looking to do more surveys, so that part of the action is no longer a need.	Capability / Retire

	plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.		
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Critical Facilities

- Eight town-owned sewer pumping stations should be listed.
- The four MDC water pumping stations should also be listed.
- Glastonbury High School is the primary shelter, the backup is the Riverfront Community Center.
- Cooling center is the Welles Turner library and the Riverfront Community Center.
 - The Riverfront Community Center does not have a fixed-in-place generator but can be hooked up to a mobile generator. This arrangement works for the town.
- WWTP is critical infrastructure, but this is likely on the previous list.
- Academy – missed what they said about this, other than that the back-up was the PD

Development and Redevelopment

- Some residential development, none of which are in floodprone areas. Several large multi-family developments are upcoming.
 - Apartments at the intersection of Main and Hebron Avenue,
 - Town-house development on Feldspar (?) (TBD 80 – 130 units).
 - Nye Road development is a mix of apartments and townhouse.
 - Pratt Street development, 74-units.
- Potential hotel project that could get underway north of town center. Size of this is so far unknown, but one early plan was for 5-stories. This is off Glastonbury Boulevard.

Recent Events

- It took about 7 days to get power fully restored after Isaias in 2020.
- “Uneventful” when it comes to flooding in 2021, no major flooding.
- Droughts were discussed during the table of actions discussion.
 - David explained that that Manchester Water Department is often affected by flashy droughts, and supplies some of Glastonbury’s water.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Glastonbury.

- Roads with flooding concerns:

- Forest Lane
- Shoddy Mill Road
- Low end of Tryon Street, almost at Portland line
- Naubuc Ave (although this has not flooded recently).
- The Connecticut River is not really a concern due to flood protection and flood management infrastructure; the last time it reached Main Street was 1984.
 - There's an area near Ferry Lane that sometimes floods, but not a major concern.
- There are a few more assisted living facilities in town compared to a few years ago.
- A concentration of lower-income housing is located on the north side of town, which may not have air conditioning. The Housing Authority may be considering or planning improvements in this area (Harris Street / Deming Road / off Griswold).
- Uranium in private wells has been an issue in certain parts of town. David noted that climate change sometimes makes other issues harder to deal with even if the original issue was unrelated to climate change.
 - In this case, people might need new water sources due to uranium, and it might be more difficult to extend water sources due to climate change impacting the source of the water.

Follow-Up

- The HMP Coordinator will be TBD, but could be Dan Pennington (who is not at this meeting). David notes this can also be the Town Manager or similar. **CIRCA will reach out to Johnathan in a week to get the name of the person who will take on this role.**
- Shelley notes that the town has been coordinating with DEEP related to identifying hazards in the CT River if there was an oil spill from the north. It's possible that the Riverfront Community Center or the Boathouse would be a staging area for a remediation effort if this occurred. This potential use of this critical facility should be noted in the plan.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Granby

Date: May 22nd, 2023

Time: 1:00 pm

Location: In-person at town hall

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Kyle Botteron	Granby Emergency Management Director
Abby Kenyon	Granby Director of Community Development	Kirk Severance	Granby Public Works Director

Overview

CRCOG and CIRCA attended a meeting with Granby to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Granby and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Granby’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Granby’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Granby 2019-2024	Notes	Current Status
1	Review snow removal policy for emergency situations and adopt a policy that will limit road obstruction.	It's likely that ice will be more of a concern than snow going forward. It costs more money to work with ice than it does with snow. Getting snow out of the way of roads is not really a concern for Granby. Revise to address ice.	Carry Forward with Revisions
2	Develop the Town's social media presence and utilize that media to improve public communication about natural hazards.	The town has a Facebook page and is working on increasing its social media presence. The structure is there. Perhaps combine this action with #3.	Carry Forward with Revisions
3	Update the Town website to include up-to-date information about natural hazards.	The town has recently revamped the website. Perhaps combine this action with #2.	Carry Forward with Revisions
4	Develop a standard operating procedure to address trees that fall into streams and block bridges and culverts.	This is an ongoing concern, and happened in a recent storm. This action is still needed, and needs to coordinate with Inland Wetland Commission.	Carry Forward
5	Consider and document the labor resource needs and benefits of participation in the Sustainable CT program.	Conservation Commission is now leading the effort to become certified, working on getting enough points to be certified. So this action is complete, as the consideration has already happened. No other actions related to Sustainable CT are needed.	Complete/R etire
6	Develop and implement timber management program for town-owned property.	This is still needed. Attendees remarked that "What we need is a forester." The town owns about 1400 acres, many of which are remote. Many have hiking trails, and many have required tree trimming in order to protect residents' houses. DEEP has a program to assess town-owned forest, which might be useful. The town staff suggested getting some UConn interns to work on this. Through a facilitated discussion, attendees settled on potentially combining with action 7 below to provide a new action to develop a Forestry Management Plan.	Carry Forward
7	Increase local budget for tree trimming.	This can be combined with the previous action. The budget is \$27,000. The town will work with tree service companies so that the company does the trimming and the town does everything else (i.e., chipping and debris management), which reduces the total cost.	Carry Forward with Revisions
8	Replace analog communication system and acquire new computers for the EOC.	The EOC now has a new computer and monitor to replace the old projector. The communication system still needs work, and needs to upgrade from a radio system	Carry Forward with Revisions

		(estimated cost \$4 million). Perhaps make this its own action. The EOC is in the police department, but the police chief has noted that the facility might be at risk due to the large number of windows / possibility of wind damage. This should be another action – not a new EOC, but fortifying the current EOC, perhaps with a retrofit using safety glass windows.	
9	Complete the reconstruction of the Silver Street Bridge.	This is complete. This was an in-kind replacement, not an up-size.	Complete/Retire
10	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	This likely did not happen, and this action can be retired because the need is not apparent in Granby.	No longer needed/Retire
11	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	The town is part of MS4 and has this very well handled. This action can be removed.	Complete/Retire
12	Pursue opportunities, including MOUs and CRCOG's service sharing initiative, for service and equipment sharing with neighboring communities. Specifically, the Fire Department needs access to a utility vehicle.	This can be removed, as the CRCOG initiative is no longer active.	No longer needed/Retire
13	Establish ordinance to prevent road obstruction due to illegal snow removal.	There is still no ordinance. This can be removed, given the snow removal discussion above for action #1.	No longer needed/Retire
14	Draft a regulation requiring dry hydrant installation in new developments.	There is no regulation, and this remains at the fire marshal's discretion to encourage the developer. This allows the decision to be made case-by-case, which is the town's preference. Remove this action.	No longer needed/Retire
15	Conduct outreach to promote timber management planning with major landholders.	This should be addressed within the timber management plan/program referenced in Action #6. Needs to be clear that the Tree Warden does not go on anybody's private property. The ordinances should not change, and any messaging should be completely voluntary. More holistic forestry management is needed, with clear distinctions between what is in the Tree Warden/town's jurisdiction and what is not. Revised/combined with actions 6/7 above.	Carry Forward with Revisions
16	Pursue MOUs with local vendors on an annual basis to provide assistance during and following storms.	This is a complete and now is a capability. Remove	Complete/Retire
17	Annually evaluate and update training protocols, particularly in relation to flooding.	Keep this action, the town staff feel that the training is important but merge with action below.	Carry Forward

18	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	This can be merged with #17.	Carry Forward with Revisions
19	Evaluate and update the stormwater management plan to state requirements.	This is complete and part of MS4 so it doesn't make sense to have it as a separate action. The town uses a consultant for assistance.	Complete/Retire
20	Conduct outreach efforts to prevent road obstruction due to illegal snow removal.	This can be removed, consistent with above discussions about snow risks decreasing	No longer needed/Retire
21	Evaluate and update the zoning, subdivision and wetland regulations to ensure they limit exposure to natural hazards.	This is a capability. Remove	Complete/Retire
22	Conduct a wildfire vulnerability and needs assessment to guide construction of additional dry hydrants and/or cisterns and fire roads through forested areas.	This can be incorporated into the forestry/timber management plan action. The town has had some small brush fires, maybe an acre at most.	Carry Forward with Revisions
23	Update GIS technology to coordinate and prioritize response.	The town's GIS capabilities are pretty good, and this action can be removed.	Complete/Retire
24	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	The town staff doesn't think there are any Rep Loss properties in Granby, but CIRCA staff will double-check.	
25	Generate a list of priority bridge, culvert, and other drainage projects identified in the Capital Improvement Plan to be included as individual actions in the next HMP update.	Bridges are inspected regularly by the state or by the town (depending on the size of the bridge). The town keeps track of the bridges in need of repairs. The attendees will provide the names of these bridges so we can include a specific action in the plan. There is a pedestrian bridge that got flooded in 2021, and a "Friends Of Holcomb" group is trying to find funds to get it replaced. The pedestrian bridge is unlikely to be funded by FEMA. Attendees discussed the possibility of not replacing this bridge, due to the permitting complexities that would occur.	Carry Forward with Revisions
26	Complete an analysis of costs and benefits of joining the FEMA Community Rating System.	There are very few homeowners in Granby who have flood insurance, and the town does not have the staff time to work on this. Joining the program would not be cost effective. Remove this action.	No longer needed/Retire
27	Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting their properties to be more hazard-resilient while maintaining historic character.	Revise this to something like "Request and use the new SHPO data on historic resources to identify resources at risk."	Carry Forward with Revisions
28	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of	Combine with the previous action. The town has no other plans to look for historic structures.	Carry Forward with Revisions

	vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.		
29	Create a long-range plan for relocating high density utility facilities.	The town staff were initially not sure which facilities this is referring to, but given that this possibly refers to a critical facility within a flood zone, attendees agreed that this may be referring to sewer pumping stations. The Salmon Brook Park pumping station is one that might be out to bid within the next month. The new pump station will be elevated and floodproofed so that it won't take in water. So the town is working on this. The action can be revised from "relocating" to "relocate or floodproof."	Carry Forward with Revisions
30	Purchase large wood chipper and new utility vehicle.	This is complete. But the fire department might still be looking for an RTV, and this could be its own action.	Complete/Retire

Critical Facilities

- The middle school is the shelter.
- The senior center can be used as a cooling and warming center.
- The EOC has been used as a charging station in the past. See Action #8 for more details on the EOC.
- The library does not have a generator, and in recent years has been offered as a cooling/warming/charging center.
- The town does have a portable generator but it's 40-50 years old.

Development and Redevelopment

- The town has had a lot of recent residential development, but not in high-risk areas.
- 235 apartments are going in north of the center of town in a 3-story building.

Recent Events

- The town experienced a long power outage during T.S. Isaias in 2020; memories vary but probably at least a week. Power outages are definitely a challenge for Granby.
- Much of the town is served by private wells, in addition to some water company service.
- The summer 2021 flooding didn't cause much destruction. Some sections of ballfields were lost to scour or erosion in Salmon Brook Park, and some debris gathered. No buildings were impacted. The pedestrian bridge referenced in Action #25 was washed out.
- Lost sections of ball field in Salmon Brook Park during 2021.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Granby.

- The new FEMA flood maps will result in more properties requiring insurance than before.
- The ability to access the animal shelter can be compromised due to flooding – this could be a new action.
- Signage could be a need to indicate what is an evacuation route.
- Riverbank Stabilization
 - There are a number of small brooks in Granby. These take on water fast and usually go down fast. But all brooks change course, and getting the Army Corps of Engineers to secure a bank is quite a complex process. The town did get permission to do some work in Salmon Brook Park before, with stumps to protect against erosion. But bank stabilization is a continuing need for Salmon Brook.
 - Bridge on Donahue Rd – there is a bank stabilization area here that should be addressed but the homeowner can't afford to do anything and isn't technically allowed to.
 - Bank stabilization is Kirk's biggest concern.
- Forestry is also a significant concern. In the last round of storms, Granby had some of the highest levels of Eversource crews at work in the town. The number and duration of power outages is high.
- The town has senior vans that can be used to take people to the senior center. There are two senior housing developments that are in close proximity to the town hall complex, plus a nursing home. People tend to be quite self-sufficient. The senior housing / nursing home is considered critical by Eversource.
 - Meadow Brook Nursing home is also in a flood zone, and reportedly has had flooding issues before.

Follow-Up

- The HMP Coordinator will be Abby Kenyon.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Hartford

Date: June 12th, 2023

Time: 10:00 am

Location: In-person at town hall

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Cecelia Drayton	Hartford Director of Sustainability
Michael Looney	Hartford Director of Public Works	Frank Dellaripa	Hartford City Engineer
Erin Howard	Hartford Director of Economic Development / Acting Planning Director	Kenny Howell	Hartford Police Assistant Chief

Overview

CRCOG and CIRCA attended a meeting with the City of Hartford to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to the City of Hartford and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Hartford’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Hartford’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Hartford 2019-2024	Notes	Current Status
1	Develop an EAP for the Batterson Park levee in Farmington, and provide it to the Town of Farmington.	When the City is finished refurbishing the park, the ownership will be taken over by the state. The City is trying to make sure the levee is included in this transfer of ownership, as the staff don't think it makes sense for the City to retain ownership. The EAP is either done or almost done – Frank will check and confirm. There were no tabletop exercises.	Complete/retire
2	Supplement or replace the generators at the city's Fire Houses to support their roles as emergency places of refuge.	City staff weren't sure about the fire houses – this kicked off a further conversation about shelters, see the critical facilities section of the notes. City staff present for the meeting generally seemed unfamiliar with this action. Perhaps revise to encompass the issues discussed in critical facilities section of discussion.	Carry Forward with Revision
3	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	City staff said that this action doesn't make sense with the reality on the ground in Hartford. The City reportedly has flooding issues, but telling business owners that they should move their equipment and stock to a higher floor is unlikely to help. Perhaps revise to encourage City staff watch the one-hour DEEP webinar training on this topic.	Carry Forward with Revision
4	Coordinate with NEMO and CROCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	City staff says that stormwater and MS4 compliance is still very much a concern. David suggested that the City needs to solve stormwater challenges, rather than rely on the technical assistance suggested by the action (i.e., learning how to submit annual reports, etc.). Erin and the other attendees explained the challenges of a combined system, and the MDC has been telling the City that there can be no net increase in stormwater right now, which impacts redevelopment. Another concern is outfall ownership -- the City thinks they know what outfalls they own, and MDC disagrees. It would be helpful to have a third party assess this. Keep; perhaps with revisions to reflect the specific concerns.	Carry Forward/Carry Forward with Revision
5	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	While the City staff may not have participated in the events recommended by the action, they participate in the ongoing Army Corps exercises about the flood protection system. David mentioned the Silver Jackets flood awareness workshops as an example of training presently available, noting that continuing education is often available from DEMHS and other agencies. The City may wish to continue this action with a revision to provide some flexibility.	Carry Forward with Revisions
6	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	Given the sensitivity of MDC operations in the City, David explained the background for this action. The reason this action is in here is because Greater New Haven Water Pollution Control Authority previously missed out on FEMA funding because they didn't list sewer pumping stations in the appropriate annexes of the HMP.	Carry Forward with Revisions

		<p>The City noted that MDC is a partner in the flood control system, with specific responsibilities in a flood situation. This arrangement works well.</p> <p>Erin raises the concern that MDC might compete with the City for FEMA funds.</p> <p>After some discussion, attendees agreed that Fish Fry pumping station should be listed as a critical facility. Frank notes that a number of sluice gates in the city are also important.</p> <p>Erin suggests listing all the MDC infrastructure near the “hot spot” areas in Hartford.</p> <p>David notes that the new FEMA guidance requires more robust stakeholder engagement, so CIRCA will likely be reaching out to MDC directly as well.</p> <p>Revise to include Fish Fry, perhaps others?</p>	
7	Determine the best course for addressing drainage issues at the culvert on New Park Avenue near the tire facility. Complete the determined action or include it in the next plan.	<p>West Hartford applied for a DCRF grant for Kane Brook, which would include Hartford. Not known yet whether this will be funded. David notes that Kane Brook is also a very good candidate for a Resilient Connecticut study and concept design. City staff aren’t sure what the “tire facility” referenced here is.</p> <p>Revise to be more clear that this is Kane Brook, and to tie to the DCRF project for Kane Brook if that is funded.</p>	Carry Forward with Revisions
8	Complete implementation of System Wide Improvement Framework and Semi-Qualitative Risk Assessment for the Hartford Flood Control System, submitted to USACE in 2018.	<p>The “SWIF” is underway and therefore the intent of this action (“complete implementation” is complete. Toe drain project and closure structure still need to be completed.</p> <p>Revise To describe the next steps.</p>	Complete/ Revise to describe next steps that need funding
9	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	<p>City staff were unsure about who the floodplain manager may be. Some outreach/education is being conducted and underway, in collaboration with an MDC program to address flooding associated with sewer backups and infrastructure challenges. Janice Castle (Hartford Office of Community Engagement) is the city staff member who would know about this.</p> <p>Frank notes that this is complicated, because for a while MDC was saying it wasn’t their responsibility. A change in mindset may be occurring, as MDC has reportedly canvassed about 1,000 homes in North Hartford.</p> <p>Check with Janice Castle, Director of city Engagement, for more information on this. David noted that, ideally, outreach related to flooding may inherently address areas with repetitive loss properties. Nevertheless, the two issues (sewer backups and repetitive losses under NFIP) are different.</p>	

10	Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting their properties to be more hazard-resilient while maintaining historic character.	<p>This was a top-down action from the last plan update, given to most of the CRCOG towns because SHPO had completed a historic resources resiliency planning project. SHPO has since created a data layer of historic and cultural resources.</p> <p>Revise to suggest that City staff should acquire and review the new SHPO layer</p> <p>Combine with Action 12.</p>	Carry Forward with Revision.
11	Make progress with the hazard mitigation goals associated with SustainableCT certified actions.	<p>The City is certified Silver. Cecilia says it would be helpful if the City could implement green infrastructure without the MDC limiting the use of green infrastructure, but currently MDC is an obstacle because even green infrastructure still adds to the stormwater system, and would add more maintenance to MDC's plate. Therefore further action towards greater certification in this specific area is unlikely to happen.</p> <p>David suggests adding another action about green infrastructure since FEMA is funding these types of projects. There is an arrangement between the City and MDC that MDC is responsible for maintaining green infrastructure, which is another reason why MDC might not be in favor of additional green infrastructure. Perhaps the new action should skate around this maintenance issue.</p> <p>Remove or broaden the Sustainable CT action, as CRCOG and the state are no longer pushing this.</p> <p>Perhaps add a new action for green infrastructure.</p>	<p>Complete/Retire</p> <p>Or</p> <p>Carry Forward with Revisions to broaden or include green infrastructure</p>
12	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Another top-down action, can be combined #10.	Carry Forward with Revisions
13	Conduct tabletop natural hazard emergency response drills with local departments more frequently. Ensure multiple hazard scenarios are drilled.	City staff participate in drills with the Army Corps (as mentioned above) and agencies such as DEMHS. This is a capability.	Complete/Retire
14	Increase DPW budget or personnel to allow for proper maintenance of drainage swales.	The City has a good relationship with DOT, and DOT does some of this work. This is maintenance, which FEMA doesn't fund.	Partly Complete/Retire

		This will be addressed in other ways, but not with FEMA funding.	
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Critical Facilities

- Frank explained that the City maintains two formal shelters, but staff discussion at the meeting suggests additional facilities are not officially shelters but still possibly used as such. Some follow-up is needed to clarify this. The high school is not considered a shelter, even though it is very well-equipped.
 - The Sustainability Office submitted a grant to DEEP to evaluate the feasibility of a microgrid for the library, City Hall, and a third (adjacent or nearby) location.
 - Before COVID, the City was supposed to renovate McKinney, but COVID muddied this, and now there’s reportedly a developer at the table for redevelopment.
 - Erin says that there is a lot of turnover and changing about which facilities are used for sheltering / cooling / warming, and it is not consistent from year-to-year. Erin suggests that the City should get a better handle on permanent shelters/cooling centers vs. temporary shelters.
 - David suggested that this high-level evaluation should be an action, and further noted that an evaluation could potentially be a study funded by DCRF if DEEP runs the grant program again.
 - The overall study for getting a better sense of facilities should be an action, but there should also be a separate actions specific to individual school buildings.
- David asked where the cooling centers are / should be.
 - Frank suggested renovating an abandoned school (Waverly School) to serve as a shelter and cooling center. David says we can add this as an action.
 - Frank noted that the last few years before a school is closed, the Board of Ed knows that it’s closing and doesn’t keep up the building maintenance to the same degree that would otherwise be attempted. This makes the eventual renovation job harder.
- David suggested listing all of the school buildings as critical facilities, since the City staff are unsure how needs and uses are going to change in the future.
- As noted above in the table of prior actions, some MDC facilities will be listed as critical facilities.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Hartford.

- Flooding is definitely the biggest climate-related concern as well as the most challenging natural hazards.
- During the discussion about FEMA grant eligibility, Frank expressed a frustration that the City has tried to apply for FEMA funds in the past without success. David suggested that reasons

could be an unsuccessful benefit cost analysis or other eligibility problems. David also notes that right now FEMA is more frequently funding “scoping grants,” which help to fill the gap between an identified project need and project implementation. This type of FEMA grant might be a good fit for Hartford.

- Frank asks whether CIRCA helps with these applications. David says Resilient Connecticut studies and designs can help with filling this same gap as a scoping grant, before seeking additional FEMA funding.
 - Erin agrees that this is a need – the City doesn’t yet have their “story to tell” for individual needs related to flooding.
- The City has six flood pump stations, and two of them reportedly never turn on (Pope Park and Armory pump stations). The locations of these stations were originally based on the contours of the ground, and David suggested that they would operate for catastrophic floods. Frank says the City could use these if only they could get water to them – for example, how can the City get water to the pump stations from the North End to help address the North End flooding problems? Studies and engineering have to be done. This falls into the hazard mitigation category of a structural project, and would need many millions of dollars in funding.
- Erin raised the topic of the levee system, which reportedly needs to be addressed before any major redevelopment can happen in the vicinity of the Connecticut River. Frank notes that work is ongoing, and the flood protection system will continue to provide protection as individual maintenance and repair projects are completed.
- The City submitted a DCRF application to document and help characterize the flooding in the North End.
- Responding to David’s comment that the CRCOG HMP has been slowly shifting from a more emergency management focus to a more planning/public works focus, Erin noted that the City is a major municipality with different issues from the surrounding towns, particularly when it comes to emergency management, police, and fire: and therefore these voices shouldn’t be left out of the plan.
 - David clarified that we don’t want to leave emergency management out of the planning process, but we need the plan to include a wider variety of actions including many aligned with what FEMA is currently funding.
- Frank asked whether there are funds available for tree planting. David says not directly from FEMA, although tree planting could perhaps be tied in with a larger resiliency project. There are other smaller sources of grant funding that might be combined, and David mentioned a recent \$27,000 grant in Willimantic for tree planting.
- Areas of concern (not an exhaustive list – city staff will consider what else should be added):
 - North Main Street / North End
 - Theodore Ave
 - Cleveland Ave
 - Albany Ave – there was a chance for a big stormwater conveyance pipe under this avenue, but reportedly no one wanted to have ownership of the pipe so it never got built. Upper Albany Ave still has a high risk of flooding.

Follow-Up

- We will need to have a follow-up meeting to continue this conversation and identify particular sites that should be mentioned in the plan. At least Mike, Frank, and Erin should be present. Monday the 26th will be the follow-up meeting date, time TBD depending on Mike's schedule.
 - David will cover this for CIRCA.
- The HMP Coordinator will be **determined in the next meeting.**
- The Army Corps is requiring the City to do some outreach to the NRZs. Maybe this should be coordinated with the HMP outreach activities.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Hartford

Date: August 30th, 2023

Time: 8:30 am

Location: In-person at town hall

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Michael Looney	Hartford Director of Public Works	Maureen Goulet	CRCOG
Cecelia Drayton	Hartford Director of Sustainability		
Erin Howard	Hartford Director of Economic Development / Acting Planning Director		

Critical Facilities

- The shelters in Hartford are not only used as Emergency Shelters but are also always open as homeless shelters. Thus, the town staff reported that the shelters are always full
 - The city is aware that they are the capitol city and have a lot of the services that are needed to provide for homeless or vulnerable populations. At the end of the day, however, the taxpayers are paying and the issue is selling the need for homeless shelters to the taxpayers.
- Shelters are allowed only in Industrial Zone, so the underlying zoning needs to be looked at to have a shelter or resilience hub/shelter placed somewhere in the city.

Development and Redevelopment

- Hartford has old stormwater infrastructure system. There are pressures on the system from climate related weather events and MDC wont allow new sewer and water connections for new development.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Hartford.

- David explained that there was a call about the DCRF that was given to the city of West Hartford. West Hartford applied for a DCRF grant or the Cane area. Mike said Prospect and

Cane are natural depression, and everyone's basements in that area filled with water during one of the 2021 storms.

- Hartford also applied for DCRF for a dashboard for climate resiliency with unmet needs. David suggested that this might fit in well with Resilient CT.
- David also explained that each DEEP resilient fund can have two actions in a HMP plan. Of the two DCRF grants, there will be four actions in the plan. Hartford town staff were good with this.
- David explained that CIRCA is developing a grant for NOAA to develop resilience hubs in several communities in CT. Hartford was listed as one. The city has interest in this but would like to know more. The town thinks that zoning policy might need to be changed in Hartford to make this happen.
- David explained ZSR and asked for clarification on the North End Specifically.
 - Mike explained that Theodore is a bowl and at the top of the edge when flooding flows downhill, Westland St is affected. Cleaveland Ave also has an issue with flooding because that backs up to Theodore.
 - Mike said take North Branch area, the ZSR can extend from the all the way to Homestead Ave.
 - Blue Hills ZSR – Mike reported that a lot of people got flooded South of Plainfield St.
 - Mike reported Franklin Ave is also at flood risk because of infrastructure. The town has had instances of heavy downpours where water goes into the catch basins, these fill and the water come back up into the street.
 - Mike also pointed out that in the North end, Gully Brook floods Love Lane.
- North Main Street has flooding issues and the town would like to continue to have discussions with MDC to rectify the flooding. The issue is who will take the lead and will it benefit the residents and what is the resolution

Follow-Up

- The HMP Coordinator will be Michael Looney
- Reach out to Park River Association
- Forward the MDC meeting to Frank and Michael who might loop in others as well.
- Michael is looking at doing a WRDA grant for a planning study to see if there is a way to get more stormwater from problem areas, in concert for the money they got from the state and East/West Hartford, to pump stations and into the Park River Conduit.
- Send an e-mail to Erin about the NOAA hub application that CIRCA is applying for.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Hebron

Date: June 20th, 2023

Time: 10:00 am

Location: Virtual via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Peter Starkel	Hebron Fire Chief
Matthew Bordeaux	Hebron Director of Planning and Development		
Andrew Tierney	Hebron Town Manager		

Overview

CRCOG and CIRCA attended a meeting with Hebron to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Hebron and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Hebron’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Hebron’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Hebron 2019-2024	Notes	Current Status
1	Assess the capability of the RHAM middle and high school to serve as regional emergency shelters.	Town staff said this is complete and RHAM is designated as a regional shelter now. Previously RHAM served as the town's shelter but not the regional one, so this is a change. The town is working on getting a generator for this facility.	Complete/Retire
7	Perform upgrades to the electrical system, generators, and fuel capacity of the RHAM Middle and High Schools so that they can operate bathroom and cooking facilities and be used as emergency shelters.	Working on this. The town is going to put out an RFQ for this soon. CIRCA will double check to see what funding source the town will be using to fund the generator. Revise to change this to completing the installation.	Carry Forward with Revisions
2	Perform study to determine Town's ability to maintain sufficient water supply to use for wildfire suppression in the future given continued development. Consider the effect of droughts and climate change.	Town staff said this is an ongoing process, but they are not sure why this is related to wildfires specifically and have not performed a study specific to wildfires. The town does recognize that there are limitations with the existing water supply and are looking into other sources for water use especially for the downtown area. The town does have dry hydrant systems on the outskirts of town. An ongoing goal is to improve the water supply. This action can be rewritten to reflect this broader concern, but take out the wildfire component.	Carry forward with revisions
9	Complete a draft timber management plan for Town-owned forested land.	Town staff said a timber management plan was developed but there was some conflict with the goals of the Conservation and Open Space Commissions. The town staff would like this action to be revised to either call for revising the plan to have more of a hazard mitigation / climate change focus, and/or to use the plan as a resource to educate residents and commission members.	Carry Forward with Revisions
5	Update floodplain regulations when new FIRM maps are issues by FEMA to be at or higher than regulatory standards.	Town staff said they do have flood plain regulations consistent with the NFIP. Town staff don't think that they are likely to see new FEMA flood maps anytime soon but are in need of new FIRM maps. This is an ongoing capability of the	Complete/Retire

		town when new FIRM maps are available, and the town does not have control over when those FIRM maps are updated, so the intent of this action has been completed.	
6	Review the LID Manual developed by the Northwest Hills Council of Governments and determine whether LID can be incorporated locally to increase rural resiliency.	Town staff said the intent of this action has been completed in collaboration with watershed groups.	Intent is complete/Retire
3	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff believe there is a pool company in town that this action might be relevant for. The town work with regional sanitation groups but are unsure if this type of outreach has been done. Revise to say "Watch the DEEP webinar related to this program."	Carry Forward with Revisions
4	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said this will always be valuable and the staff are doing this. Ongoing capability.	Capability/Retire
8	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said they are compliant with MS4.	Complete/Retire
10	Make progress with the hazard mitigation goals associated with Sustainable CT certified actions.	The Town was certified in the past but, upon reflection, staff are unsure if the effort to get certified takes too much town given staff capabilities. This is not a priority for the town.	No Longer Needed/Retire
11	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Revise to say " Acquire SHPO data and review with Flood zones". Town staff mentioned that historic resources are important to town members.	Cary Forward with Revisions

Critical Facilities

- No Changes to critical facilities
- Regional shelter – RHAM High School
 - This was a shelter for Hebron in the previous plan update as well, but the regional piece is new.
- Cooling Centers – Town Hall, Douglas Library Senior Center, and RHAM

- All facilities have generators except RHAM which the town is working on obtaining currently. The Town's Building Committee is drafting specifications to go out to bid with for the generator. They are waiting for the Town Attorney's review and should be able to publish in a week or two. The project is being funded by DECD though it's unclear through what program. The grant is approximately \$2 million.

Development and Redevelopment

- Development and redevelopment are light in the town. Development is reviewed by town land use boards, and they are unlikely to approve any development or redevelopment in high risk areas.

Recent Events

- During the 2020 and 2021 storms, the town experienced some power outages, and they needed to open charging stations and hand out potable water.
- The town did not experience many issues with flooding/blocked roads during these events.
- The town has made improvements on the culverts on Mill Stream Rd but during some rain events, the culverts still overtop.
- During the flashy droughts, there were a couple of private residential wells that went dry in town, but the town worked with Chatham Health District to address the supply challenges and this ultimately wasn't too much of a concern for them.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Hebron.

- The town is working on elevating bridges in town due to flood related concerns.
- The primary concern is for protection of water quality. Town staff said that they take pride in the health of their watersheds and are concerned with runoff impacts or development patterns that could affect water resources in the watersheds.
- The town has not seen a high demand for cooling centers in town and are able to assist getting people to the cooling centers when/if needed.
- David asked whether the town staff have concerns related to the regional sewer system, as the layout and arrangement (involving Colchester and East Hampton) is relatively unique and relies on long systems of sewer mains.
 - There was an incident about a year ago where the regional sewage line failed in Colchester. This line runs through Hebron and ends in East Hampton, however, this was not flood related.
 - Millstream Rd pump station is low lying, but floods have not affected it and this is not a concern for the town.

- The town is looking to evaluate sewer system Inflow and Infiltration and mentioned that this could be an area where improvements are appropriate.
- Town staff do not think there are any particular climate-related agriculture challenges in the town. They asked for examples, and CIRCA staff replied that other towns had mentioned droughts, washouts, and water supply for livestock.

Follow-Up

- The HMP Coordinator will be Matthew Bordeaux

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Manchester

Date: June 13th, 2023

Time: 1:00 pm

Location: Virtual Via WebEx

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Emma Petersen	Manchester Principal Comprehensive Planner	Kyle Shiel	CRCOG
Tim Bockus	Manchester Director of Public Works	Gary Anderson	Manchester Director of Planning and Economic Development
Keith Volkert	Manchester Field Service Superintendent	Kasia Purciello	Manchester Assistant Town Manager
Steve Stephanou	Manchester Town Manager	James Roy	Manchester Building Official
Dan French	Manchester Fire Chief/ EMD		

Overview

CRCOG and CIRCA attended a meeting with Manchester to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Manchester and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut* 2.0 future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Manchester’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Manchester’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Manchester 2019-2024	Notes	Current Status
1	Consider and document the labor resource needs and benefits of participation in the Sustainable CT program.	Town staff said that Manchester is a part of SCT and was certified Silver in 2022.	Complete/Retire
2	Require Elevation Certificates for all new development permits in or near floodplains and filing them both in the building department and with land records.	Town staff said that if development is near a floodplain, the planning department is already doing this, Town staff believe this is a capability. David previously noted that this is a requirement from FEMA.	Complete/Retire
3	Develop a prioritized list of flood prone roadways to be upgraded to reduce potential for access being blocked due to flooding.	<p>Town staff would like to check in with Don Janelle on this who is the Deputy Emergency Manager. Town staff believe that this is in the Emergency Management plan. The town will check to see if this is complete.</p> <p>Town staff mentioned that the roads have been changing with the climate change impacts so more roads will need to be added to this list.</p> <p>If the town follow-up reveals that this list has already been developed, revise the action to "name" some roadways or keep this action as is since it's changing yearly.</p>	Carry Forward with Revisions
4	Assess needs of the new EOC in the facilities management building to determine its resilience to natural hazards, and to identify needs to make it more resilient.	Town staff have worked on identifying needs in terms of facility and technology needed but have not done an assessment of the building proper. The town thinks this is still a need.	Carry Forward
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said the Deputy Emergency Manager has made a point to meet with business owners to prevent issues related to polluting. This is a capability.	Complete/Retire
6	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff have done this and are comfortable retiring this action.	Complete/Retire
7	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff are attending/participating regularly in EM courses. This is a capability.	Complete/Retire
8	Address easement issues being worked through with regards to a bridge upgrade, and complete construction.	The town staff are unaware of any easement issue they have had with any bridges in the town, and are not sure which bridge this action is referring to. The town has done a couple of small bridge projects in the last 5 years. Could be related to Center Springs but the town doesn't think this is the case since Center	No Longer Needed/Retire

		Spring Bridge is only a pedestrian Bridge. Could also be related to Hartford Rd Bridge, since the town needed an easement but only for the side walk. Both bridge projects mentioned as possibilities by the town have been completed. The town staff do not think this action is still needed.	
9	Implement an educational system for property owners, including appropriate materials and means for information dissemination. (Include information on importance of properly maintaining private trees).	Town staff think this is ongoing. They have an intern working on this. Tree damage has been increasing in the town and the impacts on trees in storms are mostly private trees falling in right of ways. Town staff report that tree damage and tree management is still an active need for the town. Rewrite to include that this is ongoing concern for the town.	Carry Forward with Revisions
10	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	CIRCA will check to see if Manchester has RLP. The town staff think this action should be kept in, as they believe there are some areas in town that are RLP and are more affected by climate change than others.	Carry Forward
11	Complete and add on to identification of private properties served by private wells and/or on-site septic systems located within known flood risk zones.	<p>CIRCA has data on private wells if this has not been completed yet and could provide it to Manchester</p> <p>The town staff would like to check with Public Health Department and get back to us on that.</p> <p>The town staff would need to look at city water and sewer. They can do it through health department, but it might take a while.</p> <p>Manchester believes they have a list/map of private wells, but they have not done anything with it.</p> <p>Carry Forward with revisions to reflect some progress has happened but nothing has been done with the data yet.</p>	Carry Forward with Revisions
12	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	CIRCA explained this is a top-down action and advised to revise "Acquire and review new SHPO layer and overlay with FEMA data." Town staff agree that this revised action would be appropriate.	Carry Forward with Revisions
13	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Town staff think that Don Janelle, Deputy Emergency Manager, was the lead on this. Goes hand in hand with the RLP action above.	Carry Forward with Revisions

		Town will follow- up on this. Likely carry forward with revision	
14	Conduct outreach to owners of properties identified as being served by private wells and/or on-site septic systems located within known flood risk zones to educate them about strategies for protecting their properties. Include materials and recommendations for appropriate remediation of private utilities that have been subjected to flooding, for health protection and promotion.	Town staff will follow up with the Health Department to see if this action has been completed. Likely hasn't since action 11 has not, and action 11 seems to be prerequisite for this action. Could combine with action 11.	Carry forward with revisions.

Critical Facilities

- Main shelter – High School
- Secondary shelter – Senior Center
- Cooling centers – Police Station, Library (Town staff will follow up with the health department for the full list).
 - Police station and fire station have generators
 - Not sure if the library has a generator. If it does not, we could include this as an action to get a generator for other town buildings that need it.

The town staff report that the facilities used for cooling centers and the facilities used for shelters are different, as these serve different needs. The town uses the shelters for when people have been displaced from their homes for a while, whereas cooling centers do not have people staying for prolonged periods of time.

Development and Redevelopment

- Manchester has new development going in all the time, so town staff are unsure how to answer this question. Mary prompted the group by asking if any developments are in floodprone areas. None immediately came to mind for town staff. If specific development names are needed, the town staff will likely have to do an analysis of where the recent development is and if it is in a flood plain and get back to CIRCA. This would take time and require follow-up.

Recent Events

- In all the 2021 storms the town got hit hard and experienced power outages, flooding, and road wash-outs. Town staff said on some occasions they experienced flash-like flooding.
- Some storm systems inundated that took some time to recede. The period of impact was about a week.
- Ambassador Drive Road washed out and it took the town about a year and a half to recover it.
- The town experienced smaller shoulder washout and private property issues during these storms related to flooding.
- Charter Oak Park washed out and ball fields were lost.
- Case Mountain – dam managed the storm well
- The town would like to add an action related to stream crossings and road washouts.
 - The town would like a comprehensive action to identify general vulnerable areas in regards to street flooding, rather than only listing specific roads in the plan. Town staff

note that there will likely be new areas flooding more in the future, not only the areas that have flooded in the past.

- The town has different watersheds and the storms hit the watersheds in different ways with different impacts. This should be reflected in the action related to road washouts. Potentially have watershed by watershed actions.
- The town needs to assess infrastructure so they can accommodate more of these intense storms and identify infrastructure improvements to address issues that have yet to be identified.
- The town staff remember there were many power outages during many of the storms, but they were short duration power outages.
- Stormwater infrastructure is also a concern of the town's. The town staff see a need to assess the town's stormwater infrastructure to identify choke points leading to flash flooding. They do not yet have funding for this goal. This should be an action in the plan.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Manchester.

- Town staff are aware that there are some people who are more susceptible to heating events than others. Public Safety and Public Health have a robust communication system to get the word out to notify people about shelters. The town employees use their senior center buses to bring people to and from the cooling centers if people do not have access to transportation. The town staff have not seen a ton of use in the cooling centers.
 - Town is proactive but are willing to improve.
- Town staff are worried about tree canopy issues which are two-fold.
 - The tree damage over the past years has gotten worse. The town would like to provide pathways for people to manage their own trees on private properties.
 - Town would like to maintain tree canopy to decrease heat islands in the middle of town. Right tree, right place.
- The town developed a Low Impact Development Plan and are working within the guidelines to encourage reduced impervious surfaces. CIRCA should ensure that this HMP update will be consistent with the LID plan.
- The wastewater treatment facility has limited access due to a stream crossing. The road floods and is a location that washed out during one of the 2021 storms. The town would like to look at how to increase this access and make this site more resilient. This could be a new action, separate from the comprehensive stream crossing action.

Follow-Up

- The HMP Coordinator will be Emma Petersen

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Mansfield

Date: May 25th, 2023

Time: 10:00 am

Location Virtual via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	John Carrington	Director of PW, Town engineer
Adam Libros	Deputy Fire Chief & Fire Marshal	Mike Nintaue	Director Building & Housing
Jennifer Kaufman	Director of Planning and Development	Ryan Aylesworth	Town Manager

Overview

CRCOG and CIRCA attended a meeting with the Mansfield to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to the Mansfield and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed the Mansfield prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about the Mansfield needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Mansfield 2019-2024	Notes	Current Status
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1	Encourage owners of private dams to develop EAPs and share with Town.	David advised to not carry forward any actions about private dams because the Town does not have the ability to take specific actions related to private dams. Attendees explained that private owners need to understand their requirements to take care of dams, and explained that the town needs an education system. Need a list/contact info for private dams and guidance for what they can put together for education (mailer, door-to-door). State provides a list of when dam needs to be inspected. How much is town vs state responsibility. Rewrite new action . All of dams are mapped in POCD. Overall, the discuss centered on the concept that people need to be managing their dams appropriately.	Carry Forward with Revision
2	Encourage owners of private dams to implement recommendations resulting from dam inspections.	See above. Rewrite	Carry Forward with Revision
3	Establish protocols for evaluation of snow loads on Town buildings.	David explained that actions about snow loads are typically related to lingering concerns from the February and October 2011 snowstorms. Attendees explained that anything that is built new is going to comply with CT state building code which considers drifting of snow. Town sends a standard communication if snow does start piling up. Complete/remove .	Complete/Retire
4	Complete zoning regulation "clean up" to reflect hazard mitigation best practices. Address issues including potential cistern & dry hydrant requirements in new subdivisions, use of native species, and snow storage needs for streets.	Attendees noted a need to go through zoning regulations. Looking at native species. Have not updates subdivision regulations since 2011. The Town is planning for a full re-writeup of zoning regulations. Cistern and dry hydrants are in zoning regulations because they are not in fire planning codes. Largest issue is who maintains systems and waterways. Rewrite action .	Carry Forward with Revisions
5	Evaluate areas on Higgins Highway (Route 31) that have flooded during large events for possible mitigation actions.	CIRCA and the attendees will take a look at flood map to see if there is anything to be done here. Single family homes flooded in this area. Rewrite. Action about those structures and not the areas. General action about 31/32 area that is prone to flooding.	Carry Forward with Revisions
6	Implement recommendations resulting from inspections of Town-owned dams.	How many town owned dams there are and if they have been inspected. CIRCA and the Town will need to check on this.	Likely Complete/Retire
7	Improve north side of Bassetts Bridge Road west of the bridge crossing the Naubesatuck Lake; this section of road is frequently washed out in high water events.	Still floods. Continue .	Carry Forward
8	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	The program at DEEP is over, there is no more funding. The Town believes the intent has been met through local outreach. Retire	No longer needed/Retire
9	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard	Retire . Town participates in MS4 and additional technical assistance is not needed from NEMO.	Complete/Retire

	mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.		
10	Make available information on natural disasters and preparedness on the Town's website with links to state and federal resources.	In the next 6 months the town website will be re designed. Can improve the depth of information on what is needed here. Rewrite	Carry Forward with Revisions
11	Make available literature on natural disasters and preparedness at Town Hall and the Library.	Complete.	Complete/Retire
12	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	The assistant director is planning on attending the silver jackets workshop in June 2023, and other workshops and training sessions as needed. Complete/Capability.	Complete/Retire
13	Conduct outreach efforts to educate and train residents on individual actions they can take to prepare for, survive, and recover from disaster events.	More geared towards citizens. Town send out info on monthly/quarterly newsletters. Certain areas of the community there are annual meeting. Complete/Capability	Complete/Retire
14	Install an emergency generator at the Public Library.	Complete.	Complete/Retire
15	Develop a list of best practices with regard to sustainable and resilient design to be incorporated into town projects when feasible.	The Town has started to reimagine municipal buildings with new construction in the next 5-10 years. Keep this action to ensure that the effort remains consistent with potential grants.	Carry Forward
16	Develop communication strategy to better inform public of parking restrictions during snow events. Use Facebook, Website and Code Red Reverse 911.	Use code red/social media. Complete/Capability	Complete/Retire
17	Conduct a wildfire vulnerability and needs assessment to guide construction of additional dry hydrants and/or cisterns.	There will be a section in the plan about wildfires. A vulnerability assessment will be part of the plan update. Retire or replace with specific actions.	Carry Forward with Revisions
18	Complete preparation of EAPs for Town-owned and maintained dams, as well as private ones where applicable.	Only required for class C and B. Complete.	Complete/Retire
19	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	These are properties that have flood insurance and made more than 2 claims in the last ten years. Mansfield does have a couple rep loss properties. Will check with CRCOG. Required if town has rep loss properties. Keep	Carry Forward

20	Monitor catch basins to determine whether switch away from sand has had an impact on basin filling.	This change has had an impact. Basins are cleaner/easier to clean. Complete	Complete/Retire
21	Seek Certification within the Sustainable CT program and make progress with the hazard mitigation goals associated with SustainableCT certified actions.	Certified Silver. Complete/ Retire .	Complete/Retire
22	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Required by FEMA. Keep .	Carry Forward
23	Develop public education programming with regard to tree planting and maintenance on private property.	The Town may have never done this. Eversource conducts some education. Town does have a poster at town hall indicating tree species that should be planted near town hall. Rewrite to use trees species to manage extreme heat .	Carry Forward with Revisions
24	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Rewrite . Use mapping product to understand risk to historic structures. The Town would like to see the layer. David noted that every year, there are a few more structures eligible due to the rolling lookback.	Carry Forward with Revision
25	Develop a public education program encouraging water conservation that utilizes UConn water usage alerts.	UConn tied into CT water. Messaging is out there. Retire .	Complete/Retire
26	Educate property owners on vegetation clearing techniques that will reduce water runoff and reduce the amount of combustible fuel.	Is always necessary. The Town questions how they get it out. When they update the website could get more information out.	Carry Forward
27	Explore the feasibility of developing a microgrid that encompasses some or all of the following: Town Hall, Community Center, E.O. Smith High School, Library, Town Garage.	Microgrid is not happening. Generators at EO Smith, the Town Hall, and library. Rewrite to promote solar and batteries .	Carry Forward with Revisions
28	Improve and expand the Town's GIS system to assist town personnel in the event of an emergency of natural disaster.	GIS is set up well for this. Have a lot of layers for emergencies and natural disasters. Retire	Complete/Retire

Critical Facilities

- Shelter for residents – community center
- Regional shelter - high school, split by the American Red Cross
- Cooling center – any of the town buildings while they are open for business. If they are closed they don't have any advertisement that a cooling center is open (CIRCA explained that they will need an action looking for a 24 hr cooling center)

Development and Redevelopment

- Reimagining of the municipal buildings are going to be planned and advanced in the next few years. Would like an action about that.
- Development projects are tracked on a Story Map (see link below) that the Town populates and updates. The Story Map includes about 1400 units in the four corners area; multi-family development. Not in high-risk areas. With new development we are assuming they have AC, might be worth checking in on. FEMA requires that they list new developments with estimated unit count.
- 497 middle turn pike – 262 units multi family
- 625 middle turnpike – villages at four corner – 116 units
- Under constructions – the standard at 4 corner – 392 units
- Under constructions - mixed income South Eagleville rd – 42 units – affordable to below 60% AMI
- Within the next 6 weeks – North eagleville rd – 1100 unit bed.

5 new developments in the 4-corners, 1 in the King Hill area, one in UConn area and in Mansfield complex.

**Sean Baddington will be the person to talk to about UConn-related, on-campus development like Mansfield Apartments 900 beds development (Put a pause on construction at Mansfield apartments) and the South Campus. The development of the old Mansfield Apartments property is regulated by UCONN itself. They own the land. Town believes the project is on hold for one year, but would need to speak to someone at UCONN for any further information.

Any development on UCONN owned property would need to be discussed with them directly as the Town of Mansfield is not involved. If it is property near UCONN, but not owned by UCONN, you could speak to the Director of Planning and Development (Jennifer Kaufman 860.429.3329 Jennifer.Kaufman@MansfieldCT.org).

Storymap for development:

<https://storymaps.arcgis.com/stories/89b1735a27444d54a409d9e04b99a51c>

Recent Events

- Had two small tornadoes (one in 2017 or 2019 and one in 2018). Minor damage to structures. Don't have any estimates for damages.
- Wind damage. Always have wind damage.

- Biggest issue is dead trees. Put an action together for it. If private homeowners don't take care of their dead trees and they fall on powerlines, and this causes a lot of issues.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Mansfield.

- Still have a high senior population in town that can pose a problem with power outages. Transportation issues of trying to get them to cooling centers. People with medical devices that need power.
- Sewer systems. Relying on the university in the Northern area of town and Windham in the Southern. Would like to consider a regional sewer system to have more control on wastewater management in Mansfield.
- Windham Water Works (located in Mansfield) has a grant from FEMA to look at resilience issues related to the reservoir and dam. This is a FEMA scoping grant to look at challenges.
- Areas in town that are not served by public water that have gone dry or near dry. Gurleyville rd. The Town would like to extend water systems deeper into Mansfield where it makes sense.

Follow-Up

The HMP Coordinator will be Adam Libros

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Marlborough

Date: June 14th, 2023

Time: 10 am

Location Virtual via WebEx

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Peter Hughes	Marlborough Planning & Development Director		

Overview

CRCOG and CIRCA attended a meeting with the Marlborough to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to the Marlborough and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed the Marlborough prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about the Marlborough needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Marlborough 2019-2024	Notes	Current Status
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town staff said Marlborough registered with SCT in 2020. The staff will submit their application for Bronze status this summer and will continue to move forward with other certifications.	Complete/Retire
2	Develop prioritized list of needed culvert and bridge replacements and upgrades and apply for funding to pursue that work.	Town staff said that they had an engineer evaluate culverts in 2014-2015 and 2021. The town has metal culverts that don't last a long time. They get a list and rating from the engineer every 5 years and make improvements. The town would need \$1.5 million - \$2 million to replace each culvert and they have about 5-6 that need attention. The town is upsizing from 48 to 7x14 box culverts. The list of the culverts that they are experiencing issues with: 1. Quinn road over Cattle Lot Brook, 2. South Buckboard Lane over Foot Sawmill Brook 3. Johnson Rd with Lyman Brook, 4. 254 South Main Street with unnamed brook, 5. Hodge Road culvert with a wetland system 6. South Main St bridge over Blackledge River.	Carry Forward with Revisions to include specific locations and that the culverts are being upsized.
3	Replace one Public Works truck.	Town staff is continuing to replace trucks. Ongoing capability.	Complete/Retire
4	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said they would like to revise this action to have staff watch the final DEEP training/webinar and continue education.	Carry Forward with Revisions
5	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said they are in compliance with MS4. This is a capability.	Complete/Retire
6	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they would like to keep this action to have staff continue education.	Carry Forward
7	Review the LID Manual developed by the Northwest Hills Council of Governments and determine whether LID can be incorporated locally to increase rural resiliency.	Town staff said that they have achieved this and is a capability.	Complete/Retire
8	Increase Public Works staff numbers.	Town staff said they have not been able to increase staff, but this is still a goal that can be kept in the text of the plan, although perhaps not needed as a table action (as FEMA will not fund this goal).	No longer a (table) need /Retire

9	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Town staff believes that they do not have any RLP. CIRCA will check with CRCOG. If the town does have RLP, share this information with Peter and keep/revise the action.	Likely Complete or No Longer a Need /Retire
10	Coordinate with CT SHPO to conduct historic resource surveys to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Revise to say "Acquire and review SHPO GIS data point file".	Carry Forward with Revisions
11	Prepare a forest fire suppression study.	Town staff said this has not been completed yet, but this is still an interest.	Carry Forward

Critical Facilities

- Emergency generator was added to the senior center
- Emergency generator at the Town Hall was updated
- Elementary school has a generator
- Shelters
 - RHAM high school in neighboring Hebron – main shelter for Marlborough
 - Elementary school, senior center, and town hall – secondary shelters
- Cooling centers
 - Town hall
 - Senior center

Development and Redevelopment

- The town just approved 2 apartment buildings with 92-unit total in an area that doesn't flood
- The town does not have any new development in the flood plains

Recent Events

- Town staff said they experienced a lot of tree damage and downed wires in the 2021 storms which resulted in a couple days of power outages.
- There were no road wash outs during the 2021 storms but there were some culvert issues. During one of the storms, one culvert was damaged on South Buckboard Lane over Foot Sawmill Brook, which has a temporary repair.
- June/July 2021- the town experienced culvert issues on South Rd, Hodge Rd, South Buckboard Lane. The town replaced a few culverts temporarily and one permanently. All culverts are being upsized and going to box culverts as noted above.
- The Town's main concern is that the culverts are metal and with the increased frequency and intensity of storms, the metal culverts are starting to collapse from the increased friction and water flowing through them. The culverts are losing the metal bottoms. Tree debris is not really filling up the culverts and isn't as much of an issue.

- The town is spending around \$80,000 a year to cut dead trees. Two days a month, a tree crew comes in and cut trees. The town has 5,000 acres of open space, much of which is state-owned. The state is timbering the State-owned land in town. The town owns about 500 acres and sometimes timbering on the town-owned land.
 - Town staff said they would like an action to reflect this concern about managing dead/dying trees.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Marlborough.

- 18% of the town population is over 65 and the town staff are aware that they are a vulnerable population.
 - Town is not sure if they have a heat plan. The Emergency Management Director is part time and so CIRCA will check to see if the town has a Heat Plan with the EMD. If the town does not, they would like an action included to develop one.
- Town staff said the town relies on bedrock wells, which is sometimes a concern during droughts. The town does not own the water system serving the town center, and it is reportedly privately owned.
- Town does not have any development near the flood plains.

Follow-Up

- The HMP Coordinator will be Peter Hughes

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting New Britain

Date: 8/23/2023

Time: 10 am

Location: Virtual Via WebEx

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Mark Moriarty	New Britain Director of Public Works	Raul Ortiz	New Britain Fire Chief and Emergency Management Director
Jeff Cormier	New Britain City Planner		

Overview

CRCOG and CIRCA attended a meeting with New Britain to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to New Britain and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed New Britain’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about New Britain’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for New Britain 2019-2024	Notes	Current Status
3	Address the section of Willow Brook bank near the soccer fields that is washed out.	City staff reported that the town got a resiliency grant from DEEP to address the flooding in this area.	Carry Forward with Revisions to reflect DEEP grant
4	Address damaged retaining walls along the brook at Stanley Quarter Park.	City staff reported that one of the damaged retaining walls in this area washed out during the storms of July 2023. The City has also completed some dredging in this area and has installed rip-rap. The City has made progress on this but more work needs to be done so the town staff would like this carried forward.	Carry Forward
5	Implement dam repairs at Stanley Quarter Park.	City staff reported this is complete.	Complete/Retire
6	Upsize storm drains in Allen street to increase capacity. Designs are in place, implementation is grant dependent.	City staff reported that they submitted a FEMA BRIC grant application this past week to fund implementation.	Carry Forward with revisions that the BRIC grant has been applied for
22	Dredge pond at Stanley Quarter Park.	City staff reported that this has been completed.	Complete/Retire
12	Implement plan to line west canal with geotextile fabric to mitigate flooding from that source. Monitor the effectiveness of this measure and determine whether additional studies need to be performed to address flooding from groundwater.	City staff reported this project hasn't yet been completed but is still on the town's potential project list. Currently there is not a source of funding for this project.	Carry Forward
2	Acquire a permanent generator at the Steele Street Pump Station to maintain fire protection in that area.	City staff reported that they are unsure if they have a generator. Will need to follow up.	Follow up with Chief Raul
13	Acquire a portable generator for sewer pumping stations.	City staff reported that they do have a portable generator.	Complete/Retire
8	Develop a prioritized list of needed acquisitions, upgrades, and maintenance of critical facility generators.	City staff reported that this is ongoing. They are still developing this list and working with Eversource. Town staff would like to keep this as an action.	Carry Forward
16	Develop an emergency preparedness pamphlet for residents in English, Polish, and Spanish, distribute to residents, and post on City website.	City staff reported that they have a preparedness pamphlet, but are not sure whether it has been translated. Will need to follow up about the translation question.	Follow up with Chief Raul
21	Use targeted mailings to particularly vulnerable areas, such as special flood hazard areas and dam failure inundation areas, to encourage	City staff reported that the town does encourage participation in CT Alerts	Capability/Retire

	signups for the CT Alerts emergency notification system.		
15	Add information about preparedness, mitigation, and City capabilities to the City website.	Town staff are unsure whether this has been done, will need to double check on this.	Follow up with Chief Raul
11	Incorporate natural hazard mitigation planning into the 2020 POCD update.	City staff reported that the 2020 POCD updated included a goal related to hazard mitigation and a recommendation that the HMP actions should be implemented.	Complete / Retire
14	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	City reported that they are unsure if a direct letter has happened but there is education on the website, etc. The town does sent letters to residents on a case-by-case basis when flooding occurs but are unsure if these are the RLP. The town would like to request the list of RLP – Mary noted this list can be requested from FEMA or CRCOG. This action will be carried forward per FEMA requirements.	Carry Forward
19	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	City staff reported that they haven't validated the list yet. Carry Forward per FEMA requirements.	Carry Forward
9	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	City staff reported that they are reasonably compliant with MS4. The town has made proactive steps with stormwater management, including starting a stormwater utility. This is a capability.	Capability/Remove
7	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	City staff reported that the intent of this is complete, and there is no need to keep this action.	Intent is complete/Remove
10	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	City staff reported that they have participated in regular trainings.	Complete/Retire
18	Identify and send the City Tree Warden to relevant training opportunities. Contact the UConn Extension for assistance.	City staff reported that this is complete.	Complete/Remove
20	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep	City staff reported that they are unsure whether they have coordinated with SHPO on this (New Britain does have historic districts), but City staff	Carry Forward with Revisions

	slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	do not see the need for additional surveys. CIRCA staff suggested to revise this action to “Acquire and review the SHPO historic resources inventory layer and overlay flood zones.” Town staff agreed with this revision.	
17	Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting their properties to be more hazard-resilient while maintaining historic character.	City staff would like this action to be combined with action above.	Consolidate with above
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	City staff reported they are active with SCT and have Climate Leader Designation	Complete/Retire

Critical Facilities

- The City is in the process of building a new public works operation center that will be open in the upcoming winter. This will be at a new location, but City staff does not remember the address off the top of their heads. **CIRCA staff will follow up for address.**
- The shelter is the high school.
- Cooling centers – Library, Senior Center, Community Room at the Police department
- All shelters and cooling centers have generators.

Development and Redevelopment

- There is a lot of development happening in downtown New Britain, but the staff don’t believe any of these developments are in high-risk areas. Developments include affordable housing, multi-story and mixed-use buildings (residential/commercial), throughout the downtown area.

Recent Events

- Isaias – the town staff reported experiencing tree limbs down, tree damage with power outages, but nothing too substantial. The power was out for 2-3 days in some areas.
- Flashy drought of 2020-2022 – Most residents in New Britain are on public water, not private wells. The primary reservoir went down to unprecedented low levels in 2020. The City has a backup water supply with MDC, and City staff reported that this back up water supply was essential to getting the city through the droughts of 2020.
- 2021 storms – the City experienced some flooding in following areas: Overlook Avenue, Allen Street, and John Downey Drive (along the back of the properties rather than the road itself).

- City staff would like to add an action related to completing a drainage improvement project in the Overlook Avenue area. They expect construction to begin on this project in 2024.
- City staff do not see the need to add actions for Allen Street or John Downey Drive areas.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in New Britain.

- One of the City’s fire stations is susceptible to flooding – 253 Beaver Street. The City is reportedly working on flood proofing the building. This is being addressed by the City, and City staff do not consider this as an action to add to the plan, but the plan can describe this as a capability.
- Elementary school – has experienced some recent flooding, which City staff believe may be due to the design of the storm water management system. This issue is so recent that City staff are unsure if it will continue to occur. City staff say they do not consider the need to make this an action yet.
- There is not much demand for the cooling centers when they are opened. The cooling centers all have generators.
- City staff report that flooding challenges in New Britain are more related to stormwater drainage than stream crossings.

Follow-Up

- The HMP Coordinators will be Mark Moriarty and Raul Ortiz.
- The City has previously applied for FEMA funding (mitigation grants) but has been frustrated by the slow pace. In two previous cases, the City had to pursue other funding sources because the federal grants took too much time.
- Overlook Ave Project – the City has funding for partial implementation. Would like a new action to complete the project with construction beginning in 2024.
- The City has two Mitigation grants in, one for Overlook Ave, and they just submitted on to BRIC last week.
 - Perhaps a list of these project sites and grant program names should be included in the follow-up list, to ensure that we heard them correctly.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Newington

Date: 8/9/2023
Time: 1:30 pm
Location: Remote

Attendees			
Mary Buchanan	CIRCA	Rob Hillman	Highway Superintendent
John Truscinski	CIRCA	Chris Zibbideo	Town Engineer
Paul Dickson	Town Planner	Lauren Rhines	Director of Administrative Services
(DJ) Douglas Zordan	Fire Marshal/Emergency Management Director		

Overview

CRCOG and CIRCA attended a meeting with Newington to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Newington and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Newington’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Newington’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Newington 2019-2024	Notes	Current Status
3	Identify cost-effective ways to mitigate or reduce flooding in the Stamm Road area, which includes Repetitive Loss properties, especially those that do not require working with Amtrak.	<p>Still an issue but nothing's been done to date.</p> <p>The town staff have previously been contacted by a state rep related to cross-boundary flooding in the New Britain side of this road and a nearby brewery. This is reportedly a multijurisdictional challenge that affects New Britain, Berlin, and Cromwell. There's not much that can be done without Amtrak's participation, because Amtrak needs to participate in expanding the culverts.</p> <p>Amtrak has not taken suggestions in the past about this. Maybe there is another way to get Amtrak back into this conversation. Stream crosses the Amtrak railroad at least twice.</p>	Carry forward – maybe with revisions to indicate the importance of getting Amtrak on board.
8	Perform an assessment of assets located in flood-prone areas.	<p>This is still a need. Flood problems are definitely common in the town, and likely increasing. Town staff report that they are “chasing” flood problems, and lots of complaints came in during the storms of July 2023.</p> <p>The town is actively pursuing grant money to address two specific flooding concerns:</p> <ul style="list-style-type: none"> • 1st location: Connecticut Avenue / Brentwood. Redesign detention basin that is town-owned, but was not constructed properly. It has one inlet that is the same as the outlet. By adding an inlet structure and turning the current inlet-outlet into an outlet with a weir structure, this will improve capacity of drainage. This can be done in house, and may be relatively inexpensive. • 2nd location: Badger Field outlet, which drains onto Timber Lane at Audubon Ave. Town has done previous work on detention basin, but the outlet structure it goes to is undersized. Need to add a “sister pipe” along the existing one. This will allow the downstream system to drain faster. This is a more expensive project, as more linear 	Carry forward the action about assessment, plus add two actions for the two projects mentioned.

		feet is needed to replace catch basin with double catch basin.	
4	Equip the Backup EOC (Police Training Facility) with a generator and communication equipment	Still needs to be done.	Carry forward
10	Equip backup shelters (Kellog and Wallace Middle Schools) with emergency generators	These are unofficial shelters since they don't have backup power. Looking at ARPA funding to install a transfer switch at Wallace. Keep this action.	Carry forward
11	Upgrade equipment related to waterway maintenance, snow removal, and tree maintenance. Include, specifically, adding the purchase of a large-tree bucket-truck for the Parks and Grounds Department to the Town's long-range plans.	Have purchased 2 pieces of equipment. Bucket truck was purchased. Retire the action, as the intent has been met.	Complete / Retire
2	Explore possibility of increasing annual budgets for waterway maintenance, snow removal, and tree maintenance.	Town staff note in the meeting that this would be a question for the Parks Department. After the meeting, Rob provided an update by email: "I spoke with Clay from the town's park dept. They have doubled their tree maintenance budget in the past few years to about \$50,000."	Complete/ Capability / Retire
12	Pursue opportunities to bury utilities in appropriate locations and scenarios, such as during a road reconstruction.	Keep this on as continuing item.	Carry forward
9	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	MDC provides water and sewer service in Newington, but doesn't have many facilities in Newington (except maybe some small pump stations and water tank). CIRCA will reach out to MDC directly to see if they have any concerns related to Newington. If not, can retire this action.	Follow up with MDC
6	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	"Attempting" to be compliant with MS4, action should remain.	Carry forward with revisions to update to current types of resources
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at	There are a few businesses for which this would be relevant. These facilities provide above and beyond Tier II inventories, but no outreach about flooding. Town staff would like to keep this action, but it will	Carry forward

	their facilities during or following natural hazard events.	likely come to a staffing issue or grant possibility.	
7	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff would like to keep this action. Leave as it is.	Carry forward
13	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Still an interest in historic resources, but town staff would like to trim this action down. Keep this action to assess historic resources for flood vulnerability. Mary suggests revising the action to include obtaining and reviewing the new SPHO layer. Revise the language and town staff will comment on draft.	Revise to use the new SHPO layer
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Newington is not yet part of Sustainable CT. Town staff says that Sustainable CT has not been well integrated into grant opportunities, and there is limited benefit to joining. Internal discussion needed to decide on whether to keep or drop.	Wait for an update – likely to drop.

Critical Facilities

- The list of critical facilities in the last plan has some gaps.
 - The fire stations weren't listed last time – make sure they are listed now.
 - Make sure the town hall is listed. This was rebuilt.
 - Town will review the list when we provide the draft annex.
- The primary shelter is the high school. For residents with pets, the shelter is the senior center.
 - Both of the above shelters have generators
- No official cooling center, but if needed the town could open the library, the senior center, or the town hall.
 - Of these, library does not have a generator – add an action.

Development and Redevelopment

- ~1000 residential units have been approved in the last few years. Primarily multi-family development, none in flood plains, although a few are adjacent to wetlands. Along Berlin

Turnpike and Cedar Street. Of the ~1000 approved, many have not yet been constructed but some are under construction.

- Some single-family development too – two recent subdivisions.
- Cedar Street area is likely vulnerable to heat exposure, with lots of asphalt present.

Recent Events

- Isaias, 2020: 6 roads blocked during Isaias due to downed trees. Downed wires blocked additional roads. A few days of power outages.
- The town mostly has public water (MDC), and therefore not many concerns with flashy droughts.
- 2021 – Henri and Ida – more downed trees and downed wires, but not much flooding in the town. Nevertheless, Timber Lane flooded during Storm Ida.
- July 4, 2023 – see comments below about flooding.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Newington.

- No public buildings are vulnerable to flooding.
- Stamm Road concern mentioned in the HMP table
- Other areas not previously mentioned:
 - Pheasant Run and Vivian Street– some minor flooding, not a major obstruction. Waterway is level with the roadway. The town has dredged in the past. On the July 4 storm this year this road flooded. Town staff suggest adding an action for this.
 - Willard Avenue and Garfield Street – back side of the farm stand has a tendency to flood. This flooded on the 4th of July. This might be more due to maintenance, less about needing another detention basin, but might be worth another look and/or an action.
- Town staff also note that they would like an action for assessing existing flood detention areas etc. for ease of access and maintenance. These areas will only work if they can be maintained.
- Mary brought up the concern voiced by Wethersfield about people living in motels along the Berlin Turnpike. Town staff agree that this is a concern Newington also shares.
- Aging population – people want to age in place.

Follow-Up

- The HMP Coordinator will be Paul Dickson.
- Correction to previous plan: On the second page of the narrative – the reference to the town LID stormwater manual should be removed. This was added in 2014 but taken out in 2016 and is not currently used by the town.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Plainville

Date: June 15th, 2023

Time: 10:00 am

Location: Virtual via Zoom

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Mark DeVoe	Plainville Town Planner
Joe Cimadon	Plainville Police Department Detective	Michael Paulhus	Plainville Town Manager
Susan Lonczak	Director of Health for the Plainville-Southington Health District	Andy Cirioli	Plainville Assistant Town Manger
Cal Hauburger	Plainville Economic Development Coordinator	John Bossi	Plainville Director of Technical Services
Ronald Dievert	Plainville Emergency Manager	David Emery	Superintendent of Buildings & Grounds
Michael Ferrara	Roadways Superintendent		

Overview

CRCOG and CIRCA attended a meeting with Plainville to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Plainville and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Plainville’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Plainville’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Plainville 2019-2024	Notes	Current Status
1	Encourage residents to register for emergency alerts to their cell phones through the Everbridge Reverse 911 system. Include links and information on the Town website and Facebook page.	Town staff isn't sure how much progress has happened with Everbridge, but the town staff does have the ability for dispatch to send messages to anyone in a particular area. The program they use is Code Red. The intention of this action is complete.	Complete/Retire
2	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	The town has not entered Sustainable CT. This was an internal resource-based decision. The town is challenged to fill the commissions that are required by statute, so this would be an additional strain on staff resources.	No Longer needed/Retire
3	Work with upstream communities, dam owners, and CT DEEP to develop a coordinated plan to mitigate peak flows from dam releases on the Pequabuck River.	Town staff is not aware of progress on this action. There was a release in Bristol during the flood of Irene from one of the reservoirs, which affected the Coppermine Brook. Plainville had conversations with Bristol after that, but is not aware of whether Bristol has changed their operations. David suggests revising this action to make it more achievable.	Carry Forward with Revisions
4	Designate a Town floodplain administrator.	John Bossi, Town Engineer, is the floodplain administrator.	Complete/Retire
5	Pursue permitting to remove sediment from the Pequabuck River channel upstream of the railroad crossing and west of Neal Court.	The town has not done this. The estimate from AECOM was approx. \$300,000 and would involve dredging the Pequabuck at the horseshoe bend. The town has not found the funding for this. Town staff suggest keeping this action in and seeking funding.	Carry Forward
6	Incorporate new Hazard Mitigation priorities, based on this Plan, in the 2019/2020 update to the POCD.	Completed with the latest POCD update.	Complete/Retire
7	Upgrade the generator at the Town Hall to provide full backup power to the building.	This has not yet happened but is still an interest. Keep this action.	Carry Forward
8	Identify unusable properties on which it would be appropriate to create detention ponds.	This action came from an AECOM suggestion after their Pequabuck River study. The original goal was for the town to acquire properties to develop detention ponds. Town staff note that Plainville has a 200-page guide for LID that they provide to developers, and has stormwater guidance that requires no net increase in runoff, thus meeting the intent of this action.	Complete/Retire
9	Provide for periodic survey of waterways to remove obstructions.	This is regularly accomplished by staff and is therefore a capability.	Complete/Retire
10	Acquire emergency generators for the Police and Fire Departments.	The Police Dept generator is fairly new and capable of running the entire building. Town staff doesn't know about the Fire Dept.	Carry Forward with Revisions
11	Adopt stormwater retention regulations.	Complete – see #8	Complete/Retire

12	Complete renovation of Wheeler Elementary School with a generator and steam heat.	The renovation is complete, although the town staff don't believe this included a generator.	Likely remove
13	Purchase a tanker for the fire department to bring water to underserved areas on outskirts of town.	The fire department acquired a tank (although not a tanker). The intention of this action has been achieved.	Intent is complete/Retire
14	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Plainville does this periodically when FEMA updates flood mapping.	Complete/Retire
15	Adopt regulations to promote conservation subdivisions in R-40 residential areas with no sanitary sewer service.	The POCD calls for this as a recommendation, but it is not reflected in the regulations. The intent has been completed because the POCD incorporated the recommendation.	Complete/Capability
16	Assign a municipal staff-member to be a utility liaison responsible for maintaining contact with utility representatives.	This is complete	Complete/Retire
17	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Plainville is in the monitoring phase of MS4, is in compliance.	Complete/Retire
18	Identify specific potential uses for GIS in emergency planning and pursue development of those capabilities.	There is a GIS platform available town-wide, although there are not many town-specific layers. The only hazard layer included is floodplains. The intent of this action has been met.	Intent is complete/Retire
19	Work with internet providers to help ensure internet remains available after storm events.	The town tries to do this.	Capability/Retire
20	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	One town staff member attended a flood-training last week. David remembers seeing Mark at other flood events over the years. This can be considered a capability/complete.	Complete/Retire
21	Create lists of local resources for residents and business owners and supply that information prior to forecast hazard events.	The town does this on a case-by-case basis through the town website. The intention of this action has been achieved.	Capability/Retire
22	Initiate a study to evaluate the effects of climate change on natural hazards in Plainville.	CIRCA is doing this right now with the Resilient CT program. No other planning initiative on this topic is under way.	Will be completed with this HMCAP.
23	Create an informational pamphlet to provide to potential floodplain developers about regulations and codes, and their reasons, relevant to developing in floodplain.	This is accomplished without a pamphlet, and the need is no longer present.	Complete/Retire
24	Create a Plainville Community Emergency Response Team (CERT).	The town does not have CERT. The town doesn't think they would see any actual reduction in insurance rates, would have	No Longer Needed/Retire

		minimal impact. This can be retired, no longer a need.	
25	Adopt a regulation requiring installation of cisterns or dry hydrants in new developments where public water service will not be provided.	Nothing has happened here. Town can do this on a case-by-case basis when development applications come in. The intent of this action is complete.	Complete/Retire
26	Expand emergency communication and notification methods to a variety of media, including radio, television, social media, and the Town Website.	This is a capability.	Complete/Retire
27	Delete the floodplain overlay zone from zoning regulations and replace with an "open space preservation" overlay zone that can be applied to areas outside flood zones to limit development.	This has not happened. Because of the statutory requirements for re-zoning, doing this would be extremely cumbersome. There is a floodplain zoning layer that is shown on the zoning layer, and regulations have been revised to get at this idea without actually re-zoning. The intent of this action is complete.	Intent is complete/Retire
28	Perform an assessment of in-stream structures (such as small dams) to identify and prioritize those that can be removed.	This has not been done. Plainville does not have many dams. There is one weir in town that can be manually raised and lowered if needed.	No Longer Needed/Retire
29	Develop a plan for making the wastewater treatment plant more resilient to flooding. The Pequabuck River Study determined that small-scale floodproofing projects should be considered; this plan should determine which such measures should be implemented. (Examples include structural floodproofing and elevation of the walls of the open tanks).	There have been several construction projects at the WWTP since the last HMP. Town staff aren't sure whether walls have been elevated. There is ongoing attention to make this building less vulnerable to flooding, but it is still somewhat vulnerable, especially for larger floods. Town staff note that some vulnerability is inevitable given the location and purpose of this facility. This action was specifically about developing a plan. Town staff agree that this action can be revised to something like "ensure that whenever renovations are made to the WWTP, consideration is given to reducing flood vulnerability."	Carry Forward with Revisions
30	Perform a town-wide drainage study to identify and prioritize culverts that need to be upsized.	This has not been done.	Carry Forward
31	Construct a new EOC.	This has not happened yet. There have been some thoughts and plans, but nothing concrete/approved. Revise to be more achievable – something like "identify a location for a new EOC".	Carry Forward with Revisions
32	Reconstruct the Woodford Avenue Bridge over the Quinnipiac River at a higher elevation to allow larger flows and debris to pass through unimpeded.	This is a state road. The town has a grant application for a multi-use trail going down Woodford Avenue (CRCOG is involved with this grant application as well), and the town would like to push for the reconstruction of this bridge. The town would like Woodford Avenue to be returned to the town, but would not want to accept the bridge as it currently is.	Carry Forward
33	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas, including property acquisition. This should be accomplished	Town staff asked specifically about the letter mailing piece of this action. Town says they'll be notifying people ahead of storms, not with letters. Some RL properties have been bought out and removed. There are two remaining RL homes.	

	with a letter directly mailed to each property owner.	These homeowners lived through the last several floods but declined the buyout. Keep this action. The town is interested in seeing the RL list when it is available.	
34	Have Town staff attend a FEMA or State training in basic GIS use, and/or in the use of GIS in emergency planning.	The floodplain layer is the only emergency-related GIS layer that the town platform has, and town staff know how to use it. This is complete.	Complete/Retire
35	Develop formal agreements with neighboring communities to provide emergency assistance in case bridges are washed out by flooding and areas become isolated.	Town staff is not aware of any formal agreements. This happens on a case-by-case basis, which seems to be working. The intent of this action has been achieved.	No Longer Needed/Retire
36	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	The town needs a copy of the list in order to do this.	Carry Forward
37	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Nothing has been done on this. There is one area and one home on the National Register of Historic Places. Some of the buildings in the town might be considered of limited architectural interest. The town knows how to contact SHPO when they need them, and has had SHPO come out to a site in the past. This can be considered a capability or complete.	Complete/Retire
38	Develop a set of informational resources to which commercial and industrial property owners interested in floodproofing can be directed. Have hard copies of the resources available at Town Hall and electronic links on the Town website.	These resources exist, although town staff aren't sure whether they're on the website. The intent of this action can be considered complete.	Complete/Retire

Critical Facilities

- The high school is the primary shelter and cooling center.
- The library can be used as a cooling center.
- The police department lobby is used as a cooling center/warming center/charging station as well.
- Generators: The PD and the high school have generators. The library does not have a generator – **add an action about this.**

Development and Redevelopment

- The town is concentrating on redevelopment to the extent that it can, to minimize the impact to existing green or undeveloped areas. However, parcels of open space in private hands could be developed. In these cases, the town requires LID standards to be applied.
 - One recent development included a series of rain gardens and a larger detention area.
- The town has a policy of obtaining open space as well as a policy for obtaining land within a floodway. The town is currently working on one property deal in the Quinnipiac River floodplain, which will likely be deeded to the town. The town has used the DEEP OSWA grant process in the past for this purpose.

Recent Events

- There was a 10-day power outage after T.S. Isaias in 2020.
 - Electrical distribution was a factor here – one portion of Plainville is on a different grid. (Simsbury grid?). No talk of a microgrid here so far.
 - This took a substantial investment from Eversource to fix.
- There is a natural gas fuel cell at a warehouse distribution site, Americold-Ahold (24 north west drive) that produces more than they use. Maybe some potential here for sharing.
- Not much impact from the droughts – no water restrictions were imposed by the local water utility, which was later acquired by Aquarion.
- During the 2021 storms there was some minor basement flooding, but nothing significant.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Plainville.

- Town staff notes that when developers come in with an application for land use approvals, the first thing they want to do is cut everything down. The town tries to integrate shade trees into planning and regulatory practices, including the LID development guidance.
- Town staff asks whether CRCOG or others are doing a tree canopy study. Another participant notes that CLEAR has done something like this.
- High-density short-duration thunderstorms are a concern – the town is experiencing more of them and they're less predictable and areas subject to damage are less predictable.
- The town hasn't given much thought to where a microgrid might go, but has seen the benefits of a microgrid in a neighboring town. Perhaps add an action or otherwise note that this is of interest.
 - One participant questions whether having a microgrid would disadvantage the rest of the network that's not on the grid. If the microgrid doesn't have its own generation then aren't you somewhat sacrificing the rest of the network for the sake of the microgrid?
 - David says he will look into this, given that the state has several examples of microgrids already.

Follow-Up

- The HMP Coordinator will be Mark DeVoe.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Rocky Hill

Date: June 30th, 2023

Time: 10:00 am

Location: In-person at Town Hall

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Michael Garrahy	Rocky Hill Fire Chief	Richard Renstrom	Rocky Hill Fire Marshal
Kim Ricci	Rocky Hill Town Planner	Joe Lentini	Rocky Hill Field Operations and Highway Superintendent
Michael Violette	Rocky Hill Building Official	Stephen Sopelak	Rocky Hill Director of Public Works and Community Development Services/Town Engineer
Ray Carpentino	Rocky Hill Town Manager	Brian Klett	Rocky Hill Acting Chief of Police

Overview

CRCOG and CIRCA attended a meeting with Rocky Hill to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Rocky Hill and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Rocky Hill’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Rocky Hill’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

	Mitigation Actions and Strategies for Rocky Hill 2019-2024	Notes	Current Status
1	Apply for funding through the State local bridge program to install a box culvert on Beach Road and raising the road above the 1% annual-chance flood elevation.	Town staff said this bridge didn't qualify for the local bridge program. The town didn't apply because they didn't meet the parameters. This is still of great interest to the town to install the culvert and raise the road.	Carry forward with Revisions
6	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Town staff said they were aware of one repetitive loss property that had already been acquired by the town and turned into a park. They reported that there might be one more but they were not sure of the location. Mary explained that the Town could request the list from FEMA if they were interested in learning the address of the RL property.	Carry Forward
3	Coordinate with NEMO and CROG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said they are compliant with MS4.	Complete/Retire
5	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	<p>There are several significant concerns related to MDC facilities, but the town has been in communication with MDC and the action that needs to be taken is on the side of MDC. Town staff reported that MDC is aware of the problem areas.</p> <p>Town staff identified the following areas of concern:</p> <ul style="list-style-type: none"> • Goff Brook – the MDC treatment plant is located here. (CIRCA staff follow-up suggests this is the Rocky Hill Water Pollution Control Facility located at 80 Goff Brook Lane). This location has experienced flooding. • Flooding along Waterchase Drive • Flooding along Silas Dean. Town staff suggested this might be related to a state culvert rather than to MDC. • Pump station on Main St and Brook St • Pump station on Pratt St. 	Carry Forward with Revisions.
2	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at	Town staff said they have a few businesses for whom this action is relevant and would like to leave this action in.	Carry Forward

	their facilities during or following natural hazard events.		
7	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Town staff would like to revise this action to acquire and review the SHPO layer.	Carry Forward with Revisions
4	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they have not yet participated in flood- related trainings but this is an interest.	Carry Forward

Critical Facilities

- Shelters:
 - High school is the shelter in the current plan but the town staff think this will change soon. Town staff are not sure where the new location will be if it does change. Attendees will follow up on this and let CIRCA know the primary shelter. The high school does have a generator.
 - Secondary shelter – community center which has a generator.
- Cooling Centers:
 - Library and community center. The library does not have a generator. The town has a portable military grade generator but it is not large enough to power the entire library. CIRCA will add an action into this plan for a library generator.

Development and Redevelopment

- The building code and planning and zoning ordinances do not allow development in the flood plains.
- There has been a moderate amount of development in the past five years and there will be more coming in the next three years.
- Most of the development in the past five years has been residential and will continue to be residential.

Recent Events

- Isaias – the town reported that they fared well but had a lot of power outages and trees down. Some power outages lasted 10 days. No Structures were affected, but trees and wires were down. The Eversource response during and after this storm was reportedly very slow. In the years since, the town has worked with Eversource and town staff feel that future storm response will be much better. Eversource has done a lot of tree management, which is still

ongoing; Eversource was working in town in the last couple weeks doing their “Blue Sky” operations.

- Flashy droughts of 2020 and 2022 – most people are on water in the town, so the two droughts did not have much of an impact.
- Storms of 2021 – town staff reported that the town didn’t experience any road washouts and overall did not find that these storms were too significant.
- RLP – the town has one property. This could be the one the town acquired, or it might be another property. Town staff are not aware of the address.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Rocky Hill.

- Beach Rd Bridge – still a priority for the town.
- France St in Rocky Hill near the Berlin line is a concern. This road is used as a secondary access route for about 12 properties and one business. This road is not built up to any sort of standard (seems that it was not originally intended to be a main access point), and could use some work. The road is also gated and recently someone glued the locks shut while the gate was locked. There should be an action added to reflect this access concern and the need for road improvement or at least assessment.
- The town staff said there are some culverts that need repair but that these repairs are within the town’s ability to handle. They are not causing flooding issues.
- The town staff are concerned about the aging population in town. Staff reported that the town has a lot of age-restricted communities, and assisted living facilities. Town staff believe that all these facilities have generators. The town staff said that a while back, they had to open a shelter and found that dealing with the aging population was difficult. Town is unsure if they have the resources to take care of the aging population if a shelter needs to be opened, such as cots/emergency kits/etc. Attendees would like to add an action to assess the capacity of the shelters and ensure the town has the capability to meet the needs of different vulnerable populations. Town staff would like this action to be towards the top of their new action list in the context of priority.
- The town staff also reported that the town has a lot of different group homes with different vulnerable populations.
- The town’s issues with MDC are listed above in the action list.
- Town staff said the town has a lot of agricultural land that is in the flood plain. This land floods every spring and the farmers suffer losses regularly.
- Tree concerns have improved since T.S. Isaias. The town has increased communication and participated in many meetings with Eversource since then. The entire Eversource program has changed for when a tree is down or a wire is down. Eversource is doing Blue-Sky clearing in town. The town staff believe they have a good system in place, and this has become a capability for the town.

Follow-Up

- Ray Carpentino will let us know who the HMP coordinator will be. CIRCA will follow up on this.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Simsbury

Date: June 26th, 2023

Time: 1:00 pm

Location: Virtual Via WebEx

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Patrick Tourville	Fire Marshal		
Tony Piazza	Superintendent Water Pollution Control		
Thomas Roy	DPW/Town engineer		

Overview

CRCOG and CIRCA attended a meeting with Simsbury to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Simsbury and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Simsbury’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Simsbury’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Simsbury 2019-2024	Notes	Current Status
5	For the area of Riverside Road near Drake Hill Bridge, address the riverbank, as the road is at risk of slumping due to erosion.	Town staff said that a large section of Riverside Rd had sunk down a few years ago and now they survey	Carry Forward

		it quarterly. Haven't seen movement since then but as the river floods, there might be more erosion. Revise to explore the options to address the Riverbank along Riverside road. No intersecting roads are involved. Perhaps this would be a good site for a Resilient CT Phase III project, as there seems to be a clear need for a consultant study?	with Revision
1	For the area of Riverside Road near Drake Hill Bridge, monitor for opportunities to justify the CLOMR/LOMR process and environmental permitting, as part of efforts to raise the road.	Town staff said that a section of the roadway experiences flooding and limits access inside and outside of town. People still have route 10 but that increases traffic in that area which can be an issue. The flooding isn't deep but still of concern, as the town never wants to encourage anyone to drive into floodwaters even if they are shallow. Town did a preliminary study but did not continue the project due to a lack of funding. Town would like to keep this action in case grant funding becomes available.	Carry Forward
20	Work with homeowners and Eversource to floodproof or elevate power grid features (connection points, meters, and circuit breakers) in the Riverside Road area so that power can remain on during flood events.	Town staff said that they have not known of any issues with power grid features during flooding events. The houses in the area have the meters located high enough on the side of the houses that this is not a problem. Some basements flood so there might be an issue with any meters located in basements. Town would like to carry this forward with revisions to reflect the basement concern.	Carry forward with Revisions
6	Upgrade Culverts on Riverside Road, West of the Riverside Road and East Weatogue Street Intersection	Town staff said one culvert has been upgraded: the culvert near East Weatogue St was replaced in-kind and the town also put a flap-gate valve on it. Two more culverts need upgrades on Riverside Rd. Town staff would like to know if Flap-gates are funded by FEMA / if this is considered an upgrade even if the size of the culvert is not increased. One of the concerns here is preventing backflow into the residential neighborhoods (hence the flap-gate valve), so increasing	Carry Forward with Revisions.

		the flow of water through the culverts is not what the town is trying to do.	
12	Initiate design and grant application work for elevation of Route 315.	Town staff said this has not happened but is still of interest to town.	Carry Forward
13	Complete a study exploring the feasibility and effectiveness of raising both Route 185 and East Weatogue Street in the area where they intersect.	<p>Town staff said that this has not been done but would be a big benefit to the region. After Irene, Route 44 was the only way in and out of the region or people had to travel to Farmington, Route 6.</p> <p>This is a major regional artery and the increase in population in the region is increasing the pressure on this need. Perhaps this would be a good site for a Resilient CT Phase III project, due to the regional corridor?</p>	Carry Forward
15	Upgrade culverts associated with Stratton Brook on Town Forest and Stratton Brook Roads	Town staff said this has not been completed but is still a priority.	Carry Forward
18	Complete replacement with bridges of culverts associated with Bissell Brook on Firetown Road.	Town staff said nothing has been done but is still a direction the town would like to go.	Carry Forward
7	Coordinate with CTDOT to Upgrade Culverts along Route 189 at the Intersection of Elm Street	Town staff said this was temporarily improved and the town hasn't had this problem since. It's a DOT system. A couple of residential homes are impacted by this so the town would like to carry this forward to continue to work with DOT.	Carry Forward with Revisions to note the concern for the residential houses
19	Acquire parcels with development potential that could worsen flood risk if developed, and preserve as open space.	<p>Town staff believe this is referring to acquiring an existing property on Nod Rd.</p> <p>Town staff said they received a grant a couple years back to acquire property along the River but the grant didn't cover all the costs and the grant administration was difficult and costly. The town is unlikely to acquire these properties because of the problems they have had with this grant program.</p>	Make a note to talk to David about if this is feasible.
2	Update flood damage prevention regulations to address Increased Cost of Compliance, allowing residents to access those funds.	Town staff said there have been no updates to the regulations but would like to keep this in.	Carry Forward

23	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Town staff said they have RLP. This action should be carried forward.	Carry Forward
24	Work with CT DEEP to complete a formal validation of the Repetitive Loss list and update the mitigation status of each listed property.	Town staff said they don't think this has been done and the staff member that might have done it has left the town.	Carry Forward
10	Complete an analysis of costs and benefits of joining the FEMA Community Rating System.	Town staff said nothing has been done but this is still of interest	Carry Forward
11	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they are participating in courses. This is a capability.	Complete/Retire
27	Evaluate the costs and benefits of constructing a fuel cell at the Simsbury High School	Town staff said this evaluation was done. They completed the evaluation study but ultimately decided not to construct the fuel cell.	Complete/Retire
16	Evaluate the Dike around the Water Pollution Control Facility to determine whether improvements are necessary.	Town staff said this evaluation was done. It is necessary to look at again once the new FEMA modeling and mapping is finalized along Farmington River. Town staff are not optimistic about having an action related to this, since they previously applied for a BRIC grant for this but the application was not approved.	Complete/Retire (or revise to reflect that more will need to be done post-FEMA models?)
14	Conduct a wildfire vulnerability and needs assessment to guide construction of fire roads through larger open space parcels and of additional dry hydrants and/or cisterns.	Town staff said they have not done this but would like it carried forward.	Carry Forward
17	Construct additional dry hydrants and/or cisterns in wildfire-prone areas not served by public water.	Town staff said that this is an ongoing program. They have some in fire prone areas but would like more. They would like to keep this action in case funding becomes available.	Complete but Carry Forward
21	Approve a new Drought Ordinance.	Town staff said this was done about 3-4 years ago.	Complete/Retire
25	Assess tree maintenance practices to identify opportunities for improvement.	Town staff said this is done. Town increased tree maintenance budget significantly over the past 5 years. This is a capability.	Capability/Retire
4	Codify storm water design guidelines derived from the study of impervious cover into zoning, subdivision, and highway regulations.	Town staff said this is ongoing but would like to keep it on.	Carry Forward with a revision to a

			specific action
9	Coordinate with NEMO and CROG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 compliance.	Town staff said they are compliant with MS4.	Complete/Retire
22	Coordinate with SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting their properties to be more hazard-resilient while maintaining historic character.	Combine with action 26	Carry Forward with Revisions
26	Coordinate with SHPO to conduct historic resource surveys, focusing on areas within hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by SHPO.	CIRCA suggested to revise this action to acquire and review SHPO layer. Town staff suggested the new action should be to incorporate that SHPO layer into the town's GIS files. Combine with action 22.	Carry Forward with Revisions
8	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said they would like to keep this action in and revise to incorporate new DEEP training.	Carry Forward with Revisions
3	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town staff said they have done this. Town is silver certified.	Complete/Retire

Critical Facilities

- Shelters
 - Simsbury high school – has two generators
 - Library – back up shelter. Has a generator
 - Senior center – has a generator
- Cooling centers –
 - Library, senior center, and town hall. All three have generators

Development and Redevelopment

- Route 10 on the South Side of town has new development, but it is outside of the floodplain. This development consists of apartments and an assisted living center.
- 36 Iron Horse Boulevard - They have one property that is in the floodplain, but it is raised 3 feet above the floodplain so the town is not worried about this property flooding. The property owners put in a significant effort to ensure that they would be able to develop the property, including going through the CLOMR/LOMR process.

Recent Events

- T.S. Isaias 2020 – four days of active tree removal. Simsbury has significant tree canopy, with 1/3 of town in open space. The town has a tree maintenance budget which is keeping town-owned land maintained as best as they can. The town is relying on Eversource as well to maintain the trees. They don't feel they need an action related to tree management.
- Flashy droughts – town staff aren't aware of any wells drying up.
- Summer storms 2021 –
 - Small drainage systems were overwhelmed. No major damage but there were culverts that exceeded capacity and erosion along the Farmington River riverbank.
 - Lucy Brook overtopped East Weatogue Street
 - Quarry Rd culvert is of concern.
 - Fire Town Rd – overtopped by the church.
- Town staff have reviewed the RLP and believe properties along Riverside Rd accounts for a majority of the RLP.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Simsbury.

- Flooding along Riverside Rd. is a major concern for the town
- The town is concerned about undersized stormwater infrastructure.
- Flooding concerns
 - Route 185, East Weatogue Street
 - Route 315
- Heat is not a large concern for the town. Most residents in town have air conditioning and vehicles. Town staff said that not many people take advantage of the cooling centers when they are open.

Follow-Up

- The HMP Coordinator will be Thomas Roy
- Town said they would like an action added that says “Obtain more 6 inch dry-prime pumps”. This would reportedly be useful related to the Riverside issue, and perhaps could be combined with a larger Riverside project scope.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Somers

Date: June 12th, 2023

Time: 1:00 pm

Location: In-person at town hall

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Todd Rolland	Somers Director of Public Works	Jennifer Roy	Somers Zoning Enforcement Officer
John Roach	Somers Fire Chief	Brian Wissinger	Somers Assistant Finance Director
Kim Littig	Somers Police	Joanna Shapiro	Somers Wetland and Erosion Control Officer
Justin Preuss	Somers Resident Trooper	Andrea Vitrano	Somers Sanitarian
Tim Keeney	Somers First Selectman	Mike Marinaccio	Somers CFO/Treasurer
Anne Cournoyer	Somers Emergency Management Director		

Overview

CRCOG and CIRCA attended a meeting with Somers to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Somers and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut* 2.0 future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Somers’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Somers’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Somers 2019-2024	Notes	Current Status
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town staff believe the town at one point was interested and/or involved in SCT but haven't updated their application in a while. Open space and agriculture are about half of the town and more important to focus on. CIRCA can check on and Somers is not part of SCT.	Complete/Retire
2	Install one additional needed dry hydrant.	Town staff said hydrants were installed or will be installed King Road and Watchaug Rd. Revise to say add additional fire hydrants.	Carry Forward with Revisions
3	Acquire generators for Town Hall, Public Works, and Senior Center.	Town staff said that generators are located at town hall and the senior center. Public works has one but it won't run the entire building. Library does not have one. Could revise to include generators for Public Works and the library. Schools could also use the generators. In the event of an active shooter, the library is the command post.	Carry Forward with Revisions
4	Hire a consultant to assist with implementation of the Somers Floodplain Management Study by prioritizing culvert improvements and obtaining necessary permits.	Town of Somers will look into this because they are not sure where this study is referring to. Could be on Maple Street where there was a study by Milone and MacBroom. There is a bridge repair that will come out of the study. Town staff will need to check on this but likely revise to say complete the project.	Carry Forward with Revisions
5	Improve drainage system on Battle Street.	Town staff believe that this was not completed and may still be needed. Part of a study was done a few years back, but the drainage system improvement hasn't been completed. Change the language to say "Conduct a design and implement". Town staff will check on the status of this.	Carry Forward with Revisions
6	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Attendees do not believe many businesses are in areas of risk, but they said that there is always a chance of chemical release potential at the sewer treatment plant, and therefore the sewer plant is what needs to be focused on rather than small businesses. This can be dropped and there doesn't need to be an action about the sewer plant.	No Longer Needed/Retire

7	Include in permitting requirements a review of potential impacts, based on the FMS, of proposed development and town projects.	Town staff are already doing this. Looking at wetland impacts, zoning, impervious surfaces. Different town disciplines review applications that come in.	Capability/Retire
8	Educate residents on personal disaster safety and supply kits, through the Town website and social media.	Town staff said the Town a CERT team does this.	Capability/Retire
9	Establish an ordinance requiring generators for new special needs housing developments.	Town does not have an ordinance that they are aware of. Town will work with group homes case by case to discuss if they need stand by power, and would advise group homes to get one if prudent. The town staff doesn't see any group homes moving in and this is no longer needed.	No Longer Needed/Retire
10	Coordinate with NEMO and CROG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said they are a part of MS4 and are active with MS4 compliance and reporting. They need funding and not technical assistance. No longer needed. David suggested we put in actions about projects that the Town of Somers can get money for.	No longer needed/ Complete
11	Make information about available assistance for property acquisition or relocation available at Town Hall and on the Town website.	Town staff said the CERT team does not do this, but they also do not believe it is a needed action at this time. Can take this off.	No Longer Needed/Retire
12	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff participants in FEMA, Department of Homeland Security trainings and courses.	Capability/Retire
13	Conduct an outreach campaign informing residents of the Community Emergency Response Team (CERT) and encouraging public participation.	Complete.	Complete/Retire
14	Expand emergency communication and notification methods to a variety of media, including radio, television, social media, and the Town Website.	Town staff said they have their own Everbridge subscription, update the website continuously, and are active with social media updates. This is a capacity and can be removed	Capability/Remove
15	Designate a secondary shelter (most likely the Senior Center, if sufficient backup generators are installed)	No Longer Needed. See critical facilities below.	No Longer needed/Retire
16	Work with CT DEEP to improve the Camp Road dam.	Town staff said this is In Progress. They had the dam inspected 2.5 years ago. Working with Fuss and O'Neill for a design. Change to "Implementation of design"	Carry Forward with Revisions
17	Complete an analysis of costs and benefits of joining the FEMA Community Rating System.	Very few flood insurance policies are active in Somers, that this can be removed.	No Longer Needed/Remove
18	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of	The town does not have a historic district but have a few historic buildings which aren't in flood zones. The town doesn't feel like there are other parts of the town need to be surveyed for historic buildings. CIRCA can check to	Carry Forward with Revisions

	vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	see if historic buildings are on the National Register/SHPO layer. None of the buildings in Somerville are likely historic buildings since they have been under renovations in the past. David suggested that "Use SHPO GIS point data and overlay with FEMA Flood Zones to see risk areas".	
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Critical Facilities

- Cooling Center – Senior Center and Town Hall
- Shelter - High School
- Public works has a generator but it doesn't run the entire facility.
- The library does not have a generator and the town would like it to have standby power– could be an action
- The town of Somers has three prisons which could be listed as critical facilities

Development and Redevelopment

- Have a 55+ community being built on Eleanor Rd.
- There is a new gas station going up in town
- Growers Direct Farms – an area that was farmland but they put up 30 acres of green houses.
- There is a farm in town that's buying more land and putting up Tobacco Barns
- A Small amusement park is located near the center of town. When they expanded their parking lot, they dredged out a swale to retain more water – This may be an example of active floodplain management in Somers.
- Redevelopment of the old mill site in Somerville to 80-100 room apartments
 - The mill was originally partly in the river but after the mill was removed, the FEMA map was revised. The proposal is for residential units but the units will be outside the FEMA flood zone because of the map revision and the position of the building relative to the river.

Recent Events

- Private airstrip on Watchaug Rd that floods often
- Had a lot of power line damage the last few years.
- The town sees floods along the Scantic River.
- The town staff mentioned they had a small tornado two years ago. Took a roof off on a residential home. A dam was damaged during the tornado, possibly via overturned trees.
- CIRCA will get a copy of the NFIP repetitive loss properties¹.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

¹ Subsequent research found that repetitive loss properties are not located in Somers

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Somers.

- Town staff is worried about the failure of the power grid. Somers has a lot of trees and when they come down the wires come down. That is the driver of a lot of the management issues.
 - The town should trim dead trees. Would like to see Eversource trim more trees. Would like to see more funding internally in the town to take down trees
 - Town staff do not believe that a wide forestry plan is needed. They would prefer to identify funding through FEMA or the state to take down trees.
 - The Town's annual budget is \$50,000 but they have been spending \$90,000 a year.
 - Do not own their own equipment but work with a local contractor.
 - Attendees are comfortable adding a couple actions about tree management.
- Roads that Flood or experience flooding:
 - Watchaug road was washed out during Ida. But the culverts got replaced.
 - Battle St. – the town has not done anything here but would like to, and this would be a good action to include in the plan
 - Turnpike – was fixed a few years ago.
 - Town staff mentioned Durkee Road, which floods continuously. The Scantic River goes through the area. There are not many houses on the road. The town lowered and paved the road and armored the edges and banks of the road. When Durkee Road floods, the town closes it to traffic until the water has subsided.
 - The road washed out at Gulf Rd at the Connecticut Water Company tank. There is a culvert under the access road which is under sized. Debris filled the culvert and it washed out.
- Town staff mentioned Gulf Road. Gulf Stream erodes and there are some residential houses that have severe erosion. Some houses have only 15-20 ft remaining (laterally) before the actively used parts of their back yards start to erode.
- Town staff mentioned that they recently had a frost that wiped out the fruit growers' crops. Attendees believe this is a major concern and a brief discussion ensued about whether this was climate-related.
- Town staff mentioned Woodcrest which is an apartment building that has vulnerable populations, as they tend to be more elderly. They have a generator but it does not supply power to the whole facility. It is a private property. Town does not believe they need an action for this.

Follow-Up

- The HMP Coordinator will be Todd Rolland

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting South Windsor

Date: June 26th, 2023

Time: 10:00 am

Location: In-person at Town Hall Annex

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Scott Roberts	South Windsor Assistant Town Manager/ CIO	Glen Reynolds	South Windsor Fire Inspector
Michele Lipe	South Windsor Director of Planning	Marc Melanson	South Windsor Building Official
Jeffrey Doolittle	South Windsor Assistant DPW/Town Engineer	Clay Major	South Windsor Director of Facilities
Marco Mucciacciaro	South Windsor Superintendent of Streets	Walter Summers	South Windsor Fire Marshall

Overview

CRCOG and CIRCA attended a meeting with South Windsor to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to South Windsor and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed South Windsor’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about South Windsor’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for South Windsor 2019-2024	Notes	Current Status
4	Perform dam assessment of public and private structures including, but not limited to, Avery Heights dam, dam at Lake St., dam at Veteran's Park off Parkview Dr., and Dzen's dam.	<p>Town Staff said that some of these have been completed.</p> <p>Avery Heights Dam - complete Lake St Dam – complete. This dam is on private property and the town does not own it. Veteran's Park Dam – The town has a grant application for HMGP for this dam. The summer 2021 storms caused some flooding that did not breach the Dam, but flooding occurred below the Dam. Dzen's Dam – the dam by Mill Rd. Town has not done any assessment of this dam, and attendees do not believe this dam is of concern. Town does not own this dam or the embankment. The town has an access road and has an easement to maintain the dam.</p> <p>Revise this to take out the completed Dam projects and DZen project which the town isn't interested in doing and move forward with the Veteran's Park Dam project.</p>	Carry forward with Revisions
12	Develop and prioritize recommended actions based on dam assessment, and work with property owners to implement.	Attendees reported that recommended actions have been developed for Veteran's Park Dam and all the dams that they believe necessary.	Complete/Retire
3	Update Open Space Plan in 2020.	Town staff reported that the POCD was completed about a month ago, and that the POCD includes an open space plan.	Complete/Retire
13	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Town staff did not believe that they had any RLP. CIRCA told staff they have one residential and one non-residential RLP and this action should stay in their list.	Carry Forward
15	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Town staff are not aware of any properties that are RLP. The town will work with DEEP/CRCOG to get the property information so they have the RLP on file.	Carry Forward
1	Acquire generator for Wapping Elementary School to make progress towards creation of an emergency shelter in that space.	Town staff said the Wapping Elementary School does not have a generator but that it is no longer going to be used as a shelter as they no longer own it and BOE does. The building will now be used as an annex to the high school. The town is now looking at Old Orchard Hill School (currently a recreational facility) for creating the back-up shelter space indicated in this action. Old Orchard Hill School does not have a generator so this action (with revisions) is still needed.	Carry Forward with Revisions for the new selected shelter location
16	Work with senior housing developments to have them each	Town staff said they are working on this but the facility owners are concerned with costs. South Windsor hosts two senior living facilities (Wapping Muse and Flaxville),	Intent is complete/Retire

	install emergency generators to power at least a communal space. If this is unsuccessful, consider adoption of regulation.	both of which the town has communicated with. There are also private senior housing complexes which have generators. Town staff said the don't feel the need to change regulations.	
18	Reach out to local gas stations to encourage and offer assistance with private emergency generator installation.	Attendees believe that the Town does not have authority to compel local service stations to become involved with generators.. This is no longer a need.	No longer need/ Retire
20	Install an emergency generator at the Public Library.	Town has not done this but is still an interest.	Carry Forward
14	Improve use of municipal website and social media to educate residents on emergency preparedness.	Town staff said Emergency management has its own information feed which links to other departments, public works., etc. The Town maintains signs throughout the town as well. This is a capability.	Complete/Retire
19	Conduct outreach and education program to provide technical assistance to private owners of generators to ensure they are installed correctly.	Town staff said this hasn't been completed. There have reportedly been a huge influx of people putting generators into their homes, which are all inspected before they are activated. Town staff feel the inspection is sufficient.	No longer needed/Retire
2	Develop a plan to ensure residents have access to important medications after storm events when roads and pharmacies are closed.	Town staff believe Human services has conducted a significant amount of outreach through their population. Likely complete, and also a capability. CIRCA will confirm with Andrea Cofrancesco, Director of Human Services.	Check with Andrea
8	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said the town is compliant with MS4, and this is an ongoing process. Town staff do an annual report every year and post to the website. This is a capability.	Complete/Retire
10	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	Town staff said MDC does not have any facilities in town aside from water mains. No water or sewage pump stations owned by MDC are present. MDC does have water mains which are gravity fed from out of town. The town staff do not feel this action is needed.	No longer needed/Retire
6	Complete an analysis of costs and benefits of joining the FEMA Community Rating System. Get information from participating Towns, solicit input from residents and from experts, and request assistance from CRCOG.	Attendees do not believe progress has been made. The Town does not allow new building in the FEMA floodplain. There a few buildings that are flood prone. There are some homes in the floodplains and they may carry flood insurance. Town staff believe there is not a need and is no longer an interest.	No Longer Needed/Retire
7	Assign a municipal staff-member to be a utility liaison responsible for maintaining contact with utility representatives.	Town staff said all the staff take on this role when needed and this is an ongoing process. During every storm a person is assigned as a liaison, and sometimes the specific person who serves as a liaison changes depending on the specific needs of the situation. The intent of this action is complete.	Intent is complete/Retire

11	Determine additional updates to town GIS data and capabilities needed to assist with hazard mitigation. Pursue those updates.	Town staff said they are updating GIS all the time and the town has \$100,000 in the budget next year for additional GIS work. Determining the specific updates needed for Hazard Mitigation is still of interest. Check with David to see if there is FEMA funding for GIS work.	Carry Forward with Revisions
17	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Town staff said there was three historic resource inventories done in the past few years. CIRCA recommended to revise to say acquire and review SHPO-supplied GIS data and town staff agreed.	Carry Forward with Revisions.
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff do not believe they have an issue with this but would like to keep an action for training. Revise to say watch the DEEP's online training.	Carry Forward with Revisions
9	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Staff said they are actively participating in courses. This is a capability.	Complete/Retire

Critical Facilities

- Wapping School – ownership is going back to BOE, so this will not be the shelter that the town originally thought it might become at the time of the last HMP update.
- Old Orchard Hill School – This former school building was converted to a recreation center, and is also a possible site for a future shelter (taking over the role that town staff once envisioned for the Wapping School building). Needs a generator.
- Shelters:
 - High school (primary) – has a generator
 - Community center – has a generator
- New Orchard Hill has a generator and is available but not a designated shelter.
- Cooling centers
 - Community center – has a generator
- Library is used as a charging center. It does not have a generator but that need is already listed as an action in the plan and will be carried forward.
- All four of the Elementary schools have been rebuilt in place over the past five years

Development and Redevelopment

- The town does not allow new development in the FEMA floodplain, and are not aware of any particularly vulnerable developments.
- Town staff will provide a list of recent developments in South Windsor to CIRCA.

Recent Events

- T.S. Isaias of August 2020 – South Windsor got hit hard with mostly trees down and roads blocked. Got power back within 4-5 days. Not much flooding.
- Eversource has been trimming trees the last 3-4 years and town consults with them. Town staff mentioned tree management in open space areas that would impact personal properties. Staff don't feel the need to have an action based on this because this is an ongoing capability.
- Flashy droughts of 2020 and 2022 – South Windsor residents with wells are believed to benefit from a high-water table and town staff don't believe any wells went dry.
- Storms of 2021. Have three HMGP grants in as a result of storm Henri.
 - Culvert – off Chandler Rd washed out.
 - Culvert – Sele Dr was in danger of being undermined. Did not flood but was of concern.
 - Spring Pond overflowed and damaged the pool.
- Town staff said they will work with CRCOG/DEEP to get the list of RLP.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in South Windsor.

- Storm damage has been an issue in the past. This damage primarily includes downed trees in the area that take out power.
- Culverts washing out/those that are in poor conditions are a concern for the town.
 - Culvert on Griffin Rd – very old and in poor condition
 - Two Culverts on Rye Street – one culvert is failing and if that one fails then the other will be impacted and likely fail.
 - Town staff said they would like an action to conduct a town wide assessment on culvert conditions.
 - CIRCA will get a list of these culverts from South Windsor staff.
 - Town staff said they would like a similar action about conducting a townwide bridge assessment. CIRCA will get a list of these bridges from South Windsor staff.
- Town staff does not see much demand for the cooling centers.
- Town staff know their vulnerable populations and are confident in their ability to reach and assist these populations.
- Town staff mentioned they are managing their sewer system and looking for grants. Areas in the collection system may be affected by infiltration. Town staff provided CIRCA with a list of the sewer pump stations.

Follow-Up

- The HMP Coordinator will be Marco Mucciacciaro
- Town reached the point total for Silver Cert with SCT but the community was not as engaged as originally believed possible, and the Town is choosing not to go forward with certification.

#	Mitigation Actions and Strategies for Glastonbury 2019-2024	Notes	Current Status
2	Develop a plan to ensure residents have access to important medications after storm events when roads and pharmacies are closed.	We do not have any plans on how to get people their meds if the roads and pharmacies are closed. We continue to encourage planning for an emergency and that is part of it. If there are issues with the person not being able to get their meds due to other issues (they can't drive, their health prevents them from getting them, etc.) we can help them. So I think more discussion on this subject would be a good idea.	Carry Forward

Follow up with Andrea:

We do not have any plans on how to get people their meds if the roads and pharmacies are closed. We continue to encourage planning for an emergency and that is part of it.

If there are issues with the person not being able to get their meds due to other issues (they can't drive, their health prevents them from getting them, etc.) we can help them. So I think more discussion on this subject would be a good idea. Carry this action forward.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Southington

Date: August 4th, 2023

Time: 10:00 am

Location: Virtual Via Zoom

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Annette Turnquist	Southington Director of Public Works and Town Engineer
Jim Grappone	Southington Assistant Town Engineer	Mark Sciota	Southington Town Manager
Dave Lavallee	Southington Acting Planning Director and Environmental Land Use Planner		

Overview

CRCOG and CIRCA attended a meeting with Southington to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Southington and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Southington’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Southington’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Southington 2019-2024	Notes	Current Status
16	Work with property owners to remove constrictions and/or widen channels on private property to mitigate exacerbation of flooding conditions.	Town staff said the town encourages property owners to do this on their own. If there's a flooding concern in an area, the town issues a letter to the property owner to remind them that they can do this work without a permit. This is a capability.	Capability / Retire
8	Create and adopt Low Impact Development (LID) regulations.	Town staff said the town overhauled the zoning regulations and incorporated LID.	Complete / Retire
4	Construct dry hydrants and cisterns on the east side of town and near West Ridge	Town staff report that this is not a high priority right now, but may be a future need. The town has purchased several new fire trucks over the last few years and a new water truck, so the intent of this action has been completed through other means.	Intent complete / Retire
2	Include procedures specific to the liquid propane plant in the Town's Emergency Operations Plan	Town staff said this propane plant is still there and has expanded slightly since the last plan. The tanks are brought in by railroad. This is still a concern. The fire department has trainings related to this. Carry forward.	Carry forward
9	Require installation of underground utilities in all new developments, when feasible, through the Subdivision Regulations.	Town staff said they do this on a case-by-case basis. In some cases, in industrial zones it might be more feasible to do utilities above ground. This is a capability.	Capability / Retire
17	Relocate EOC to Fire Department and convert the current EOC at the Police Station into a backup EOC.	Town staff reported that the police department has given the town the detective's division to use. This is not a priority but should still be carried forward.	Carry forward with revisions to note that this is not urgent.
3	Purchase new generator for the municipal center.	Town staff reported that this is complete. Many of the critical facilities already have generators, including town hall, municipal center, Water Pollution Control, Police Department, Fire Department, Calendar House (primary shelter/senior center/cooling	Complete/Remove

		center), Joseph A. Depaolo middle school (secondary shelter), library (cooling center). The town is all set with generators.	
10	Work with groceries and gas stations to assist them with installation of emergency generators so they can reopen quickly following hazard events.	Town staff said they don't have any means to force groceries and gas stations to do this. Town staff report that they are more concerned with extended stay facilities such as hotels and motels. Generators are not required by the regs, although the town encourages them. One concern related to this is the hotels that own and rely on sewer pumping stations; if the power goes out and the sewer pump doesn't work, this would create problems for the town. These pump stations are privately owned. The town development staff emphasize to private developers / large property owners that it is a good idea to have generators, but can't enforce.	Carry forward with revisions to include hotel/motel concern.
11	Purchase new equipment for snow removal.	Town staff said they are purchasing new equipment yearly and this is a capability.	Capability / Retire
6	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said the town is compliant with MS4. The general permit has expired and the town isn't sure how long DEEP will extend it for.	Capability / Retire
12	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	The town is interested in knowing where the RL properties are. CIRCA explained that consultants can't request this information from FEMA, but CRCOG can. Dave is the acting floodplain manager.	Carry forward.
15	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Carry forward.	Carry forward.
7	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they are up to date on their trainings.	Capability / Retire
13	Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting	Town staff report that there have likely been no changes in the last 5 years, but in the last 10	Carry forward with revisions.

	their properties to be more hazard-resilient while maintaining historic character.	years the town developed a reference list. If there is a need for a site plan application or other permit, the town staff will check against the reference list. CIRCA recommends replacing this action with an action to acquire and review the new SHPO GIS layer.	
14	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Combine with action 13 above.	Combine with above / carry forward with revisions.
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	The town said that they ask businesses for their management plans. Outreach would be precipitated by a land use or site plan application. Administering of the aquifer protection area (APA) regulations results in some organic outreach too.	Capability / Retire
1	Consider and document the labor resource needs and benefits of participation in the Sustainable CT program.	Southington is not yet in Sustainable CT. Town staff will bring this up with the town council after the election in the fall.	Complete (action was specifically to consider, not to join) / Retire

Critical Facilities

- Primary shelter – Calendar House (senior center) on Pleasant Street, has kitchens and medical office, full generator power, bus transportation. Approximately 80 people could fit here.
- Secondary shelter – Joseph A. Depaolo Middle School across the street from Calendar House on Pleasant Street. This has only been used once in the recent past after the 2011 snow storm.
- Cooling centers – library and senior center. The library is under construction and the new one will open in September 2024 with full generator power. The senior center has a generator.
 - Back-up cooling center for off hours is a meeting room in the Police Department that is open 24/7.
- All sewer pump stations have been updated – new pumps, new controls, new generators. This was done with ARPA funds.

Development and Redevelopment

- One re-development is pending downtown near the river, which has already been reviewed for floodplain storage. This is primarily commercial with a mixed-use component. Formerly called Greenway Commons, although the footprint of the re-development will be smaller. 200 apartments and retail.
- A lot of adaptive re-use of older buildings continues to occur in the town.
- Upper part of West Street Corridor is undergoing some development interest, possibly due to the proximity of ESPN. The town might adjust zoning regulations to allow for responsible development.
- The town has a good track record of acquiring open space – about 600-700 acres in the last ten years or so.

Recent Events

- Isaias – some branches down, small power outages. Eversource has done a lot of work over the last 10 years since the ice storm and has worked closely with Southington Public Works.
- Flash flooding has occurred in the recent storms of 2021 – see next section for specific streets.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Southington.

- Flash flooding is a concern along the floodplain of the Quinnipiac River. Roads are often closed during the 100-year storm event, which is happening more frequently. Usually the roads don't flood for more than a day, and the flooding involves overtopping but no erosion / damage to the roadbeds. Several properties (8-10) in this area flood on a periodic basis. Specific streets include:
 - Curtis Street
 - Mill Street
 - South Main Street
 - Darling Street
 - Plantsville neighborhood (although not recently – could be related to the removal of a dam)
 - The town might be interested in acquiring funds to buy out the repetitive loss properties, perhaps add an action to reflect this.
 - Southington is interested in acquiring the RL list.
 - The town has been working on improving the manholes to reduce flood impacts.
- Facilities for extended stays (hotels/motels) are lacking generators and this is a concern, especially those facilities that rely on private sewer pump stations.
- Clearing the trees when they fall in the river itself is a challenge, as this requires accessing private property.
- Town granted the water utility \$900,000 of ARPA funding for lead service line removal. The Town is open to CIRCA reaching out to the water utility. PFAS is also a concern.

- Town staff are not aware of any concerns related to agriculture, and they report that the aquifers serving the farms are pretty robust.

Follow-Up

- The HMP Coordinator, at least for now, will be Mark Sciota.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Stafford

Date: June 28th, 2023

Time: 1:00 pm

Location: Virtual via Zoom

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Glenn Setzler	Stafford Chief Building official	Jim Desso	Stafford Emergency Management Director

Overview

CRCOG and CIRCA attended a meeting with Stafford to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Stafford and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Stafford’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Stafford’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Stafford 2019-2024	Notes	Current Status
12	Repair Staffordville and New City dams.	Town staff believe that vegetation clearing was done at New City Dam about 2 years ago. No changes to the structure of the dams but this is still a concern.	Carry Forward

4	Initiate efforts to breach the Hydville Dam. Coordinate with CT DEEP.	Town staff said there is a mill across the street that's in disrepair and there is some talk about revitalizing that mill which has the ability to still utilize the dam. Town staff is not aware of any coordination with DEEP. Mary asked whether this is a DEEP-owned dam, but town staff were not sure. Attendees would like to carry this forward with a revision to reflect the possible redevelopment of the mill.	Carry Forward with Revisions
5	Perform a study to identify preferred actions to take to provide sufficient egress and access to and from the main fire station downtown, addressing the issues created by the undermined bridge.	Town staff said they are considering turning this fire department over to only an ambulance department and moving the fire department out of the floodplain. However, this is currently just a discussion with no concrete plans. A new catch basin was added so the undermined bridge issue has been improved with the catch basin. Carry Forward with Revisions to reflect the that the bridge issue has been dealt with.	Carry Forward with Revisions
11	Explore possible sites on which to relocate the main fire station out of the floodplain.	Town staff said this is in discussion and still of interest	Carry Forward
14	Relocate utilities along Main Street underground during expected road and roundabout rebuild in 2020.	Town staff said they are in the middle of re-doing the roundabout now. The town staff met with Eversource to discuss the possibility of relocating utilities underground, and the cost to put the utilities underground is not feasible now. Town would like to keep an action related to relocating utilities underground in case there is money down the road, but the mention of the road/roundabout rebuild can be removed.	Carry Forward with Revisions
8	Revise Public Works personnel contracts to allow for the hiring of subcontractors during surge conditions.	Town staff said they would like to refer this to DPW.	Check with DPW, Devon Cowperphw aiite
10	Add language encouraging Low Impact Development and limiting impervious surfaces to the Zoning Regulations	Town staff said they are currently in transition with the zoning officer, as they currently have someone in an interim role because their previous zoning officer left last year. Town staff are unsure if they were working on this, but think that the Zoning Commission might know.	Town will check on this with the Zoning Commission
2	Expand hazard warning, advisory, and outreach efforts to social media.	Town staff said they received ARPA funds to purchase new warning signs for early warning advisory, which have been deployed. The town has also made progress with using social media for notifications.	Complete/Retire
3	Establish an annual education program for private snow-removal contractors and residents on not obstructing roads and the right-of-way.	Town staff said this hasn't been a significant issue in recent years. Town notifies the residents ahead of time with early warnings of snowstorms using the warning signs mentioned in the previous action, which accomplishes the intent of this action.	Intent is complete/Retire

6	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said they have reached out to businesses for prevention of accidental releases and working on this with the fire department. This is a capability.	Capability/Retire
7	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they do participate in trainings when they are offered. This is a capability.	Capability/Retire
9	Educate Town staff on detour protocols, and purchase more detour signage and traffic routing equipment.	Town staff said they have done this in conjunction with the new ARPA-funded notification signs. This is complete.	Complete/Retire
13	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Town staff said they are working with a third party (not SHPO) to discuss the potential creation of a historic district in the town. There is not currently a historic district in the town, but there are a number of historic structures. Town staff mentioned that historical buildings are important to residents so an action about historic buildings should be kept in the plan. CIRCA suggested that this can be revised to acquire and review the SHPO layer/.	Carry Forward with Revisions
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town is registered with SCT.	Complete/Retire

Critical Facilities

- The primary EOC was relocated from the West Stafford Fire House to the Library Annex.
- The secondary EOC was moved from the main fire station to the West Stafford fire department so that it is no longer in the flood plain.
- Shelters:
 - Primary shelter is Stafford middle school, which has a generator
 - Secondary shelter is the senior center, which also has a generator.
- The cooling centers are the senior center and library, which have generators.

Development and Redevelopment

- Would like to refer this question to the DPW, who can advise on where the vulnerable areas are.
- Stafford has a two-phase senior housing complex in progress, with the first complex already built and the second one in progress. These are two 73-unit complexes that are next to each other, but staff don't think they are in a flood zone. One complex, on Woodland Springs Dr, was

completed in 2019. The second phase of the project (which involves building the second of the two complexes) is underway at 55 Woodland Springs.

- There are sporadic individual housing going up throughout town. No major subdivisions are proposed or under development.

Recent Events

- Isaias – the town experienced a lot of tree damage and power outages for about a week. The rural areas were a bit harder to get to and Eversource reportedly needed a little longer to get out there. The town has worked with Eversource to clear a lot of the trees out under the power lines since that storm.
- Droughts of 2020-2022 – not many issues in the town. There were a couple of private wells with water levels that were decreasing, but the problem was rectified by the owners decreasing their water use. The town did not have to provide any supplemental water use to those properties.
- During the 2021 storms the town staff mentioned that some of their roads washed out.
 - Hopyard Rd, which is a dirt road, washed out. This road is reportedly a historic resource and cannot be paved for this reason.
 - Water run-off from the mountain came down and washed-out Olympic Avenue.
 - Tetrault Road- here was some drainage issues on this road and it to be closed down during the storms.
 - Other than that, there was only some flooding of people’s yards and basements during these storms.
 - Town staff noted that they did not just experience these issues once during 2021, but during the multiple storms that occurred that year.
- RLP – Stafford has one new RLP. We will add actions about RLP to the HMCAP. Town staff are not sure which property this would be, but suggested that it might be a residential property that experienced coincident tree damage.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Stafford.

- Flooding concerns were discussed above.
- CIRCA can check with DPW to see if there are any culverts that need to be looked at
- Hopyard Rd has water on both sides. Beavers are creating dams and that’s creating an issue with water over the roads
- Extreme heat – the town gets about one to two dozen people that use the cooling centers. This is more than CIRCA has heard from other towns.
- Stafford has two elderly housing complexes, 55 Woodland Springs and Averly Park, that only have AC in a portion of the facility. During a previous winter storm, the town did evacuate all the elderly people at Averly Park on West St to the senior center (secondary shelter), because of concerns that power would be lost at Averly Park. There is some back-up power for the elderly housing complexes, but not enough to power the full complexes / residences, maybe just a community room. Residents can utilize individual AC units, but the concern about power outages remains. Town staff mentioned that in an ideal world these new complexes would have

full AC and enough generator power to power the full complex, but there is not enough funding for these new buildings to have generators. Include an action for both Woodland Springs and Avery Park to get generators (or more specifically, to get generators capable of powering the full complexes).

- Town staff mentioned the Fire station that is in the floodplain, they are in discussions about moving it. This was covered during the HMP table discussion.
- Town staff did not have any agriculture concerns
- A lot of Downtown Stafford is served by sanitary sewer. Town staff believe there is some ARPA money to update the Water Pollution Control Facility.
- Stafford hospital – there is a parcel where CT Water put a water tank. Somers pumps into the tank and that water comes into Stafford. The water line is almost complete and once it is, this improvement will provide the industrial park the ability to tap into the water supply.
- The hospital has started discussion about future development including a multi-story assisted living facility along with multiple cottages. This involved discussion about additional resources for sewer. The hospital is on septic now but the capacity is maxed out. If this development occurs they might need to connect to the downtown Stafford sewer, but Stafford sewer as it is now could not handle that development. Town staff mentioned that this is in the beginning stages, and they are not sure how much of this information the hospital wants to be available to the public at this time. Don't include this as an action as there is possibly sensitive information here. CIRCA will make a general statement in the plan about development trends associated with the hospital like "Nominal residential development near the hospital could potentially occur in the next few years."

Follow-Up

- The HMP Coordinator will be Jim Desso

8	Revise Public Works personnel contracts to allow for the hiring of subcontractors during surge conditions.	Devin Cowperphwaiite said if this is referring to the collective bargaining agreement with DPW employees (drivers/laborers), the MEUI CBA already has language in it that provides management the right "to establish contracts or subcontracts for municipal operations provided that this right shall not be used for the purpose of laying off current employees in the bargaining unit." This action is no longer needed/Complete.	No Longer Needed/Complete/Remove
10	Add language encouraging Low Impact Development and limiting impervious surfaces to the Zoning Regulations	Town staff said they are currently in transition with the zoning officer. Town staff believe the regs already include language about ratios of pervious/impervious surfaces..	Complete/Retire

1. Can you also please let us know about the development/redevelopment happening in Stafford. Is there any development happening in floodplains?
2. Are there any culverts in town that need repair? If so, would you like a list of them added into the actions of the HMP?

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Suffield

Date: June 29th, 2023

Time: 10:00 am

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Bill Hawkins	Suffield Direct of Planning and Development	Jim Canon	Suffield Chief of Police and Emergency Management
Colin Moll	Suffield First Selectman	John Spencer	Suffield Emergency Management Director

Overview

CRCOG and CIRCA attended a meeting with Suffield to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Suffield and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Suffield’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Suffield’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Suffield 2019-2024	Notes	Current Status
8	Conduct a study to identify the worst areas of surface flooding and develop methods to alleviate the problem areas.	Town staff said they are not sure if a town wide study has been done. This action likely came from the former engineer. However, the town evaluates and deals specific areas as needed. The town would like to keep this action in case funding becomes available for townwide studies.	Carry Forward
1	Develop a list of flood prone areas and share that list with police and fire.	Town staff are aware of the areas where potential flooding occurs. There is one area near Stony Brook on Hale St before Taintor St, that they keep an eye on. If this area floods, the town can experience some traffic issues but this affects farmers more than residential areas. The same stream crosses under Taintor St which causes some small flooding issues.	Complete/Retire
3	Preemptively clean debris out of select drainage structures before and during heavy storm events, particularly on Susan & Diane Lanes.	Town staff said this is has been happening and is still in process. Town would like to check on Susan and Diane lanes specifically.	Carry Forward
10	Encourage property owners to refrain from dumping debris into stream channels and drainage culverts.	Town staff said they are unsure if anyone in town specifically deals with this but the town staff think this action can be retired.	No Longer Needed/Retire
9	Encourage low impact development techniques in new development in accordance with the POCD.	Town staff said they adopted their most recent POCD last year. Zoning commission is supportive of LID but there has been no move to change regulations. However, LID is happening in town and the intent of this action has been met.	Complete/Retire
5	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said they are compliant with MS4.	Complete/Retire
6	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they participate in some trainings. This is a capability.	Capability/Retire
4	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said they haven't done much with this, but they don't have a lot of businesses that might have releases. The town does have a lot of farms/nurseries where runoff could be an issue. Revise to watch the DEEP training video.	Carry Forward with Revisions
7	Conduct at least one annual hazard education and outreach campaign to residents using the Town website, Facebook pages, mailers, and information stationed at Town buildings.	Town staff said that if there is a threat of severe weather there is a notice that goes out on the website/social media. If there are heat concerns, the town uses the website to notify people and let them know about cooling centers. The town does not have a CERT team but have an Emergency Management website with info. This is a capability.	Intent is complete/Retire
11	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support	Town staff said they worked with SHPO and conducted two rounds of historic and cultural research surveys (one finished in the last 5 years) with a couple hundred properties, most residential, that were looked at. However,	Carry Forward with Revisions

	identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	they don't think the focus of these studies were on floodplains. Given that the Town has demonstrated experience participating in resource surveys, CIRCA advises to change this action to acquire and review SHPO layer.	
2	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town staff said they have entered the SCT program and bronze certified. They would like to move forward in the program and obtain silver certification.	Complete/Retire

Critical Facilities

- Shelters -
 - Primary Shelter – Suffield High School at Sheldon Street. This is an overnight shelter.
 - Secondary Shelters – Middle School
- Cooling/Warming center
 - Senior Center on Bridge Street.
- All critical facilities have stand by power consisting of generators.

Development and Redevelopment

- Most of what the town sees is single-family residential development. There are not a lot of areas where development is an issue related to flood risk
- Not a lot of new commercial development is occurring. In the industrial zone, one new building has been constructed in the last few years.
- Overall, the town sees light, sporadic development.

Recent Events

- Isaias – Town staff said this storm was not substantial in Suffield, and the thunderstorms of 2021 were much worse.
- The 2021 thunderstorms were a lot worse than any of the hurricanes were. The town saw a lot of tree damage during these thunderstorms. The town was out of power for a couple days and downed trees isolated neighborhoods in the Griffin Rd area.
- Droughts – other than some of the farmers losing some crops, the town did not experience too many issues with the droughts.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Suffield.

- Relating to extreme heat, the town hears mostly agricultural concerns. The town reported that they do a good job with the cooling centers and making sure the elderly are taken care of.
- Relating to flooding, the town reported few issues with this because the banks of the Connecticut River are so high.

- Related to the Griffin Street area that gets isolated during storms; The town is working with Eversource to address power outages. This area has a lot of old pine trees on private property where Eversource can't cut. There are wires that run through a high tree density areas which only affects 4-5 houses so Eversource has trouble getting there. The roads in this areas are narrow so a tree down can block all access. Attendees agreed to consider an action on this.
- David said there are some anxieties about the lakes changing in Southwick, based on discussions occurring in the context of the Southwick hazard mitigation plan. The town seems to think that there are more water quality issues which are happening earlier in the season.
- Any issues with culverts that were causing flooding were addressed two years ago by the town engineer
- Town staff said they are looking at the sewers and infrastructure concerns. The concern is from flooding from Stony Brook. The sewer Interceptor at Stony Brook is at risk. Town staff are looking at a design plan. CIRCA will get more information from Suffield on this but this will be an action.

Follow-Up

- The HMP Coordinator will be Bill Hawkins
- Town staff explained that the darker spots on the heat CCVI that CIRCA showed was where there is a large outdoor farm suggesting that outside workers might be contributing to those darker areas.
- EPA and NUCA – working on Geographic Response Strategy (GRS) for the CT River. Suffield has a site included in the GRS. They already did site surveys in the last few weeks. This GRS discusses preservation of the Windsor Locks/Suffield canal and had a strong mitigation plan for any spills in the river. The plan is more about water quality and preservation of resources.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Tolland

Date: June 27th, 2023

Time: 10:00 am

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Robert DaBica	Tolland Fire Marshal
David Corcoran	Director of Planning and Development		
Scott Lappen	Tolland Director of Public Works		

Overview

CRCOG and CIRCA attended a meeting with Tolland to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Tolland and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Tolland’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Tolland’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Tolland 2019-2024	Notes	Current Status
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5	Hire engineer to repair or replace center pier on Willimantic River.	Town staff said this is under way. The town has applied for state funding and has gotten a letter saying funding has been awarded. The engineering has been done, and the project is in the next phase. Carry forward with revisions to reflect the next stage of this project.	Carry forward with revisions
8	Update bridge and culvert sizing requirements to allow for passage of larger storm events: utilize the Cornell NRCC Extreme Rainfall figures found at http://precip.eas.cornell.edu/ .	As far as town staff know, Tolland has not updated its design manual. Town staff are not sure whether the town offloads some design work to consultants. Revise to replace with NOAA Atlas 14/15 figures rather than Cornell NRCC.	Carry forward with revisions
12	Analyze and make recommendations to improve Gehring Road crossing of Spice Brook.	Town staff said no progress has been made on this action but report no issues with this crossing in the last 8 years.	No longer a need / Retire
13	Analyze and make recommendations to improve natural and artificial drainage in Industrial Park and Gages Brook.	Town staff said there is a grant in process for this, and funding has reportedly been awarded. Engineering stage is underway. Two structures on Industrial Road East and one on Industrial Road West are being addressed. Revise to be "complete the improvements."	Carry forward with revisions.
14	Implement recommendations to improve Gehring Road crossing of Spice Brook.	See action 12	No longer a need / Retire
19	Develop a scope of work for making recommended improvements, developed as a separate action, to the Industrial Park and Gages Brook.	See action 13.	Combine with 13 / Carry forward with revisions.
21	Identify private bridges that may need repair, and reach out to owners to determine best means of evaluating and implementing necessary upgrades. Because this is expected to be a long term, multi-year project, for the current Plan period, the action to be taken is to develop a scope of work for the project.	Town staff are not aware of any outreach related to private bridges, such as those which would cross driveways. Town staff do not anticipate that capacity and authority would be present to enable this.	No longer a need / Retire
16	Educate commissioners, developers and the community on Low Impact Development requirements on an ongoing basis.	Town staff said there is LID guidance in place and this is done on an ongoing basis. This is a capability.	Complete/Capability/ Retire
7	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard	The town staff they are compliant with MS4.	Complete/Capability/ Retire

	mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.		
1	Develop a list of private contractors that can be utilized for emergency tree service work.	Town staff said the town goes out to bid on an annual basis with the possibility of contract extension. Currently wrapping up first year of a contract with a local tree contractor, and will extend another year.	Complete/Capability/Retire
2	Develop a system for servicing/dredging fire ponds and dry hydrants periodically.	Town staff said the town does this on an ongoing basis.	Complete/Capability/Retire
3	Update list of special needs populations to include 37 new units and any other new additions to the population.	Town staff said the town maintains this list. Not clear what the 37 units is referring to, but it could reflect a phase of Parker Place (low-income senior housing) that was underway in 2018-2019.	Complete/Capability/Retire
4	Develop a plan to increase municipal sheltering capacity to meet 7% requirement.	Town staff is not sure of this but it sounds like the sheltering capability is well-established. The intent may have been met.	Complete/Capability/Retire
9	Add a link to the Emergency Management page on the Town Website with information about the National Flood Insurance Program.	Town staff said there is info on the town website.	Complete/Capability/Retire
20	Explore creation of a new EOC with improved capabilities and technologies	Town staff said the town is still using the same EOC they've been using for years. Chief John Littlel has been looking for a larger facility – check with him to see if a larger facility is still desirable.	Check with Chief John Littell and carry forward if needed
6	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said there is not much development located in the FEMA floodplain areas in Tolland, and there are no businesses within or adjacent to the floodplain.	No longer a need / Retire.
11	Conduct annual outreach campaign to educate residents on signing up for emergency alerts, building and maintaining disaster plans and kits, and improving their disaster readiness. Include notifications on the Town website.	Town staff said Tolland has a CERT team and the town sends out emergency alerts.	Capability / Retire
18	Coordinate with CT SHPO to conduct historic resource	Town staff report that most of the historic structures are on the town green, which is relatively high and outside flood zones. Town	Perhaps retire entirely or Carry

	surveys to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	staff are not aware of any historic structures in floodplains, given how little development is in the floodplains. Revise to the new SHPO layer action)	Forward with Revisions
10	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they attend trainings, although may not be specific to flood management.	Complete/Capability / Retire
15	Send out email blasts with information about the National Flood Insurance Program.	Town staff said Tolland has very little development in flood plains, which leads to a very low flood insurance policy count, so this need is not relevant.	No longer a need / Retire
17	Seek Certification within the Sustainable CT program and make progress with the hazard mitigation goals associated with SustainableCT certified actions.	The town staff reported that they have considered doing this but decided that “the juice was not worth the squeeze”. May decide to seek in the future.	No longer a need / Retire

Critical Facilities

- There are three schools – the High School and Birch Grove are the two main shelters.
- The EOC is at the training center.
- Senior center is a cooling center and shelter
- All the schools and the senior center are air-conditioned. If needed the town hall and the library could also be used for cooling.
 - The senior center has a new generator, two mini-split systems upstairs, and a dehumidification system downstairs.
 - Town staff believe all the schools have generators.
 - The capital improvement plan includes replacing the 60-year-old generator at the highway garage, which is the central fueling station for the town emergency and public vehicles. Add an action for this.

Development and Redevelopment

- Two major developments in process:
 - 240 multi-family units behind Big Y grocery store off Rt 195. Adjacent to the Tolland Marsh but uphill and not in a flood zone.

- 83-unit development on Rt 195.
- Fire Marshal notes that if these are also multi-family without fire partitions, the town does not have the staff capacity to keep up with the required annual inspections.
- Otherwise no major subdivisions in the town.

Recent Events

- After Isaias there were a lot of trees and poles down on important roadways. Power outages.
- Attendees remarked that “We [Tolland] are in the storm capital of Connecticut.”
 - Town staff call it the “Tolland Triangle”
 - Lots of wind damage occurs frequently. The elevation change from Vernon to Tolland could contribute to the relatively higher storm damage.
- Shenipsit Lake – the level in the lake dropped considerably during the 2022 drought. The town shut down all irrigation on municipal properties to set an example of water conservation. Connecticut Water Company had requested voluntary water conservation.
- 2021 storms – the town has 8.3 miles of gravel roads, spread out throughout the town, and the town had to rebuild these roads 3 or 4 times during 2021. There’s no drainage system associated with these roads and the water just runs along, over, and through them.
 - During 2 or 3 of the 2021 storms, the town had to evacuate a campground because the road washed out (private property). The campground has since been sold and now has improved roadways. It’s now called the Quarry Campground.
 - Localized flooding occurs off of Rt 30, Kingsbury Avenue. Town staff suspect the pipe under Rt 30 is undersized for large rain events. A few of the businesses in this action have experienced flooding. The brook is Gages Brook, west of Industrial Park Road East (but this is not the crossing mentioned in the table).
 - The plan update will add actions related to unpaved roads and streams crossing under paved roads.
 - One property on Old Stafford Road, near Slater Street intersection, that had the driveway flood twice – there is a stream that flows under it, going through either 3 or 4 corrugated pipes. The receiving body on the other side of Stafford Road was full, so the water started backing up and flooded the driveway. This might be the property that inspired the action about private bridges five years ago. The town previously communicated with the property owner and told him to retain an engineer; he was reportedly resistant to the idea and added another pipe instead. Attendees determined that this issue could be left alone.
- Tolland is newly on the Repetitive Loss list. The town staff are interested in knowing who to contact to get this information.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Tolland.

- Most of the accidents that occur on 84 occur between exits 66 – 69 in Tolland.
- The elevation of the town means that when other places get rain, Tolland gets snow.

- Geographically-driven impacts on weather events are a potential situation for Tolland.
Add an action reflecting this unique risk.
- Add an action related to tree damage.
- Vulnerable populations are located at Parker Place, Winding River Village, and Old Post Village; these are all elderly housing, and residents could be at risk for extreme heat. All of these have air-conditioning but the facilities might be vulnerable to power outages.
 - Parker Place has a generator but probably not enough to run all the air conditioning.
 - Winding River likely has a generator, but town staff note that there's always a possibility it won't work.

Follow-Up

- The HMP Coordinator will be David Corcoran.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Vernon

Date: 8/16/2023

Time: 10 am

Location: Virtual Via Zoom

Attendees			
Mary Buchanan	CIRCA	Nicole Govert	CIRCA
Dwight Ryniewicz	Vernon Public Works Director	Leslie Campolongo	Vernon Planning Specialist and Zoning Enforcement Office
Dan Wesilewski	Vernon Fire Marshal and Fire Administrator	Mike Purcaro	Vernon Town Administrator and Emergency Risk and Management Director
Shaun Gately	Vernon Director of Land Use and Development		

Overview

CRCOG and CIRCA attended a meeting with Vernon to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Vernon and CRCOG for appropriate filing related to the hazard mitigation plan update.

Mary commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. Mary provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. Mary described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Vernon’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Vernon’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Vernon 2019-2024	Notes	Current Status
2	Develop a scope of work and a request for proposals to study improvements to the Manchester	This area is still very much a concern for the Town. Town staff reported that in recent years there have been multiple 100-year storms	Carry Forward with revisions to

	Flats area, around Route 83 and Welles and Main Streets, to alleviate flooding issues.	(particularly the summer of 2021) which have resulted in flooding in this area. There has been also been a significant amount of private sector development in this area on both sides of the river. There were some losses involved with new property owner in the areas around the bank, including loss of equipment. The work of the private development on both sides of the river has mitigated some of the flooding and risks in the area. On the side of the river where the Golf Land golf course used to be, actions were taken by developers to mitigate flooding. This is redevelopment with an eye on maintaining flood capacity that was there while developing some previously-open space. There are still some stormwater choke points. Repeated storms have resulted in flooding in this area. Vernon Public Works has done what they can to update and maintain stormwater systems but the system gets overwhelmed easily. A lot of land in this area is privately owned, which makes it more complicated to implement flood mitigation strategies. In the recent July 2023 storms this area did not experience much flooding. The town would like to carry this forward.	reflect redevelopment
3	Develop a scope of work and a request for proposals to study improvements to Frederick Road to alleviate flooding issues.	Town staff said they were unaware of flooding on Frederick Rd and this is not one of their priority flooding areas. The Frederick Rd does back up to the Tankerhoosen River and causes some localized flooding. Town staff would like to revise this action to focus on their priority areas for flooding, which include: <ul style="list-style-type: none"> - East St from the Northeast School to the cemetery - Overbrook Road - Windsorville Road (includes regional water treatment facility and regional animal control facility) - West Street 	Carry Forward with Revisions to reflect the other priority areas.
8	Review water level monitoring systems that can provide real-time data and alerts to inform critical decision making to identify those appropriate for the Town. Explore grant funding options.	Town staff said there has been some discussion of having an alert system in place, specifically, flow monitoring or water level monitoring. Replacing culverts and stormwater infrastructure and sewers became more of a priority for the Town, so this action has not yet been achieved. Town is still interested. Town staff suggested that perhaps CRCOG could take the lead on this project for multiple towns in the region, and Vernon could be a pilot area.	Carry Forward with revisions to note that this might be better suited as a regional project with CRCOG as the leader

4	Complete upgrades to the generators at the Town Hall Annex and Parks & Recreation Facility	<p>The town has made progress on generators, including installing a new generator at the Parks & Rec Facility and the Fox Hill Radio Tower. This tower provides regional emergency communications for fire and EMS, and is a critical asset for the region. There are also up-to-date generators at other locations: senior center, middle school. Generators meet operational and planning needs for the shelter and the other buildings.</p> <p>Town staff said the town is currently looking to upgrade the generator at the Police Department and the generators at the fire stations, which all date back to 70s and 80s. Town is seeking grants for these upgrades. The new police accountability law that was passed requires police departments to be accredited, which includes building requirements.</p>	Revise to Fire Department and Police Departments.
13	Pursue grants to purchase portable generators and modify buildings for hook-up.	Town staff said they have enough portable generators. The current needs are being met with what they have.	Complete/Remove
9	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	<p>Town staff has gone above and beyond the wording of this action and has done more than mailing letters. Town regularly proactively sends Public Works out to floodprone properties, and the town gives out sandbags free of charge at Public Works. In some cases when the Town knows there is a higher risk for flooding, the town will drop off pallets of sandbags for property owners.</p> <p>Town staff also report that the Town is taking steps to address the causes of some of the flooding experienced in RL area. On Overbrook Road, the town is doing internal engineering to redirect some of the flow that is causing some of the back-up along the storm water management system. Town staff also express a regional concern, as water from neighboring towns is reportedly flowing into the waterways in Vernon and contributing to the burden on the waterways/systems. For example, town staff report that increased development in South Windsor and Ellington has increased flooding in the Skinner Rd area and Hockanum Boulevard.</p> <p>This action will be carried forward according to FEMA requirements since Vernon has RLP. A new action will be added to capture the regional water flow concern.</p>	Carry Forward but add another action for the regional action to address the flooding

12	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Town staff said this has not been completed.	Carry Forward
6	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said they still need help with MS4 and would like to keep this action.	Carry Forward
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff said they maintain hazardous materials as required. The town staff believe they mitigated most of this and started a program to inspect businesses which has given them a handle on the quantities and types of materials that are stored. This is a capability.	Capability/Remove
7	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff said they participate in training regularly. This is a capability.	Capability/Remove
10	Evaluate the costs and benefits of joining the FEMA Community Rating System.	Town staff said this is still on their to-do list.	Carry Forward
11	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Town staff reported that they are aware of their historical resources along flood zones and are comfortable retiring this action.	Complete/Retire
1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Town staff said this has been a priority and a significant accomplishment, and Vernon's success has reportedly motivated neighboring towns to do the same. The town has been Silver Certified since 2019 and was recertified in 2022. The town is continuing to push forward.	Complete/Retire

Critical Facilities

- Vernon Center Middle School – Primary and regional shelter
 - Rockville High School – Back up shelter
 - New Senior Center on Bolton Rd– Tertiary shelter, but not advertised
- Rockville Public Library has become town-owned in the last five years. This library can serve as a cooling center, but does not have a generator. Add an action to acquire a generator for the library.
- Senior Center on Bolton Rd – Cooling center, has a generator.
- Upgrade to the Fox Hill Radio Tower – significant upgrade but same location. This tower provides regional emergency communications for fire and EMS. This was a significant upgrade in critical infrastructure.

Development and Redevelopment

- There has been a significant amount of development and re-development in Vernon in the last five years.
- The main economic corridor is the Route 83 / Welles Road / Main Street area referenced in Action #2 of the table above. There has been a significant amount of private development in this area. Apartments and commercial development (from the 200 block to the 800 block on Route 83). Some open space has been acquired and developed but this development has included steps for flood mitigation, including the grading of the parcels to allow water flow back to the river.

Recent Events

- Isaias – tropical storm of 2020 – the town’s experience during this storm reinforced the need to be proactive about public engagement and hazard mitigation management. The town experienced wind damage and outages, with the biggest challenge being coordination with Eversource and getting utility workers to have boots on the ground in the places where they were most immediately needed. Town was out of power for a few days (3-4 on the East St section with utility poles down and failing transformers). There was not significant flooding during this storm but a lot of infrastructure damage and trees down.
- Droughts of 2020-2022 – there are residents on private wells, but town staff are not aware of any concerns reported related to droughts. The Town has identified a drought coordinator who communicates with the state.
- Summer Storms of 2021 – the Town got hit very hard by these storms, and these experiences have shaped the Town’s current list of priority areas for flood vulnerability.
 - East St from the Northeast School to the cemetery
 - Overbrook Road – mostly stormwater concerns
 - Windsorville Road (includes regional water pollution control facility and regional animal control facility)
 - Water sometimes overtops this road, in addition to the concern for the regional facilities.
 - The WPCF is currently undergoing a 90-million-dollar update.
 - The concern here is mostly stormwater flooding.
 - West Street
 - Skinner Rd area and Hockanum Bld – see action 9 above
 - Route 83 and Welles and Main Streets – see action 2 above.
 - During the storms of 2021, the ground was saturated from the earlier storms and couldn’t take on any more water, so when the later storms hit there was a significant amount of stormwater runoff.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

Mary facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Vernon.

- The local weather service has been a tremendous asset. Vernon is one of the few municipalities that has invested in Hyper Local Weather Forecasting. This has helped the town to alert the public (tornado warning to flooding), prepare for storms, and schedule town events. This should be reflected in the Capability section of the town annex.
- Mary asked about heat concerns: The town has the cooling centers but there has not been much demand for them so far. The town has some expanded capabilities leftover from the COVID pandemic but hasn't had to deploy them for heat.
- Town has a significant elderly population and does have some people living in hotels which are ongoing/unique challenges for the town.
- The town also has a significant special needs population and many people living in apartments.
- There are many daycares that serve Vernon and neighboring towns as well (2 large daycares have been opened in the past 5 years, with a 3rd likely opening in the future).
- Cluster of critical facilities in downtown Vernon: Hospital, court system, board of education are all within one block of each other which could pose potential risks, although flooding has not so far been a major concern for these facilities.
- Sewer infrastructure capability of the downtown area: These are aged system. The town did an extensive lining program on the sewer mains in the Rockville Section, in which they cleaned out the pipes and installed a liner in the pipes. The project has been a great success and the town plans on expanding this effort to additional areas of the sewer system.

Follow-Up

- The HMP Coordinator will be Mike Purcaro

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting West Hartford

Date: June 16th, 2023

Time: 10:00 am

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Bob Hilborn	West Hartford Emergency Management
Duane Martin	West Hartford Director of Community Development	Michael Perruccio	West Hartford Emergency Management
Bob McCue	West Hartford Emergency Management		

Overview

CRCOG and CIRCA attended a meeting with West Hartford to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to West Hartford and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed West Hartford’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about West Hartford’s needs related to climate change and natural hazards.

** We verified on the Sustainable CT website that West Hartford is Silver Certified as of 2021 and also holds the Climate Leader Designation

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for West Hartford 2019-2024	Notes	Current Status
10	Define a set of actions to be taken by the Town to increase its Community Rating System rating by at least one tier.	The town is now a class-7 rating. This may have been completed. Todd can provide more information.	Complete/Retire
26	Perform a Repetitive Loss Area Analysis (RLAA).	Town staff isn't sure about this one, will need to check with Todd. Check back.	Check back
23	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Check with Todd	Check back
20	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Check with Todd	Check back
9	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Check with Todd	Check back / likely Retire
25	Send property owners along streams a mailer with information about ordinances against, and dangers of, dumping and placing obstructions into streams.	Check with Todd	Check back
7	Complete the North Branch Trout Brook flood study.	This study is complete. The town conducted a culvert capacity study as well as a watershed-scale hydrologic study. The town is moving forward with culvert improvement designs.	Complete/Retire
27	Replace undersized and/or degraded culverts on Trout Brook.	CDM Smith is working on designs for three of these culverts. Two are at 60% design, one at Trout Brook and Asylum Avenue and another at the West side of Trout Brook drive, near former UConn campus. The third is at 30% design, at the intersection of Trout Brook at Lawler, up to Lindy Lane. Fourth one is a state culvert (Route 44/Albany Avenue), so nothing more than concept design has been done for this yet. For the two culverts at 60% design, the permitting process will start soon, funding is in place, and construction will hopefully start next year.	Perhaps carry forward with revisions to indicate progress and specify next steps
28	Stabilize unstable streambanks along Trout Brook.	Not yet done. Town staff said they have reached an agreement with DEEP. DEEP is responsible for maintaining the watercourse banks. With regards to the other tributary branches, the town has not done anything.	Carry forward with specific locations identified.

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29	Replace the Fern Street Bridge over Trout Brook to ensure continued operation during future emergency events.	<p>This is in process, with SLR as the consultant to design the bridge. One complication is that they need to replace the water main, which is \$2 million. The total bridge cost is \$5 million. The town has been in contact with CROCOG, DOT, and MDC to continue discussions and look for funding. SLR will do the water main design. At the earliest construction will happen in 2024.</p> <p>In heavy rain events water will actually overtop Fern Road here. Raising the bridge was considered but not implemented because of the houses nearby. They realigned the water course approaching the bridge to reduce scour, but there will still be some flooding during heavy rain events.</p>	Carry forward with revisions to complete this project.
2	Incorporate Low Impact Development requirements into the Subdivision and Zoning Regulations.	In process, but nothing to bring to the Council just yet. Town is actively working on this. This is in POCD and the town would like to get this done.	Carry forward
11	Coordinate with NEMO and CROCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	The town is compliant with MS4, so this is likely not needed.	Complete / Retire
13	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	<p>This should include the two new facilities MDC just constructed, one at New Britain Ave / Hillcrest Ave and the other on Talcott.</p> <p>Pump stations should also be included, although the town staff don't know locations offhand.</p>	Achieve with this plan / Will list the MDC facilities in this new HMCAP.
14	Develop a list of local resources, including non-profits, volunteers, and gas-stations and grocery stores with emergency generators, to distribute to residents prior to forecast hazard events.	This is a moving target, but this generally happens on a case-by-case basis.	Complete/Retire
1	Develop a prioritized list of emergency generator acquisition, upgrade, or maintenance needs.	This is complete. Town Hall, two high schools, and a fire station all need generators. The town has applied for a grant to fund generators. Revise so that this action calls for completing the installation.	Carry forward with revisions
8	Implement needed improvements to the Emergency Operations Center to withstand high wind and other natural and manmade disasters.	The town is doing a study about relocating the EOC to town hall.	Carry Forward with revisions
18	Explore feasibility and cost/benefit balance of developing a microgrid for the Town Hall and Police Department.	Still in process. Check with DPW.	Check back
19	Construct a new fueling facility for municipal vehicles.	Check with DPW.	Check back
6	Determine sheltering supplies needs and increase supplies if needed (cots, water, food, etc.).	Completed. Town entered into an agreement with Red Cross for the high school to be a regional shelter. The town is also part of the response protocol for if there's an issue at Millstone.	Complete / Retire
17	Provide shelter management training to all personnel for position and function.	Completed. CERT team has been established.	Complete / Retire

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3	Establish pet sheltering alternatives.	Completed. CERT team will assist.	Complete / Retire
4	Increase the ability of residents and visitors to safely shelter in place and when necessary, evacuate to safer locations, through education, trainings, and warnings.	Ongoing	Capability / Retire
5	Improve transportation access for residents and visitors to emergency shelters.	This isn't something the town has a ton of control over, but could theoretically use fire station vehicles to move people if needed.	Capability? Retire
15	Provide specific incident action plan development training to positions and functions of EOC representatives.	Ongoing, as new hires continue to come onboard.	Capability/ Retire
16	Provide Incident Command training to all personnel for position and function.	Ongoing, as new hires continue to come onboard.	Capability/ Retire
12	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Duane hasn't taken these, but he indicated that CIRCA could add this to the list of things to ask Todd.	Check back
22	Make progress with the hazard mitigation goals associated with SustainableCT certified actions.	Did not discuss this with town staff but see the footnote below.	Check with town staff.
21	Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting their properties to be more hazard-resilient while maintaining historic character.	Check with Todd.	Check back
24	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Check with Todd.	Check back

Critical Facilities

- During a heat wave the town instructs residents to use the three public libraries, the community centers, and shopping centers (i.e. Westfarms Mall). They have not seen much demand for cooling centers thus far. Of these, the only facility with a generator is Elmwood Community Center, which is a shelter. Libraries do not have generators.
 - By the time this plan is done, the Elmwood Community Center and Faxon Library will be merged into a new community center on Mayflower Street, and the existing Elmwood Community Center building will no longer be used as such.

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- Conard and Hall High Schools – do not have generators, but have generator hook-ups. The town is working on getting generators for these schools as well as the town hall.

Development and Redevelopment

- Part of the former UConn campus is in a FEMA flood zone. The wetland permit application for this project is about to be withdrawn and then re-submitted to reflect a revised plan.
- The new apartment complex at the former convent at the Southwest corner of Park and Prospect is significantly completed but not open. It was under construction during the 2021 storms, which impacted that property and the adjacent stream.
- Flood risks are considered during the review process for new developments.

Recent Events

- Flooding was widespread during some of the 2021 events.
- According to the emergency management team, a consistent significant problem is loss of power during storms and lack of cell service, particularly along Avon Mountain area, and Farmington Avenue near Farmington town line.
 - Carriers usually tell people to switch to wi-fi when they lose cell service, but this does not work when they've also lost power.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in West Hartford.

- The town is probably going to be replacing a lot of trees in the town center, perhaps with implications for heat management.
- An MDC tunnel project is underway related to keeping pollutants out of water courses, maybe a year more to go until operation. MDC might have more to say about this.
- The town is sometimes in contact with MDC about disconnecting some residents from combined water/sewer so that their stormwater flows to the stormwater drainage system instead of combined systems. But this can result in basement flooding.
- Flooding is a concern town wide.
- Anything that affects the power to people's houses is a concern – leads to cascading problems, people calling the town and asking them to bring generators, opening shelters.
- High winds hitting trees, trees taking down wires and poles.
- The town has not yet had to respond to an extreme heat event locally. Parks are well spread out within town, and several splash pads are available. There's a large retail area (Westfarms Mall) with air-conditioning available. They have so far not experienced a heat event during a loss of power.
- Winter storms are a concern. Town staff note that it's easier to cool people off than it is to keep people warm. Staff also note that this might change with climate change.

Follow-Up

- The HMP Coordinator will be Duane Martin. But it sounds like we should also be keeping Emergency Management in the loop (Bob McCue?)

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- DCRF award – CIRCA will be part of the grant for Kane Brook/Kennedy Brook.
- Other grants – generator project (Hazard Mitigation from DEHMS) and EOC project (through State Rep’s office).

Meeting Minutes Addendum

Hazard Mitigation and Climate Adaptation Plan (HMCAP)

Local Planning Meeting

West Hartford

Date: June 16th, 2023

Overview

Todd Dumais (Town Planner) was contacted via email to provide additional information regarding the prior mitigation actions.

#	Mitigation Actions and Strategies for West Hartford 2019-2024	Notes	Current Status
10	Define a set of actions to be taken by the Town to increase its Community Rating System rating by at least one tier.	Complete. Todd was uncertain which CRS activities provided the boost, but he provided the draft verification report associated with the verification date of October 12, 2022. David's opinion is that none of the single line items were responsible. However, the verified credit is only 18 points above the threshold for Class 7. The Town should consider an action to add one more CRS activities such as 520 or 610.	Complete; potentially revise and carry forward
26	Perform a Repetitive Loss Area Analysis (RLAA).	Partially complete. One analysis was completed by the Town's consultant, for two adjoining residential properties. The East Branch Trout Brook culvert replacement will reduce risks in the largest RL area.	Complete; potentially revise and carry forward for others
23	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	To be completed August 2023. Retire action, as it will be complete before the HMCAP is reviewed by FEMA.	Will be complete before 2024/Retire
20	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Conducted annually. This is a capability and can be retired.	Complete/ Capability
9	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Conducted as needed. This is a capability and can be retired.	Complete/ Capability
21	Coordinate with CT SHPO to conduct outreach to historic property owners to educate them on methods of retrofitting	Conducted as annual outreach to all properties in flood zones. This is a capability and can be retired.	Complete/ Capability

their properties to be more hazard-resilient while maintaining historic character.		
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Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Wethersfield

Date: June 28th, 2023

Time: 10:00 am

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Sally Katz	Wethersfield Director of Physical Services
Denise Bradley	Wethersfield Town Planner	Derrick Gregor	Wethersfield Town Engineer
Fred Presley	Wethersfield Town Manager		

Overview

CRCOG and CIRCA attended a meeting with Wethersfield to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Wethersfield and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Wethersfield’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Wethersfield’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Wethersfield 2019-2024	Notes	Current Status
4	Repair washout around the east abutment for Jenson Dam at 45 Highland Street.	Town staff said the Jenson Dam issue was reportedly addressed by the private property owner a few years ago.	Intent of this action is complete / Retire
5	Add a double catch basin at 222 Ridge Road to address road flooding, which overflows and floods downstream homes in Ridge Crest Place (requires CCTV inspection first).	Town staff said this was completed.	Complete / Retire
6	Perform the necessary repairs to the spillway at Wintergreen Woods.	Town staff said this was completed.	Complete / Retire
7	Reconstruct the earthen berm at Spring Street Skate Pond Dam, perform emergency spillway and outlet improvements (compare to Dam Inspection Report).	Town staff said this has not yet been addressed, but the town has gotten state funding to address this. The design still needs to happen. Revise this action to reflect that the design will be happening next.	Carry forward with revisions.
24	Install an underdrain on Olney Road behind eastern curb line to protect road base and alleviate flooding.	Town staff said this has not yet been addressed, and the town received a recent complaint about it so is currently looking into it again. Prior to this most recent complaint there were no issues for several years.	Carry forward
13	Dredge sediment from Griswold Pond to improve the water quality.	Town staff said this has not yet been done. David facilitated a brief discussion about dredging rarely helping to mitigate flooding, but in some cases where lateral removal occurs, a pond will gain some extra flood capacity. Town staff would like to keep this action. David suggested a change to make the action achievable by revising it to "conduct study and prepare plans" for addressing this issue.	Carry forward with revisions.
14	Olsen House Ditch improvements: design and construct a 24" RCP to replace an open rip rap ditch and backfill the area to eliminate the need for guiderail.	Town staff said the Olsen House is 105 Marsh Street, the former television station. This has not been done. Revise action to include the address so that it's easier to remember what this is referring to in the future.	Carry forward with revisions
15	Perform design and permitting for Bell Pond dredging and reconstruction of Bell Pond Dam spillway with miscellaneous improvements to improve water quality and protect downstream properties (Moderate Hazard Class Dam per DEEP).	Town staff said the town does have funding to achieve this. Revise this action to act on the recommendation.	Carry forward with revisions.
16	Complete Culvert Replacements listed in the CIP: Carriage Hill Drive, Coppermill Road, Fox Hill Road, Highland Street, and Lantern Lane.	Town staff said the town got capital funding for design on the Coppermill Road project as well as some funds for construction. The town also hired a consultant to	Carry forward with revisions

		evaluate the listed crossings; Coppermill was identified as a priority during this evaluation. Revise action to reflect this progress and continue demonstrating a need to address the other culverts.	
17	Complete extension of storm drainage (piping & CBs) in Nott St and reconstructing a portion of Heather Dr with new underdrains to address persistent icing problem.	Town staff reported that this is complete. The icing problem no longer seems to be an issue.	Complete / Retire
18	Install 2 CBs and piping at intersection of Timber Trail with Cornish Rd to address issues with flooding homes on Timber Trail.	Town staff said nothing has been done here but there are no longer complaints here.	No Longer Needed/Retire
25	Perform actions listed in the 1995 Town Wide Drainage Study as listed in the CIP: Goff Road Detention Pond Construction, Sunset Boulevard, Surrey Drive Swale, Tanglewood construction.	Town staff reported that the mentioned study remains in effect and a more recent study has not occurred. Sunset Boulevard experienced some flooding during 2021; the town has conducted some engineering studies. Derrick will check on the listed crossings and see what else has been done.	Follow up
1	Identify strategies for making expansion of capacity for public works trucks and equipment storage more achievable.	Town staff said Public Works has a new salt shed that provides appropriate capture of runoff and drainage, and also has a covered storage area for the trucks and has instituted truck-washing practice so trucks have a longer life. Town staff discussed perhaps including the purchase of another property for more storage space and vehicle parking. The possible property in question is in the floodplain. Add an action in general terms for this need.	The action as written is a capability / retire, but add an action to capture the second part of the discussion.
2	Identify strategies for making replacement or enlargement of sand/salt storage facility more achievable. Track damages to sand/salt storage facility so that a BCA can be completed.	See above. The intent of this is complete / the BCA is not needed because no FEMA funding is going to be pursued for this.	Intent is complete / Retire
3	Develop a long-range plan for expansion of the Public Works building capacity and relocation outside of flood zone.	Town staff said relocation is not on the table right now, but the town staff still expresses "we would love it" because the property floods on a regular basis and would not be well-suited to weathering large events. Town staff say that it's possible some state facilities might become available for purchase in the future. Attendees agreed to carry forward this action in case some funding for exploring options becomes available, with some revisions to reflect the discussion.	Carry forward with revisions

11	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	Town staff said that as part of the MS4 program, the town does annual sampling. There is one connection between Wethersfield and Hartford in which there is a water quality concern from the stormwater coming from Hartford. The town has alerted MDC to this issue. CIRCA will ask MDC for the list of MDC facilities.	Carry forward with revisions to reflect the culvert / water quality concern?
19	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	Town staff said this outreach has not happened. Town staff isn't sure whether they have this list, but would be interested in acquiring it.	Carry forward
22	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	See above. Carry forward	Carry forward.
8	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	Town staff are not aware of any work done on this. Town staff estimate there are probably a few dozen businesses for whom this would be relevant. Replace with revision to watch the virtual DEEP training.	Carry forward with revisions.
9	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	Town staff said the town is compliant with MS4.	Complete / Retire
10	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Town staff will attend webinars or meetings from time to time related to this.	Capability / Retire
12	Complete an analysis of costs and benefits of joining the FEMA Community Rating System. If benefits outweigh the costs, perform outreach to gain public and stakeholder support for joining FEMA CRS.	Town staff were uncertain how many property owners have flood insurance in town, although they estimated that there are probably a lot due to the large floodplain area within town. Town staff want to carry this forward.	Carry forward
20	Identify additional space for snow storage and disposal.	Town staff reported the salt shed has been enclosed so less salt washes away. This action was likely related to removing snow from densely developed areas. Town staff report that the intent of this action has been completed, and they have worked with engineering staff to figure this out when needed when intense storms occur.	Intent is complete / Retire

21	Seek Certification within the Sustainable CT program and make progress with the hazard mitigation goals associated with SustainableCT certified actions.	Town staff reported that the town has joined Sustainable CT	Complete / Retire
23	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	David explained that of all the CROG towns, this action was meant to be most beneficial to a community like Wethersfield with a large group of historic and cultural resources. Town staff report that they believe they have a good handle on this challenge, but because historic structures are a large part of Wethersfield identity, they don't want to remove this action. Carry forward with revisions, perhaps to emphasize using new GIS data from SHPO and working with property owners as needed to reduce risks.	Carry forward with revisions.

Critical Facilities

- Community center is primary shelter. Renovated high school is the back-up. (The renovation to the high school did not change the location of the building.)
- Cooling centers would be the above two facilities, and could also include the library if power is not a concern. The library needs a generator. Add an action about this.
 - The town previously received \$750,000 from FEMA to put generators in eight facilities, so the track record is good.
- Of the schools, only the high school has generators. The other schools are not used as shelters or cooling centers, so the generator need is not as urgent as the library.

Development and Redevelopment

- Generally, redevelopment is happening within the commercial corridors along Silas Dean Highway and Berlin Turnpike.
- Some minor house additions have happened in areas near the floodplains. One of these on Elm Street. Not much development in the residential areas.
- The Borden Development (1160 and 1178 Silas Dean Highway) is a mixed-use residential development in the floodplain, and had to include compensatory flood measures. The catch basin here has experienced some flooding.
- Overall, the Town requires analysis with compensatory mitigation for development or redevelopment in FEMA flood zones.

Recent Events

- Isaias – Tree fell on a house, and wind damage to a roof of an apartment building run by the housing authority; downed trees over roads.
- Some flooding experienced during 2021, but no road washouts or substantial impacts to public infrastructure occurred.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Wethersfield.

- In 1995 the town completed a town-wide flood study that identified upwards of 60 projects. This is now believed quite dated. The town has a long list of drainage and flood-improvement projects that need to be funded. Funding is the main obstacle to getting these done. Staff capacity is also a concern.
- Generally, floodplain issues are predictable and have not led to any big issues, apart from the recent major storms.
- Silas Dean and Berlin Turnpike both have hotels/motels that are increasingly utilized by people as regular living arrangements, to the point of schoolchildren coming from these addresses. Police have been responding to these areas more frequently than in the past.
- One comment from town staff about connection work being done in neighboring towns that have impacts. Wethersfield and Glastonbury are working on a connection between them by reworking the exits along 91 which are located in the flood plain.
- Silas Dean Highway overtops during 100-year storms near Mill Street. There is another area that sometimes overtops near Maple Street.
 - The town applied for DCRF to address these areas as well as the Borden complex and Mill Woods park, but did not get selected. David will check with Sarah Watson of DEEP to get a copy of this application to see if we can add any actions related to this.

Follow-Up

- The HMP Coordinator will be Denise Bradley.

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Willington

Date: June 5th, 2023

Time: 10:00 am

Location: In-person at town hall

Attendees			
David Murphy	CIRCA	Troy Sposato	Willington Director of Public Works
Mary Buchanan	CIRCA	Stuart Cobb	Willington Emergency Management Director
Erika Wiecenski	Willington First Selectwoman	Mike D’Amato	Willington Land Use Agent

Overview

CRCOG and CIRCA attended a meeting with Willington to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Willington and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Willington’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Willington’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Willington 2019-2024	Notes	Current Status
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1	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	This is still desired, but hasn't happened yet due to lack of resources and time. First Selectwoman says this action should be kept.	Carry forward.
2	Petition FEMA to conduct a detailed flood study of the Willimantic River near Route 74, where currently it is an unnumbered A zone.	FEMA has reached out to all the towns in the area to review their draft maps/plans – this meeting will be happening on June 20th.	Check back in after the meeting on the 20 th .
3	Encourage ConnDOT to improve drainage culverts and road grading on Route 320 to prevent periodic flooding and icing at the intersection of Hancock Road, at the culvert crossing of Ruby Pond discharge south of the Truck Stop facility just off I-84, at the culvert just south of the Town bus parking area, at the wetland beaver areas north of Cisar Road and north of Eldredge and Pinney Hill Roads, and at the culvert crossing at the north side of the Cosgrove Road intersection.	CIRCA will check with DOT about these projects – from town staff it sounds like some progress has happened but not all. First selectwoman does not think that Hancock Rd project has happened. Town staff reported that DOT does not participate in tabletop exercises for emergency management and does not communicate frequently with the town.	Come back to this one – information is needed from DOT; and consider breaking into separate actions.
4	Install generators at Town Hall and Public Works.	Town Hall does not yet have generator. Waiting on generator for Public Works but this is in progress, using ARPA funds. The three fire houses have generators, and the school (used as shelter) also has a generator. Revise to include additional facilities that need generators (see later discussion in Critical Facilities section).	Carry Forward with Revisions
5	Perform a town-wide drainage study to identify and prioritize locations requiring increased drainage capacity or other drainage-flooding mitigation measures.	This has not yet been done – there is informal knowledge among town staff, but the problems have not been identified using data. The town staff believe this is still a need. David noted that the Town of Coventry requested DCRF funds to conduct this type of analysis, so including this in the plan is appropriate.	Carry forward
6	Improve drainage culverts and install new catch basins and drainage systems along Village Hill Road and Schofield Road to reduce flooding and icing problems.	The town submitted Village Hill Road for TRIP, and were #5 of CRCOG's list – only the top 4 were pushed forward. Schofield Road was reportedly washed out twice in rainstorms, with multiple tons of debris. The drainage in this area is poor. The town has spent a lot of money putting rocks back. This is a work in progress. The Town is working with Beta Group to develop a scope of work to figure out what needs to be done and what funding sources might be suitable. David suggests this might be a HMGP project for next year's round, assuming HMGP is funded soon. These projects have been in capital improvement plans for decades, but haven't moved forward. Funding is always a concern. Split these into two separate actions.	Carry Forward with Revisions
7	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored	The flood management program has been around for decades, since the NFIP was enacted. Most	No Longer Needed/Retire

	and used at their facilities during or following natural hazard events.	places in the town would not be affected by this action, so there is not a need for this.	
8	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	The town is already working on mapping stormwater with Beta Group as its consultant, and is currently waiting for their report. Separate technical assistance is not needed.	Completed/Remove
9	Add a requirement to subdivision regulations that new developments construct underground cisterns for firefighting.	No changes to the regulations have been made. Town staff suggests revising this action to include subdivision requirements for emergency management in general – truck widths on long driveways, emergency vehicle bypass, etc. In neighboring Ashford they have been requiring cisterns. In Bolton there used to be a regulation for businesses to include fire protection, but later revoked this out of concern it was anti-business. After the water supply pipeline was extended from Tolland into Mansfield, a new water main has been extended to Cedar Ridge Apartments but with only a 4-inch pipe so this only covers domestic water and not firefighting supply.	Carry Forward with Revisions
10	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	Stuart plans to attend the flood awareness workshop on June 13, and the Town participates in various drills with DEMHS. Therefore, some level of continuing education is occurring. However, the first selectwoman suggests leaving the action as a reminder to continue this. Town staff says that what prevents the flood-based information from being communicating is that the town doesn't have digital flood mapping. David noted that this was changing and digital mapping will be available very soon. Revise to reflect the data concern.	Carry Forward with Revisions
11	Designate and prepare a debris management area.	Town staff has determined that chipping brush on-site is easier than hauling brush. Public Works mutual aid arrangement has been used in the past to provide grapple trucks / help to haul brush. So the town does have a way to manage debris. The town is also working on getting a permit for the site where they bring debris. Overall, the intent of this action has been met and it is considered complete.	No longer needed/Retire
12	Identify or hire a municipal staff member responsible for regularly updating the Town's website and Facebook page with hazard-relevant information.	The intent of this has been completed through existing staff (the part-time web master) and the First Selectwoman (for social media).	No longer needed/Retire
13	Review the LID Manual developed by the Northwest Hills Council of Governments and determine whether LID can be incorporated locally to increase rural resiliency.	The town has not used this manual. Town staff say they try to toe the line between making too many requests of developers while also being mindful of managing runoff appropriately. Town staff suggests avoiding the reference to a specific manual. The town is applying LID techniques when practical, on a case-by-case basis. There is not a lot of commercial development occurring. The intent of this action has been completed.	No Longer Needed/Remove
14	Develop a GIS application to assist town personnel in the event of an emergency or	The GIS exists, but some of the layers need to be built out. Beta Group will also help with this.	Intent to Complete/Remove

	natural disaster, including mitigation plan maps as layers.		
15	Identify specific properties located in FEMA flood zone; including the identification of losses that occurred in 2005, 1995, and 1938.	EMD reports that there are limited properties, and the flood zones are known. One new area of concern is the Liska Road bridge, as in past storms floodwaters have come up and over the bridge. Liska Road is a one-way dead-end road so there is an access concern. About 20 houses are affected by this. There was a bridge replacement upstream on the Fenton River and another bridge replacement downstream on the Fenton River, but this middle bridge is now undersized. This will be added to the CIP. Town staff note that it is sometimes easier/cheaper to replace a bridge themselves rather than involve FEMA (although the bridge would not be up to federal standards). Revise to reflect the bridge concern and any other emerging challenges identified in this meeting.	Carry Forward with Revisions
16	Add 6 additional dry hydrants near wildfire susceptible areas of State forest and municipal woodlands within the central portion of the Town.	The town has been installing dry hydrants on an ongoing basis for years. Some progress has been made but some additional dry hydrants are still needed. Keep but drop the number	Carry Forward with Revisions
17	Re-publish all Town ordinances and regulations on Selectmen the Town's website, particularly those dealing with hazard mitigation for storms, flood events, and other natural hazards or disasters.	This is under way.	Intent to Complete/ Remove
18	Coordinate with CT SHPO to conduct historic resource surveys to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	This was a top-down action that can be replaced to reflect new SHPO data. David asked if the Town had some historic structures and the attendees noted that some were present.	Carry Forward with Revisions
19	Use "right tree, right place" model to educate municipal staff, contractors, and the public about planting trees.	David explained that this action (in 2019) replaced several previous tree-related actions that were in older editions of the plan. The town reportedly does not plant many trees – Willington is already heavily forested. More removal happens than planting. Eversource and the state DOT have both been doing lots of clearing work along roadways. The tree budget has been increasing every year. The ash borer and gypsy moth have both caused damage.	No Longer Needed/Re move
20	Perform a study of municipal buildings to determine their snow load ratings.	Town staff seem aware of the snow load for flat roof buildings, and believe a study would likely not be used for anything additional.	No Longer Needed/Re move

Critical Facilities

- The library, senior center, and town hall can all be used as cooling centers. None of these have generators. **Add an action about acquiring generators for these facilities.**
- Hall Memorial School is used as a shelter and has a generator, but does not have AC.
- Love's truck stop – 3 Polster Road should be added, given that the other truck stop is already listed as a critical facility.

- Kids Express has closed, this can be removed.

Development and Redevelopment

- There are no new subdivisions going in at the present time.
- The Dollar General on Rt 74 is new since the last HMP.
- Love's truck stop is new since the last HMP.

Recent Events

- 2021 was “a summer of extraordinary rain”. Many areas flooded that had never flooded before. Mason Road had a major washout. Upstream of the same brook was Cowles Road, which also washed out. This brook is an unnamed stream that goes into the Fenton River.
- Tropical Storm Isaias resulted in a substantial amount of debris, and the town had to spend a lot of time and money clearing the roads. Overtime was a significant expense.
 - Power outage also occurred, although not more than a week.
 - FEMA did not provide Public Assistance after Isaias; the process of documenting damage was described as tedious and labor-intensive. For example, FEMA wanted photographic before-and-after evidence of cleanup.
- Relative to droughts, the town has occasionally received requests for the town to fill up a private well with water (which is not an effective solution). There is no town-wide need for a new drought action.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Willington.

- Flooding / crossings / wash-outs are an ongoing concern.
- First Selectwoman says that extreme heat is an issue that can't be ignored.
 - The town does receive some calls/requests for cooling centers, although it is reportedly not a town-wide problem. There has not been a need for providing transportation. The senior center does have an accessible van. There is a verbal agreement with the school bus company but this has never been needed. Most people living in Willington have personal vehicles.
 - One challenge would be accessing people via the roads if transportation is needed after a storm, due to the debris blocking the roads.
- Town staff suggested a new action might be helpful for properties where tree-top debris is left on the ground in flood-prone or fire-prone areas. The primary concern is that tree debris will wash into streams and get caught in culverts and bridges, which leads to overtopping and washouts. The wildfire concern is secondary but also present.
 - The state BMP calls for leaving these in place to help with forest regeneration and wildlife, and because hauling out debris can be more destructive.
 - A number of properties in town do selective harvesting so slash is left on these properties.
 - Willington is one of 11 towns in the state that regulates timber activities on a local level.

- A town-wide forestry management plan is not necessary, as the town can manage properties case-by-case, and also develop management plans as needed (one is already has a plan for Town Ridge property (600 acres) adjacent to the UConn forest).
- **Add an action** saying to review the town's timber regulations to look for potential conflicts with flood concerns – maybe tell property managers not to leave any slash within a certain distance of a watercourse, or something similar.
- DEMHS has asked towns to designate a drought coordinator – for Willington this is Troy.
- EMD says that 2 out of 3 of the moderate-risk dams in Willington (Halls Pond and Wilderness Lake Campground) did engineering plans / emergency action plans (EAPs). The third one (Wasilewski Pond Dam off Rt 74) reportedly does not yet have a plan. An action could be developed to address the completion of EAPs.

Follow-Up

- The HMP Coordinator will remain Stuart Cobb

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Windsor

Date: June 27th, 2023

Time: 1:00 pm

Location: Virtual Via WebEx

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Suzanne Choate	Windsor Town Engineer		

Overview

CRCOG and CIRCA attended a meeting with Windsor to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to Windsor and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Windsor’s prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Windsor’s needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Windsor 2019-2024	Notes	Current Status
17	Perform a flood risk assessment of the Mill, Meadow, and Deckers Brooks watersheds. Consider flood extents from the 1984, 2003, and 2005 events.	The Town Engineer said they are unaware if anything has been done on this. CIRCA suggested that this action was developed by	Will check on

		someone who had been around.	
18	Develop and implement maintenance plan for River Street retaining wall.	The Town Engineer said that there were some roadway projects suggested on River St which did not go forward. She believes this was not done. There was no major project, but town is unsure if maintenance has been added. Suzanne will check in with PW.	Will check on
4	Identify, prioritize and implement local road improvements on an annual basis.	The Town Engineer said there is continuing maintenance on some watercourse that silt up from erodible soils. She is not aware of any road improvement.	Will check on
11	Develop and implement maintenance plan for all identified stormwater facilities.	The Town Engineer said to her knowledge this has not been completed. Maintenance in problem areas is done but she are unsure if maintenance is ensured in all facilities. Town has an unwritten plan but CIRCA will check back and see if it's still needed.	Will check back
10	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	The Town Engineer said that they recently got GIS information on stormwater facilities. Upgrades are in works on a main along the river. There is some work planned by MDC but staff were not sure about what this was exactly.	Complete/Retire
9	Review and revise, as necessary, zoning regulations to ensure developers maintain stormwater retention capacity in compliance with MS4 zoning requirements.	The Town Engineer said they have done this and regulations ensure development is in line with MS4.	Complete/Retire
6	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	The Town Engineer said they are compliant with MS4.	Complete/Retire

14	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	The Town Engineer said this has not been done. CIRCA explained that this action is required if there are RLP.	Carry Forward
16	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	This will be carried forward since Windsor has RLP.	Carry Forward
1	Require "Inspection & Maintenance Agreement" recorded on land records for private developments.	The Town Engineer said they have done this, and town does require this. One of the requirements before development, ENS, INN included in stormwater permit. is to put in place an INN agreement included in stormwater permit stormwater.	Complete/Retire
7	Increase sheltering capacity by identifying additional shelter facilities. Consider looking at new shelter at 330 Windsor Ave.	The Town Engineer said this is a community building but she does not know what it is used for.	Will check on
8	Increase training for hazard response, e.g. National Incident Management System (NIMS). Include fire, police, EOC and schools.	This question is better answered by the EMD	Will check on
12	Identify and develop a secondary emergency operations center.	This question is better answered by the EMD	Will Check on
2	Conduct outreach on ongoing maintenance with respect to flooding, wind, freezing and other hazards. Use town web page for information in addition to social media.	The Town Engineer is unsure of what has been done. Town does have a web and social media presence but would like to check in on.	Will check on
3	Replace the Town's emergency services communications system.	This question is better answered by the EMD	Will check on
15	Complete an analysis of costs and benefits of joining the FEMA Community Rating System.	CIRCA told Windsor about the CRS program. There is only one town in the region that is in FEMA CRS program. CIRCA advised that this might not be a good fit for Windsor. The Town Engineer is okay removing this action.	No Longer Needed/Retire
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from	The Town Engineer said that they don't think Windsor has a lot of	No Longer Needed/Retire

	chemicals stored and used at their facilities during or following natural hazard events.	businesses in the flood plains, and there might be one business	
13	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	The Town Engineer is new to town so she has not had the ability to attend courses but is interested in doing so.	Carry Forward/Check with EMD about this

Critical Facilities

- Will check on this

Development and Redevelopment

- The Town Engineer said there is a lot of development in the Western part of town.
- There have been a lot of warehouses development in town.
 - Mostly the airport, along 91 and in the western part of town.
 - There was a warehouse built on Baker Hollow Rd
- There are apartments being developed in two areas as well.
- Town has had some applications for redevelopment. Specifically, 144 Broad St which was an old strip mall being repurposed for apartments in the middle of town near the train station
- There is some TOD happening in town too. The town does have TOD incentives in Windsor.
- No new structures can be added to 100-year floodplains according to the town ordinance.

Recent Events

- Check on recent storms, flashy droughts,
- Floods of 2021, will need to check
- RLP
 - There are two. The town is interested in getting the locations. None have been added since the last HMP.
- One reported violation with a structure in the floodplain along the CT River. The structure was not pre-FIRM (1970). There was a barn there which was rebuilt.
- A business on the CT River put a shed up and filled to enable this action, which is not allowed.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Windsor.

- The Town Engineer will need to touch base with Emergency management on the vulnerable populations.
- The Town has noticed areas of erodible soils which are more susceptible to more intense storms. These areas have housing. In Windsor, there are some along the Farmington River – steep, sandy slope.
- East Windsor has regulations about what can be built within terrace escarpment along the Scantic River. This approach could be employed in Windsor.

Follow-Up

- The HMP Coordinator will be Suzanne Choate or maybe Peter Garvis

Meeting Minutes – Hazard Mitigation and Climate Adaptation Plan (HMCAP) Local Planning Meeting Windsor Locks

Date: May 22nd, 2023

Time: 10 am

Location: In-person at town hall

Attendees			
David Murphy	CIRCA	Nicole Govert	CIRCA
Mary Buchanan	CIRCA	Paul Harrington	Windsor Locks First Selectman
Jen Valentino Rodriguez	Windsor Locks Director of Planning and Development	Phil Sissick	Windsor Locks Director of Public Works
Chief Gary Ruggiero	Windsor Locks Fire Chief		

Overview

CRCOG and CIRCA attended a meeting with Windsor Locks to begin the update of the multi-jurisdiction hazard mitigation plan, describe the expansion of *Resilient Connecticut* into the CRCOG planning region, and explain how the hazard mitigation plan update will become a Hazard Mitigation and Climate Adaptation Plan (HMCAP). CIRCA will be responsible for the expansion of *Resilient Connecticut*, for the development of the HMCAP, and for ensuring that FEMA approves the hazard mitigation elements of the plan. These meeting notes will be provided to the Windsor Locks and CRCOG for appropriate filing related to the hazard mitigation plan update.

David commenced the meeting by providing an overview of the suggested combined planning process and introducing the idea of a climate adaptation plan. David provided an overview of the *Resilient Connecticut* project and *Resilient Connecticut 2.0* future plans. David described the structure of a combined climate adaptation and hazard mitigation plan and the standard six hazard mitigation strategy categories of that might be incorporated into adaptation and resilience actions.

During the discussion, the local planning team reviewed Windsor Locks’ prior hazard mitigation actions (dating from 2019) and attendees followed an open discussion about Windsor Locks’ needs related to climate change and natural hazards.

Review of Previous Hazard Mitigation Plan Actions

#	Mitigation Actions and Strategies for Windsor Locks 2019-2024	Notes	Current Status
1	Maintain trash rack at Chestnut and Main Streets.	There was some uncertainty about what trash rack this is – but it seems to be fully on private property nearby an enclosed stream. This action can be removed, but we may want a different action related to the stream where it crosses Center Street (this stream washed this road out during the October 2005 or April 2007 flooding, although there has been work done since).	No Longer Needed/Retire
2	Enter the Sustainable CT program through Registration and review actions that can be undertaken to pursue Certification. Make progress with the actions related to hazard mitigation.	Windsor Locks is now Bronze Certified with Sustainable CT. This action is complete and can be removed.	Complete/Retire
3	Address plumbing issues at Waterworks Property, particularly exposed and eroded pipe.	Town staff are uncertain what this specific action is referring to. However, this property is an abandoned Connecticut Water Company wellfield that the town now owns as open space. The town has no intention of doing anything here, and actions are limited by the deed restriction. This action can be removed.	No Longer Needed/Retire
4	Develop designs and a cost-estimate for elevation of the fueling tank at the 1 Stanton Road DPW site; tank is currently underground and at-risk of being impacted by flooding.	The tank is still underground. It was replaced in-kind underground within the last ten years, and probably has a 40-year lifespan now. The tank is just on the edge of the FEMA flood zone; Stanton Road is in the flood zone. Phil says keep this action in case there is a grant opportunity for this.	Carry Forward
5	Conduct outreach to local small businesses with the aim of preventing the accidental release and pollution from chemicals stored and used at their facilities during or following natural hazard events.	The town did an email distribution to local businesses with DEEP resources. This is complete.	Complete/Retire
6	Coordinate with NEMO and CRCOG to share resources and gain technical support for hazard mitigation actions involving stormwater management and public outreach, which have parallel benefits related to MS4 stormwater permit compliance.	NEMO and a team of students provided limited services about two years ago and offered some alternative ideas. There are not many MS4 actions available for Windsor Locks because the town is 95% developed and almost entirely urbanized. This action is considered complete and can be removed.	Intention is Complete/Retire
7	Review land use regulations (other than the recently updated flood regulations) to determine their effectiveness at minimizing natural hazard exposure, and amend as necessary.	There haven't been changes in the last five years. There is an amendment under public hearing now for private streets. The town did discuss whether to increase the review areas for wetlands, but the Wetland Commission decided not to move forward with this. The review has been completed, so this action can be removed.	Complete/Retire
8	Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.	This is ongoing and can be removed because it represents a capability.	Complete/Retire

9	Work with MDC to identify potential hazard mitigation actions for MDC facilities, and list those actions in the next HMP Update.	Windsor Locks is served by The Connecticut Water Company. Part of the airport sanitary sewage to MDC, but the town is not an MDC town. This can be removed, as its inclusion in 2019 may have been a mistake.	No Longer Needed/Retire
10	Develop a list of local resources, including non-profits, volunteers, and gas-stations and grocery stores with emergency generators, to distribute to residents prior to forecast hazard events.	The town has an emergency management director and a CERT team, so this is a capability and can be removed.	Complete/Retire
11	Add generator to South Elementary and add natural gas to Public Safety Complex.	The Public Safety Complex generator runs on diesel rather than natural gas, and South Elementary still does not have a generator. Keep this action with both parts of this sentence.	Carry Forward
12	Conduct annual outreach campaign to educate residents on signing up for emergency alerts, building and maintaining disaster plans and kits, and improving their disaster readiness.	This is handled by CERT. The town is considering getting their own subscription to Everbridge instead of using the state version. Reword this action to include this Everbridge goal.	Carry Forward with Revisions
13	Identify emergency response needs and possible solutions with regards to space, generators, and equipment. Consider ADA compliance, equipment storage, and availability of portable generators.	The intent of this action was met (identifying needs); Reword this to be more direct. Town Hall or senior center can be used as cooling centers. The high school can be used for warming and is also the emergency shelter. DEMHS Region 4 did a study on fuel availability in each town and the feasibility of getting generators to gas stations. The town does not have any portable generators. David explained that FEMA will not fund portable generators, but will fund fixed-in-place generators. Construction will be starting for a new police department and a new senior center in the fall – design is still in progress, and town staff are uncertain whether generators are included in the design. The new senior center will definitely need a generator, as it will be the new cooling center.	Carry Forward with Revisions
14	Address drainage issues on Papermill Brook at Center Street/ Whitton Street.	This has not been done, and attendees would like to keep this action. There are two separate locations on Center Street.	Carry Forward
15	Address drainage issues on Kettle Brook at Middle School on Center Street in conjunction with homeowner.	This is the area that will be addressed by the NRCS program. Keep the action just in case.	Carry Forward
16	Address drainage issues on Industrial Road.	There is a stream here (possibly Little Brook) but this is more of a drainage issue. The building and parking lot have flooded multiple times. Create a watershed action to potentially group some of these streams into one action.	Carry Forward with Revision
17	Address drainage issues at West and Spring Streets.	This is a storm drain issue. Keep this action. Create a watershed action to potentially group some of these streams into one action.	Carry Forward with Revision
18	Address drainage issues in the Smally Road area.	This is a storm drain issue. Keep this action. Create a watershed action to	Carry Forward with Revision

		potentially group some of these streams into one action.	
19	Address drainage issues on Bristol Rd.	This hasn't flooded recently but has previously been an issue. This is a storm drain issue. Keep this action. Create a watershed action to potentially group some of these streams into one action.	Carry Forward with Revision
20	Address drainage issues at Dibble Hollow & Bel Air Circle.	This is backyard flooding, and has involved loss of property (lawns / pools). Keep this action. Create a watershed action to potentially group some of these streams into one action.	Carry Forward with Revisions
21	Address drainage issues at Gaylord and Lowndes Drive	During the October 2005 storm there was 3-4 feet of water in the backyards of this area. Keep this action. Create a watershed action to potentially group some of these streams into one action.	Carry Forward with Revision
22	Contact the owners of Repetitive Loss Properties and nearby properties at risk to inquire about mitigation undertaken and suggest options for mitigating flooding in those areas. This should be accomplished with a letter directly mailed to each property owner.	There is a house on Center Street that has had water in their basement every time it floods. But the town staff is not aware of any recent flood insurance claims. CRCOG will request the list from FEMA.	Likely No Longer Needed/Retire
23	Work with school systems to conduct outreach using Everbridge and Parent Link.	See earlier action related to Everbridge.	Carry Forward with Revisions
24	Coordinate with CT SHPO to conduct historic resource surveys, focusing on areas within natural hazard risk zones (such as flood or wildfire hazard zones and areas near steep slopes), to support identification of vulnerable historic properties and preparation of resiliency plans across the state. This action leverages existing resources and best practices for protection of historic and cultural resources through an ongoing statewide initiative by CT SHPO.	Revise. SHPO has since mapped the locations of historic structures across the state. Revise this action to something along the lines of "Request and obtain GIS layer of historic resources from SHPO and review to identify historic resources at risk."	Carry Forward with Revisions
25	Conduct natural hazard education outreach at least once annually using social media, occasional mailings, and town events.	Keep this – the goal is to update the website.	Carry Forward

Critical Facilities

- Many of the critical facilities were discussed during the discussion of the above table of actions.
- Town Hall can also be used as a cooling center and is also the site of the food pantry.
- Connecticut Fire Academy is also located within Windsor Locks.
- New police department and new senior center - cooling center
- International airport

Development and Redevelopment

- CT Rail and Amtrak both run commuter trains through Windsor Locks (between Springfield and New Haven). Freight trains also come through.

- In the process of adding a second rail line of high-speed rail. There used to be a second rail line close to the canal line, which they removed.
- A new transportation center is being developed as well, moving the location back to the downtown where it originally was.
- The whole area along the river is a TIF district, economic incentive.
- There is a Main Street Study and Plan.
- There is a TOD study and plan.
- A developer has submitted a concept plan and MOU for 80-100 units with first floor retail on Main Street.
 - This might involve a stream daylighting – there is a huge stream conveyance under this area. However, daylighting this stream would involve losing development space.

Recent Events

- In 2021, “we flooded everywhere.”
 - Nine inches of rain in one of the summer events (potentially Ida). Two pump station failures – South Center. This required 24/7 work to keep the pump stations work, and the town probably spent \$50,000 just in overtime. Some upgrades have happened since.

Unique Challenges and Intersections of Assets with Flood or Heat Vulnerabilities

David facilitated a discussion to identify new hazard mitigation and climate adaptation actions, including actions that could address extreme heat and other unique challenges in Windsor Locks.

- Flooding is the biggest concern.
- Significant lengths of infrastructure under roads are aged and in need of replacement.
 - David explained that FEMA won’t pay for projects that they consider deferred maintenance, but stream daylighting or upsizing culverts might be funded.
- Attendees noted that “This is not a planned community” – lots of development happened in pieces. The town also did not have wetland regulations in place when some of this development occurred, so some development happened right up to the edge of streams.
- Recent stream study by Fuss & O’Neill. Town is in a related NRCS program to explore alternatives, although Jen didn’t know the exact program name. The NRCS project will be focusing on Kettle Brook.
 - Jen will send us a summary document about the NRCS study.
- Center Street has multiple stream crossings – Papermill Brook, Kettle Brook, and Merrigan Brook.
- Reed Ave and Sadler Street have a consistent flooding concern.
- The watershed with Waterworks Brook and Dibble Hollow Brook have flooding concerns that impact multiple streets, including Gaylord / Lowndes / Dibble Hollow. Perhaps rework actions to include watersheds rather than street-by-street locations.
- A power outage during summer would be a risk to elderly population, due to the extreme heat risk.

- Chief Gary Ruggiero noted that Windsor Locks is “9 square miles with 1600 hotel rooms, and none of these hotels have generators.”
 - Many people are living in hotels – vulnerable populations, substance use challenges, etc.
- In the event of an emergency, the airport is supposed to take care of passengers, etc. without calling on the town. But the hotels don’t have their own power.
- Some discussion of the apartment building right along the river that was redeveloped and made flood-compliant – when the building closest to the bridge was redeveloped, the bottom floor was made a garage to allow for flooding. However, town staff still have concerns about the parking, and worry that a large river flood would still overtop the canal.
- There is a lot of regional infrastructure/facilities in this relatively small area centered on Windsor Locks – the international airport, a few military facilities, a million-square foot food distribution center, Amazon facility, two major pipelines (one of which fuels the aviation fuel needs of the airport), two prisons. Not all of these are within Windsor Locks boundaries, but all are close by.
 - “If something crazy went down, people would be calling on Windsor Locks to help.”
- Windsor Locks has been damaged by two tornadoes.

Follow-Up

- The HMP Coordinator will be Jen Valentino.