Present: David Murphy (CIRCA), Mary Buchanan (CIRCA), Margot Burns (RiverCOG), John Guszkowski (Consultant Providing Zoning Services), Carey Duques (Essex Land Use Official), Lisa Fasulo (Essex Director of Health and Director of Emergency Management)

Overview: CIRCA met with the Town of Essex and RiverCOG to describe the expansion of Resilient Connecticut into the RiverCOG planning region and provide a forum to the local hazard mitigation plan team to comment on the status of actions in the Essex annex of the Hazard Mitigation Plan adopted in 2021. These meeting notes will be provided to the Town and RiverCOG for appropriate filing related to the Hazard Mitigation Plan.

David commenced the meeting by providing an overview of the Resilient CT project and Resilient CT 2.0 future plans. During the discussion, the local planning team reviewed the Town's hazard mitigation actions, and attendees had an open discussion about the Town's needs related to climate change and natural hazards.

Review of HMP Actions:

Activity #	Goal/Objective	Activity Description	Status Reported by Location Planning Team
1	2-1	Create a secondary, emergency access route from Route 9 to the Cedar Grove Terrace, Cedar Grove Extension, and Hunters Trail neighborhood.	The secondary access route has not been created. The planned extension of the Hunters Trail neighborhood (which would have added more houses with limited egress) did not happen and its approval (issued circa 2019) has since expired; this extension might have facilitated construction of the secondary access via Bokum Road. Therefore, the existing neighborhood still has only one access point. This area is entirely residential and has no critical facilities. CIRCA will add an access ZSR to the Resilient Connecticut 2.0 map viewer to capture this risk.

Activity #	Goal/Objective	Activity Description	Status Reported by Location Planning Team
2	2-1	Create a secondary, emergency access route to Woodland Drive	The secondary access route has not been created. A potential pedestrian path was considered to reach the school, and this could have led to a secondary access on the school side of the neighborhood. The land is very steep here. CIRCA will add an access ZSR to the Resilient Connecticut 2.0 map viewer to capture this risk.
3	2-1	Collaborate with residents of Architect Hill to identify an acceptable method of improving the neighborhood's supply of firefighting water (such as installation of underground water tanks). Implement the identified solution.	No progress on the Architect Hill concern. More broadly, there have been no water main extensions since the HMP plan was written. The water main between Centerbrook and Ivoryton is being replaced, but not extended.
4	1-1	Develop a technical assistance and incentive program to help Essex residents with private drinking water wells improve the quality and reliability of those wells, especially under drought conditions.	No progress.
5	1-1	Develop a plan for improving the emergency sheltering capabilities of Essex. Factors to consider include capacity, access, and pet sheltering. Plan may include establishing a backup emergency shelter located within Essex, which can support residents if the John Winthrop Middle School Regional Shelter in Deep River is inaccessible. Possible options for local sheltering include the Town Hall, Public Library, or Essex Elementary School	An official plan has not been developed, but the town hall can serve as a temporary shelter if the official shelter (John Winthrop Middle School in Deep River) is inaccessible. The town hall has a generator, a shower, and communications technology. This provides temporary sheltering capacity but the town hall would not be intended as a longer-term shelter. The Town Hall can, however, be used as a cooling site. John Winthrop was activated as a shelter during one of the storms in 2021, and was used to provide grab-and-go meals, charging stations, and water. There was not a need for shelter during the 2020 and 2021 storms because no dwellings were impacted and residents could shelter at home.

Activity #	Goal/Objective	Activity Description	Status Reported by Location Planning Team
6	2-1	Perform an assessment and alternatives analysis of the (Old) Deep River Road, River Road, Dennison Road, and Pond Meadow Road bridges over the Falls River to determine what work needs to be done to mitigate the risk of flooding or washout at those sites and maintain traffic flow for access and egress during and following disasters.	This is an ongoing discussion. The town is moving forward on replacing the bridge on River Road. The bridge on Old Deep River Road is likely the next one to be replaced and the town is pursuing state programs to support this. Most of the planned replacements would likely be in-kind and would not increase the size of the bridge. The Pond Meadow Bridge would likely be increased in size when replaced because the existing bridge was itself a repair and intended to be temporary.
7	2-1	Acquire a portable generator to be stationed at the Essex Public Works Facility.	Status unknown; follow-up with Public Works Director Ryan Welch.
8	2-1	Increase the amount of emergency fuel available in Essex by either increasing long-term storage or arranging for emergency supplies to be placed on standby prior to forecast storms.	Status unknown; follow-up with Public Works Director Ryan Welch. None of the five gas stations in town (all private entities) have generators. Lisa noted that some Town officials would like the gas stations to have some standby power capacity so they could be used during outages.
9	3-1	Conduct a coastal risk and vulnerability analysis or study to identify potential impacts of shoreline change (and the effects of sea level rise on those dynamics) along the tidal Connecticut River in Essex	No new analysis has been conducted, but the town has reviewed the existing resources on sea level rise. The Ferry Street area experiences consistent but temporary flooding as noted in CIRCA's memo prepared for the Town several months ago. This is reportedly most significant during storm events and during very high tides, but recovery after a storm or high tide does not take long. There are bulkheads protecting some of the water-dependent facilities along the river such as marinas and boat yards. There is some concern about septic systems close to the river. One property in the Ferry Street area recently required a septic repair. Expansion of riverside facilities is limited by septic capacity.

Activity #	Goal/Objective	Activity Description	Status Reported by Location Planning Team
10	2-1	Perform drainage improvements on roads known to become icy due to water seepage during the winter season	Status unknown; follow-up with Public Works Director Ryan Welch. There are a few isolated streets in town with groundwater drainage issues that then result in water on the roadways.
11	1-1	Work with private owners of Class B and C dams to complete Emergency Action Plans for their dams. Ensure that EAPs are on file with pertinent town departments.	The town engineer has confirmed that the Bushy Hill dam is believed well-constructed and compliant with the dam maintenance requirements. There are other smaller dams at the end of Dennison and on North Winds; these landowners are believed in compliance with the inspection schedule. David asked if EAPs are on file for the Class B and C dams, and follow-up is needed to check on this.
12	1-1	Incorporate hazard mitigation standards and considerations into the ongoing overhaul of the Town's Zoning Regulations.	No progress has been necessary here. There have been no related changes in the zoning regulations.
13	3-1	Conduct a direct outreach campaign to owners of Repetitive Loss and Severe Repetitive Loss properties informing them of mitigation options including elevation, relocation, and acquisition. Include information about funding and technical assistance from municipal, state, and federal sources.	No progress here. There are only a few RL properties.
14	3-1	Complete creation of back-ups of existing electronic records, including geographic information system (GIS) data, and establish a protocol or process for continual data back-up. Digitize all paper records as back up for their preservation.	This is underway.

Activity #	Goal/Objective	Activity Description	Status Reported by Location Planning Team
15	3-1	Develop a written annual schedule for natural hazard public education and outreach efforts through the Town website, social media outlets, mailers, in-person outlets, neighborhood associations, and other media, to ensure consistent and long-term public education programs. Education should include information on sheltering locations, private property owner mitigation action options, techniques for homeowner self-inspection, hazard insurance, and geographic distributions of natural hazard risk zones in Town.	No progress here.
16	1-1	Develop an emergency plan for private boat owners to relocate and store boats during flood and hurricane events.	The town is currently drafting a revision to the harbor management plan, and there is some language in this about planning for coordination and cooperation during natural hazard events. One of the action items in the upcoming harbor management plan is to strengthen this capacity. Therefore, progress is likely.
17	2-1	Implement mapping and monitoring of catch basins, storm water outfalls and related infrastructure.	There is a consultant working on this in collaboration with the Town. The catch basins are completely mapped, but outfalls are not yet mapped. A third of the town's catch basins are cleared each year; the areas of town that have frequent sediment in the catch basins are maintained more frequently. All the activities are recorded. This action is mostly complete.

Open Discussion:

- David asked if the commercial/industrial park has experienced any flooding or other unique climate-driven challenges. The Town responded that there have been no reported flooding issues related to the industrial park. John noted that "9 Town Transit" is located in this industrial park, and David noted that this facility would be considered a critical or essential facility as Resilient Connecticut 2.0 progresses. Margot explained that 9 Town Transit is merging with Middletown Area Transit later this year.
- The town submitted a NFWF ECRF application for the Thatchbed Island project in February 2022 and plans to submit an application under the standard NFWF coastal resilience application cycle

- in May 2022. The goal of this project is to restore the eroded portions of the island, bring in Envirotubes filled with dredge from Essex Harbor, create a living shoreline, and replant vegetation. This would serve the dual purpose of restoring the island while creating a deposition place for local dredge.
- David asked attendees to comment on the greatest flood and heat-related needs. The Town noted that Ferry Street is the most obvious site for a flooding-related project.
- The bridges mentioned in HMP item #6 are aging and likely increasingly vulnerable; slow progress is happening on replacement.
 - Old Deep River Bridge is on the priority list for bridge replacements. There is a possibility this will be funded through a public improvement bond in the next few years.
- The area where Route 154, Route 153, the Falls River, the Mud River, and Rt 9 all converge has a possibility of representing a unique choke point near the ramp of 9.
 - Abundant Phragmites and other overgrown vegetation are reportedly a challenge in wetlands of this region, leading to poor water quality.
 - The Witch Hazel facility in this area has experienced some flooding due to backed-up drainage.
 - There is a proposal in front of the wetlands commission right now to clear out some of the overgrown vegetation and Phragmites in this area.
 - Margot noted that this area could ideally serve as a key wildlife corridor linking the Preserve (in Old Saybrook) to the Connecticut river.
 - Overall, this "choke point" situation at the bend in Route 9 could be given further attention.
- There are many historic structures in Essex (at least 50 years old and contributing to the historic context of the town, including the housing from prior mill and piano factory workers). The town is preparing nominations for historic district status of Essex village center. The Ivoryton historic district was officially listed in about 2015.

Follow-up:

- Please take a look at the map viewer for the Zones of Shared Risk and offer any corrections/additions. Link here:
 https://experience.arcgis.com/experience/9a4f68dd99f44dc58b93fd85bcfe1255/
- (Note: the Editor tool within the viewer does not always save reliably, so please email mary.buchanan@uconn.edu with any changes you'd like to see reflected in the Essex ZSR layer.)