East Hampton Resilient Connecticut 2.0

4-28-22

Held over Zoom

Present: David Murphy (CIRCA), Mary Buchanan (CIRCA), Margot Burns (RiverCOG), Jeremy DeCarli (East Hampton Planning & Zoning), Dennis Woessner (East Hampton Chief of Police), Russ Melmed (Chatham Health District)

Overview: CIRCA met with the Town of East Hampton, the Chatham Health District (which serves East Hampton), 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 East Hampton 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, attendees had an open discussion about the Town's needs related to climate change and natural hazards and reviewed some of the Town's hazard mitigation actions.

Initial discussion:

- While viewing Zones of Shared Risk, David noted that the new typology for sewer systems draining to a common point might be a useful tool in East Hampton. David asked whether any pump stations or trunk lines for the sewer system are within flood zones, areas at risk of erosion, or otherwise at risk.
    - None of the pump stations are in flood zones but some are very close to the shore of Lake Pocotopaug. The lake is dam-controlled so there is less of a flood risk.
    - There is also a pump station located near American Distilling where Pocotopaug Creek crosses Rt 66. This stream is also somewhat dam-controlled.
    - The intersection of Young St and Middletown Ave is on the edge of a wetland system, but is at a fairly high elevation.
    - The sewer line near the lake crosses under Hales Brook at Lake Drive and could be at risk of washouts.
    - Jeremy will confer with the Water Pollution Control Authority to confirm, but it doesn't seem as though the sewer infrastructure is particularly at-risk from flooding.

Review of HMP Actions:

Activity #	Goal/Obj	Activity Description	Status Reported by Local Planning Team
1	1-1	Acquire additional equipment to clear roads of downed trees, disabled vehicles, or unforeseen obstacles i.e. chain saws, lifting gear (chains & winches), bulldozer, chipper, wheeled excavator with grapple.	The town has acquired some additional equipment in recent years; for details, it would be best to consult Matt at Public Works, who could not be present at this meeting.
2	2-1	Bridge on White Birch Road is vulnerable to damage from flood events from Fawn Mill Brook and Loos Pond. Replace with new larger bridge.	The bridge replacement has not happened. This is related to a larger concern: the larger and more frequent storms have revealed that much of the infrastructure is not sufficient for the increased stream flow volumes.
3	2-1	Replace culvert on Collie Brook Road with a larger culvert	This has not happened yet.
4	2-1	Undersized culvert on Hale Brook at Lake Drive results in roadway flooding. Replace with larger culvert.	This has not happened yet. This culvert came up repeatedly throughout the discussion. This culvert has corrugated metal pipes that have deteriorated. This area is captured in one of the CIRCA Zones of Shared Risk.
5	2-1	Demolish factory building at 13 Summit Street and daylight Pocotopaug Creek, and possibly remove the existing dam.	The town may end up owning this building within the next few months. The building condition is deteriorating. If a stream daylighting project here would lead to reduced flood risk, this would fit well with Resilient CT. The existing dam (old, stone/earth) is believed in poor condition. It is unlikely that the dam could be removed without also removing the building.
6	2-1	Undersized 24" culvert on Elbow Brook at Wopowog Road results in roadway flooding and erosion of gravel surfaced road. Replace with 3' culvert.	This has not happened yet.
7	2-1	Develop an inventory of deteriorating metal culverts throughout town to begin replacing those most in need.	Public Works has begun to develop this inventory.
8	1-1	Work with private dam owners on a communication plan regarding the opening and closing of the dams along the Pocotopaug Creek corridor.	Communication with owners of Pocotopaug Dam has improved; the status of communication with other private dam owners is unclear.

Activity #	Goal/Obj	Activity Description	Status Reported by Local Planning Team
9	1-1	Ensure all Emergency Action Plans (EAPs) for any dam in town is maintained on file.	The town staff believes that most of the dams do not have EAPs. These are only required for high and significant-hazard dams.
10	2-1	Replace and upgrade the capacity of the Whippoorwill Hollow Road culvert. If this culvert fails, houses will be cut off from egress.	This has not happened yet.
11	1-1	Pursue funding to develop a low impact development (LID) manual for techniques to be implemented throughout the town.	The manual has not been developed, but interest remains. There was previous discussion of adopting a state manual. A number of LID projects have been completed with 319 funds.
12	1-1	Develop a management plan that tracks areas in need of tree trimming and removal.	The plan has not been developed, but tree trimming is ongoing. The Town has been focusing on dead and dying trees. The state has also been conducting tree removal work.
13	2-1	Locate alternative fire protection water sources or identify alternative storage methods for fire suppression capabilities.	Alternate water sources have not been identified. The fire department has cleaned out areas supplying dry hydrants and previously hired a company to clear sediment and ensure that screens are in place.

Open Discussion:

- David asked if the town has a cooling center. The senior center can be used for this purpose if needed. The senior center has air conditioning, a generator, and internet.
    - The senior center is adjacent to Pocotopaug Creek, although reportedly not in the flood zone. If the dam failed there would be a flood risk to the center.
    - The town is working on making a senior bus or van available. Middletown Area Transit is also an option for transportation.
- The high school is the official shelter for the town and has a generator.
- Severe rain events and deteriorating culverts are an ongoing concern.
- During a storm a few years ago (possibly Sept 2018), a culvert on the paved section of Wopowog Road near Tartia Road failed and a section of Wopowog Road was washed away. There are a series of culverts on Wopowog Road; it is crossed multiple times by Safstrom Brook (see HMP Action 6 as well related to Elbow Brook and Wopowog Road).
    - The volume of water led to erosion around the culvert.
    - The failed culvert was backfilled with stone and paved over; it was not damaged and therefore not replaced.
    - The road was blocked for several days.

- The Lake Drive culvert at Hale Brook (see HMP Action 4) is likely too small for the increasing volumes of rain. This road is also very low, relatively close to the stream level. The road reportedly floods multiple times a year during storms, including during the summer storms of 2021. One concern is that increasing the culvert size here will require involving the Army Corps due to the need for an Individual Permit, which will drive up the complexities and cost. The town is exploring funding for this project but has not yet conducted a benefit-cost analysis.
- Most of the town's critical facilities are not located in risky locations. The library and senior center are very close to Pocotopaug Creek, although not in the flood zone; these buildings would be at risk if the dam is lost.
- David asked about the nexus of the long-planned public water system expansion with risks from hazards and climate resilience concepts, noting that public water systems can lead to some resiliency of critical facilities and housing. In response, attendees noted that risks associated with private wells are a concern.
    - Many of the wells are shallow; anecdotally there have been some that have dried up during drought conditions.
    - Storm events that knock out power also create a problem for private wells that rely on electricity to operate. This risk will likely increase as storms become more frequent/intense.
        - The expansion of municipal water systems may therefore advance resiliency.
        - The town has received another grant to look into solutions for the water system. This is a longstanding issue, with town planners discussing the water system since at least 1934.
- Another climate-related hazard was identified during the discussion: the exacerbation of toxic blue-green algae in Lake Pocotopaug. This lake hosts a public swimming area, and therefore provides a cooling ability to East Hampton residents, particularly those of lower income who do not have access to private beaches or air conditioning (such as residents of nearby rental properties). There is no public pool that can serve the same purpose. During harmful algal blooms, the town must close the public beach, thereby preventing access to the cooling capability associated with the lake.

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 East Hampton ZSR layer.)

Jeremy will be the main contact going forward for Resilient CT 2.0. Matt from Public Works couldn't attend this meeting but will likely have helpful input also.