



13. Enfield

Community Overview

The Town of Enfield encompasses 33.4 square miles with an estimated population of approximately 42,141 people. Enfield is located along the Massachusetts border and is in both the Connecticut River mainstem watershed (eastern drainage) and the Scantic River watershed which drains to the west. Elevation is approximately 154 feet above sea level. The main watercourses include Grape, Pierce and Terry Brook as well as the Connecticut and Scantic River. Parks in Enfield include: Powder Hollow Park, Scantic River State Park, Lafayette Park, and Hazardville Historic District.

Interstate 91 travels north-south in Enfield while other main transportation routes are 190, 192 and 220. Major industries include insurance, manufacturing of a variety of products, warehousing and distribution of toys, clothing, and pharmaceuticals, processing of food and dairy products, vegetable and tobacco farming, and ice cream production.

New development in Enfield is primarily in the form of redevelopment of retail and warehouse distribution centers. Notably, these centers are separate from the shopping mall area. One such center is planned for 35 Bacon Road, covering 800,000 square feet, with construction pending. At 113 North Maple Street, a 480,000 square foot distribution center has already been built. Another warehouse, around 500,000 square feet, has received approval for construction at 0 King Street near the East Windsor line. In the mall area, there is some smaller infill development happening, but the mall itself remains largely vacant. The town expects future redevelopment or changes in occupancy within the mall area. Development/redevelopment is not increasing risk to natural hazards.

Critical Facilities

Critical facilities throughout the Capitol Region are listed in Appendix B. In Enfield these include the Town Hall, Police Station, EMS facility, DPW campus, Water Pollution Control Facility, Sewer Pumping Stations, six fire stations, schools, senior housing, medical facilities, State Prisons and town libraries.

Table 13-1: Critical Facilities, Enfield

Facility	Shelter	Cooling Center	Generator
Town Hall (Backup EOC)			X
Police Station (EOC)		X	X
EMS Facility			2 Portable
DPW Campus (building & yard)			
6 Fire Stations			X
Water Pollution Control Facility			X
Sewer Pumping Stations			
JFK Middle School		X	X
Enfield High School	Primary		X
6 Elementary Schools			
7 Private Schools			
St Joseph's Home for the Elderly			X

Facility	Shelter	Cooling Center	Generator
Parkway Pavilion Health & Rehabilitation Center			
Allied Rehabilitation Centers Home for Adults with Developmental Disabilities			
Community Health Resources Group Home for Adults with Chronic Mental Illness			
5 State Prisons			
Enfield Public Library		X	Likely
Pearl Street Library		X	
2 Eversource Substations			

During extreme heat events, Enfield Public Library, Enfield Pearl Street Library, Enfield Police Department and Enfield JFK Middle School can all be opened as public cooling centers. A generator for Pearl Street Library is needed. The Police Department and JFK Middle School both currently have generators. JFK Middle School was the town Shelter but no longer is. The town previously used the Lamagna Center as a cooling center which has since been demolished and redeveloped, thus no longer used.

Capabilities

Hazard mitigation is incorporated, to some degree, as a specific element in Enfield’s Plan of Conservation and Development.

The Town adopted a Flood Hazard Mitigation Plan (FHMP) in 2000 to assist the community in identifying localized flood prone areas, flood hazards and risks, and strategies for preventing the loss of life and reducing property damages. The Town updated and incorporated its FHMP into the 2008 Capitol Region Natural Hazards Mitigation Plan, and maintains its currency. The Town of Enfield has several structural and regulatory flood mitigation tactics currently in place. The Town requires flood compensation on all applications.

The Town has completed, or is currently working on, most of the planned mitigation projects included in the 2000 FHMP, including drainage system improvements, dredging, catch basin cleanings, GIS implementation, and property acquisitions among other things. Equally important to these structural and property remedies are the education and outreach efforts that Enfield has made. All-hazard workshops are offered twice a year for emergency management personnel and non-profit organizations, and flood insurance policy seminars are available for homeowners.

The Town of Enfield has pursued a number of approaches to help reduce the community’s vulnerability to flooding and prepare for emergencies. Examples of such actions by the Town in recent years include, but are not limited to the following accomplishments:

- *Implemented a GIS system which both citizens and staff can access. This database provides detailed information, including wetlands.*

- *Continued its comprehensive road resurfacing/rebuilding program which was initiated in 2000. Any street contemplated for improvement under this program is also assessed for flooding problems, and corrected where such action is feasible.*
- *Implemented an erosion control effort for areas of Town vulnerable to rapid slope deterioration, particularly the area along the west bank of the Scantic River with its escarpment soils. One location in particular – Cloud Street has several residential properties threatened due to severe erosion from rainfall runoff. An extensive slope stabilization project was implemented and completed in 2010 to save these properties. The new focus is now on Kimberley Drive*
- *Conducted extensive stream clearing and bank stabilization work in Beeman’s Brook which flows through a heavily development residential neighborhood.*
- *Trained over 150 Town of Enfield employees in the Red Cross Shelter Worker program.*
- *Established a local television station – E-TV to broadcast emergency alerts with a scrolling banner, commonly referred to as “Chy-Alerts.”*
- *Implemented the Everbridge phone/message alert system to inform citizens of emergency situations in Enfield. A backup system is the use of the transmitter at Asnuntuck Community College , station WACC*
- *Established and actively share important information with citizens through social media. Enfield Emergency Management Facebook wall presently has over 1,200 “likes.”Both the Police Department and Town Manager utilize this system*
- *Established a Community Emergency Response Team (CERT), whose primary mission is shelter operations, with a secondary mission of providing emergency support such as HAM radio operations.*
- *Completely revised its Inland Wetlands and Watercourses Regulations in March 2011, revised in April of 2020.*
- *Continue to reduce the volume of storm-water entering the Town’s Water Pollution Control’s sanitary sewage system by systematic elimination of infiltration and inflow. Progress in recent years has not been as substantive as in prior time periods due to reduced funding.*
- *In Dec of 2022, the 10 year Plan of Conservation and Development was adopted. This document includes goals to implement *Low Impact Development regulations which include public outreach, engagement and education. This in turn will further benefit MS4 compliance; *promote the insulation of homes and businesses and provide public outreach and programs to educate on the importance of, and cost savings from insulation;*To confront climate change, goals set include incorporation of solar or geothermal systems to municipal buildings; *remove regulatory barriers to allow alternative energy to be installed throughout he town; and to consider tax abatement for installation of alternative energy for new developments.*

Enfield has a tree warden responsible for tree trimming and maintenance. Most work is contracted out.

Enfield is undertaking a significant overhaul to its Water Pollution Control Facility. This project includes measures to improve the resiliency of the site, which is adjacent to the Connecticut River. The Town

worked closely with the State on this project. *Recently this \$35 Million dollar upgrade was completed, This also included a berm around the plant to reduce flooding.*

Since the 2014 HMP, Enfield has acquired emergency generators for its two shelters, developed a Vehicle Replacement Plan to guide upgrades of its Public Works fleet, and offered flood policy seminars to homeowners.

Since the 2019 HMP, the following actions have been incorporated as capabilities:

- Pursue opportunities to bury utilities in appropriate locations and scenarios, such as during a road reconstruction.
- 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.
- Send information to residents about emergency preparedness and services available in the event of an emergency by mailing out a newsletter and including information in tax bills.(Facebook)
- 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.
- Participate in EMI courses or the seminars and annual conference held by the Connecticut Association of Flood Managers.

Capabilities to address natural hazards and the losses that they have caused, have increased since the last plan has been adopted.

Challenges

Challenges Overview

The town of Enfield noted that T.S. Isaias brought challenges, with extensive wind damage and fallen trees leading to power outages. In the aftermath, the town collected the wood, and the Department of Public Works piled it at the town dump for measurement purposes. Additionally, power lines dropped and melted a section of Brainard Road, measuring approximately 40 by 60 feet.

Another recent storm, potentially occurring in 2021 (though exact details elude town staff), resulted in the rupture of a drainage culvert along one of the rivers, causing damage to two-thirds of the right lane of Abbe Road.. Fortunately, the town swiftly addressed this issue within 4-5 days, although the specific road remains unidentified due to staff recollection limitations.

Enfield's farmers, particularly those involved in tobacco cultivation, have encountered challenges due to erratic drought and excessive wet conditions. While specific affected sites remain unclear, there have been crop losses.

Enfield faces a significant challenge with Freshwater Brook, particularly in the vicinity of I-91, which creates a constriction point for the waterway. Additionally, the town grapples with recurring flooding on Freshwater Boulevard during heavy rainfall, a situation that is typically mitigated by opening the dam at

Freshwater Pond in a timely manner. While this is a manageable solution, there are instances when sudden, intense high intensity , short and long duration storms produce a high volume of water flow that surpasses the dam's capacity to control flooding.

Enfield town officials noted that some parts of town have neither public water nor sewer.

A pressing concern for the northeastern corner of the town revolves around the lakes in the area. Elevated water temperatures in these lakes have the potential to exacerbate problems such as algal blooms and adversely affect local fish and wildlife populations. The spillway is scheduled to be improved in the near future.

Hazard Losses

The economic losses faced by the community from natural hazards can be estimated by reviewing historic loss figures. Loss estimates are summarized below.

Average Annualized Losses

Average Annualized Loss (AAL) estimates are summarized below. Average Annualized Loss (AAL) figures are useful tools for comparison of the risks faced from different hazards with different likelihoods of occurring in a given time period. AAL estimates were prepared for each natural hazard which may impact Enfield. National Centers for Environmental Information (NCEI) data, from the last 20 years, was categorized by hazard and averaged based on the proportion of population within each town in the CROCG Region. National Flood Insurance Program (NFIP) losses were calculated based on the 50 year span of the program. FEMA Public Assistance (PA) data from the past 11 years was categorized based on hazard and used to compute AAL. United States Department of Agriculture (USDA) from the past 10 years was calculated to get AAL. Expected Annual Loss data from the National Risk Index (NRI) was downloaded and categorized to get AAL for the below hazards. Dam failure data was taken from the 2019-2024 CROCG Hazard Mitigation Plan (HMP) plan since no new dam failures have occurred in the past five years. The 2019 HMP Dam failures were sourced from the 2014 Connecticut Natural Hazard Mitigation Plan Update, with dam failure data supplemented by the National Performance of Dams Program and the Connecticut Department of Energy & Environmental Protection.

Table 13-2: Average Annualized Losses, Enfield

Hazard	Source	Average Annualized Losses (AAL)
Hurricanes/Tropical storms	NCEI	\$108,295.15
	NRI	\$1,522,095.48
	FEMA PA	\$7,514.80
Tornados/High Winds	NCEI	\$40,543.72
	NRI	\$385,918.13
Winter Storms	NCEI	\$32,117.87
	NRI	\$23,987.54
	FEMA PA	\$14,201.89
Flood	NCEI	\$32,825.80
	NRI	\$53,488.75
	NFIP	\$6,340.21

Hazard	Source	Average Annualized Losses (AAL)
Drought	NRI	\$353,443.98
	USDA	\$118,075.70
Extreme Heat	NRI	\$49,001.89
Wildfire	NRI	\$2,558.56
Earthquakes	NRI	\$109,057.97
Dam Failure	HMP	\$80.00

Losses Summary

A review of the above loss estimates demonstrates that the Town of Enfield has experienced significant expenses as a result of natural hazards and is at risk for additional losses if some of the less-frequent events were to occur. These actual and potential losses justify hazard mitigation actions to reduce losses in the future.

Mitigation Strategies and Actions

This HMCAP includes new goal statements that are aligned with *Resilient Connecticut* and the efforts of the GC3. The five new goals developed for this HMCAP were developed with cooperation from CIRCA in the *Resilient Connecticut* planning process, and are:

- Ensure that critical facilities are resilient, with special attention to shelters and cooling centers.
- Address risks associated with extreme heat events, especially as they interact with other hazards.
- Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods.
- Reduce losses from other hazards.
- Invest in resilient corridors to ensure that people and services are accessible during floods and that development along corridors is resilient over the long term.

The previous goals of the 2019 HMP have been replaced and incorporated into these five new goals in accordance with the explanation in the Multijurisdictional document.

Noted Hazard Mitigation Needs

Over the course of Plan development, multiple hazard mitigation needs were noted:

- The town should continue proactive tree and power line monitoring and maintenance to minimize damage and power outages.
- Supporting local farmers during droughts can involve implementing irrigation systems or offering assistance and resources to protect crops.
- The town should continue to look into options to address underperforming culverts near I-91 and near the river that experience flooding over the past 5 years.

- To tackle the lack of public water and sewer in some areas, the town should explore options for extending these utilities to underserved regions.
- Enfield may wish to incorporate a water quality monitoring system to ensure the health of the town lakes.

Status of Previous Mitigation Strategies and Actions

The Town of Enfield reviewed the mitigation actions proposed in the 2019 HMP and determined the status of each. That information is included in the table below.

Table 13-3: Status of Previous Mitigation Strategies and Actions, Enfield

No.	Action	Notes	Status
6	Complete and implement Freshwater Brook dam action plan to mitigate flooding on I-91 and Route 5.	<p>Repairs have been completed on the dam including the replacement of the damaged wall, 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 has completed two bridge replacements with state funds. One is on Orlando Drive, and was an upsized 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. A smaller design was selected to avoid the need meet FEMA’s map revision requirements.</p> <p>The pinch point for Freshwater Brook is I-91.</p> <p>CIRCA staff 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 approved 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>	Carry forward, revisions to reflect today’s discussion to suggest a larger study as well as individual projects

No.	Action	Notes	Status
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.-34 Lynch Terrace is a repetitive flooding location</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 CRCOG 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 of an emergency by mailing out a newsletter and including information in tax bills.	The town website has most of this information somewhere, and sometimes added to social media. Town staff report they are constantly updating websites and putting information out.	Capability / Retire

No.	Action	Notes	Status
4	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 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

Active Mitigation Strategies and Actions

The Town proposed to initiate several new mitigation actions for the upcoming five years. Additionally, a number of actions from the previous planning period are being carried forward or replaced with revised actions. These are listed below.

Each of the following actions has been prioritized based on FEMA guidelines, listed from highest to lowest priority, and numbered.

Table 13-4: Active Mitigation Strategies and Actions, Enfield

Number	Hazard Mitigation and Climate Adaptation Actions	Hazard Mitigation and Climate Adaptation Goal	Type of Action	Responsible Department	Approx. Cost Range	Potential Funding Sources	Timeframe	Priority	Hazard(s)	EJ?	PERISTS Score	STAPLEE Score	PERSISTS x STAPLEE =
EN1	Determine if the Pearl Street Library has a generator and if not, acquire a generator for this facility.	Ensure that critical facilities are resilient, with special attention to shelters and cooling centers.	Preparedness & Emergency Response	Emergency Management	\$100,000 - \$500,000	FEMA HMA	07/2024-06/2025	High	All Hazards	Yes - Distressed Municipality	19	5	95
EN2	Ensure that transportation and transit options are available to bring people to cooling centers.	Address risks associated with extreme heat events, especially as they interact with other hazards.	Preparedness & Emergency Response	Emergency Management	\$10,000 - \$50,000	Transit; IJJA BBFP	07/2024 - 06/2026	High	Extreme Heat	Yes - Distressed Municipality	19	3	57
EN3	Conduct a town wide assessment of stream crossings to identify vulnerabilities and develop a priority list for maintenance and upsizing.	Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods.	Structural Project	Public Works	\$10,000 - \$50,000	DCRF; Municipal CIP Budget	07/2026-06/2028	Medium	Riverine and Pluvial Floods	Yes - Distressed Municipality	19	6	114
EN4	Conduct a comprehensive flood mitigation study for Freshwater Brook	Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods.	Structural Project	Public Works	\$50,000 - \$100,000	DCRF; FEMA HMA	07/2026 - 06/2028	High	Riverine and Pluvial Floods	Yes - Distressed Municipality	20	6	120

Number	Hazard Mitigation and Climate Adaptation Actions	Hazard Mitigation and Climate Adaptation Goal	Type of Action	Responsible Department	Approx. Cost Range	Potential Funding Sources	Timeframe	Priority	Hazard(s)	EI?	PERSIST Score	STAPLEE Score	PERSIST x STAPLEE =
EN5	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.	Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods.	Property Protection	Planning	\$0-\$10,000	Municipal Operating Budget	01/2026 - 12/2026	High	Riverine and Pluvial Floods	Yes - Distressed Municipality	20	7	140
EN6	Work with CT DEEP to complete a formal validation of the Repetitive Loss Property list and update the mitigation status of each listed property.	Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods.	Property Protection	Planning	\$0-\$10,000	Municipal Operating Budget	07/2026 - 06/2027	High	Riverine and Pluvial Floods	Yes - Distressed Municipality	20	5	100
EN7	Work with the Connecticut Institute for Resilience and Climate Adaptation (CIRCA) to develop an appropriate scope of work to address flooding and extreme heat concerns in Resilient Opportunity Areas (ROARs).	More than one goal.	More than one type	Public Works	\$0-\$10,000	CIRCA	07/2024 - 06/2027	Medium	Riverine and Pluvial Floods/ Extreme Heat	Yes - Distressed Municipality	19	5	95
EN8	Review the Connecticut Cultural Resource Information System (ConnCRIS) to identify and understand historic and archaeological resources in areas of hazard risks found here: https://conncris.ct.gov .	Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods.	Property Protection	Planning	\$0-\$10,000	SHPO; Municipal Operating Budget	01/2026 - 12/2026	Medium	Wildfires/Tornadoes and High Winds/ Riverine and Pluvial Floods	Yes - Distressed Municipality	19	9	171
EN9	Update town website to include hazard mitigation and emergency preparedness tips for town	More than one goal.	Education and Awareness	Community Development	\$0-\$10,000	Municipal Operating Budget	01/2025 - 12/2025	Medium	All Hazards	Yes - Distressed	18	7	126

Number	Hazard Mitigation and Climate Adaptation Actions	Hazard Mitigation and Climate Adaptation Goal	Type of Action	Responsible Department	Approx. Cost Range	Potential Funding Sources	Timeframe	Priority	Hazard(s)	EJ?	PERISTS Score	STAPLEE Score	PERISTS x STAPLEE =
	residents, including sections corresponding to each hazard considered in this Plan Update.									Municipality			

Figure 13-1: CIRCA Environmental Justice Rank and Critical Facilities, Enfield

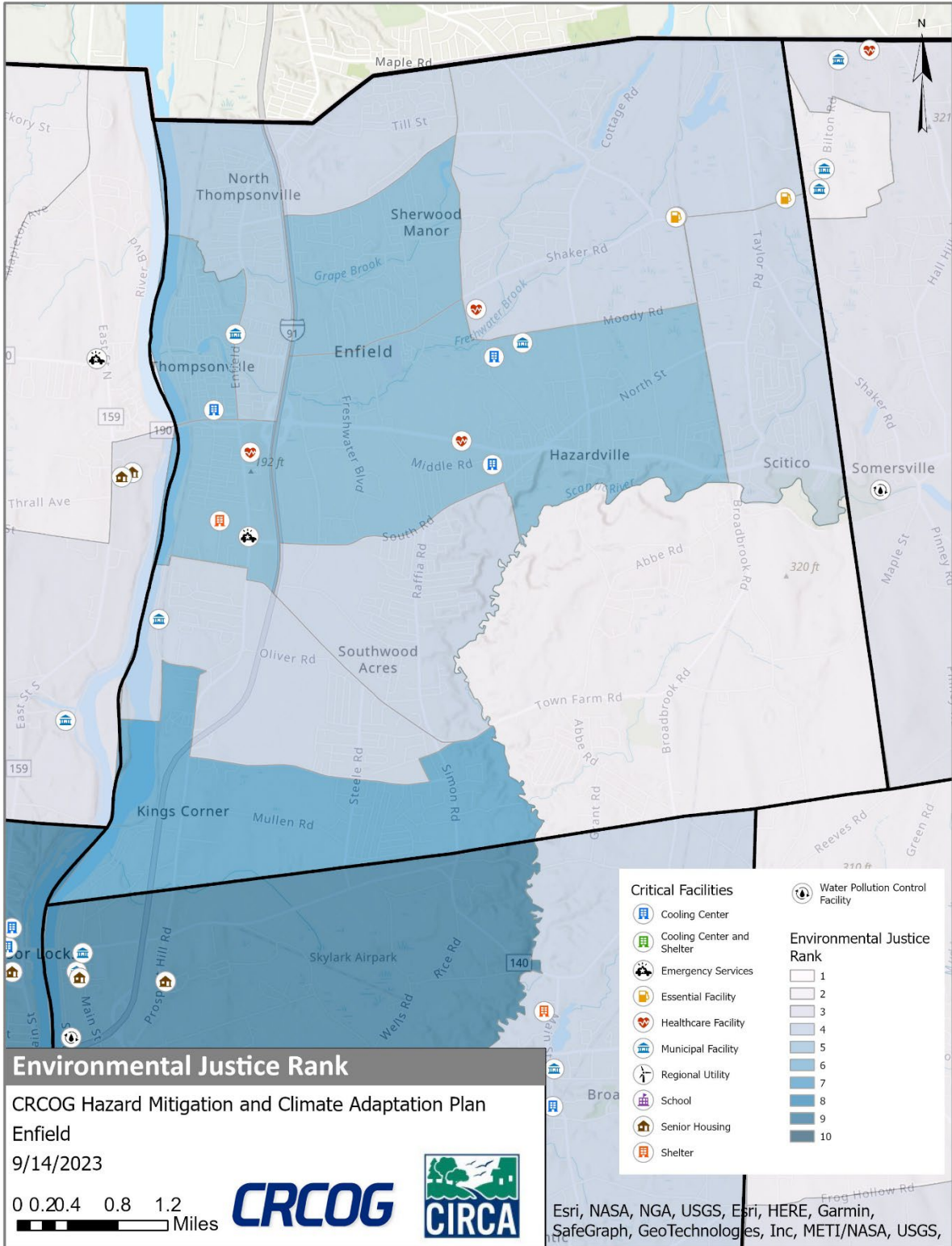


Figure 13-2: FEMA Flood Zones and Critical Facilities, Enfield

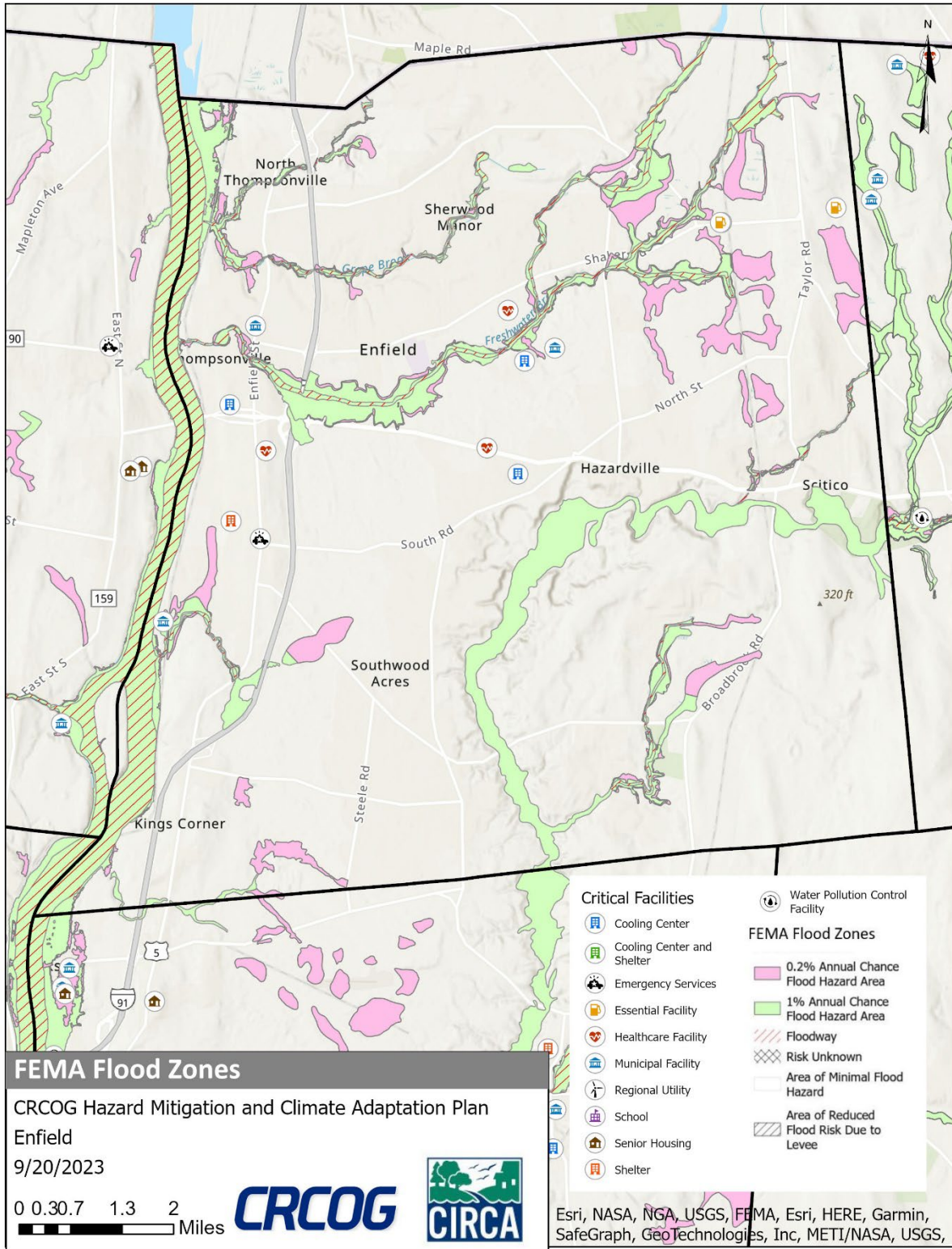


Figure 13-3: CIRCA Flood CCVI and Critical Facilities, Enfield

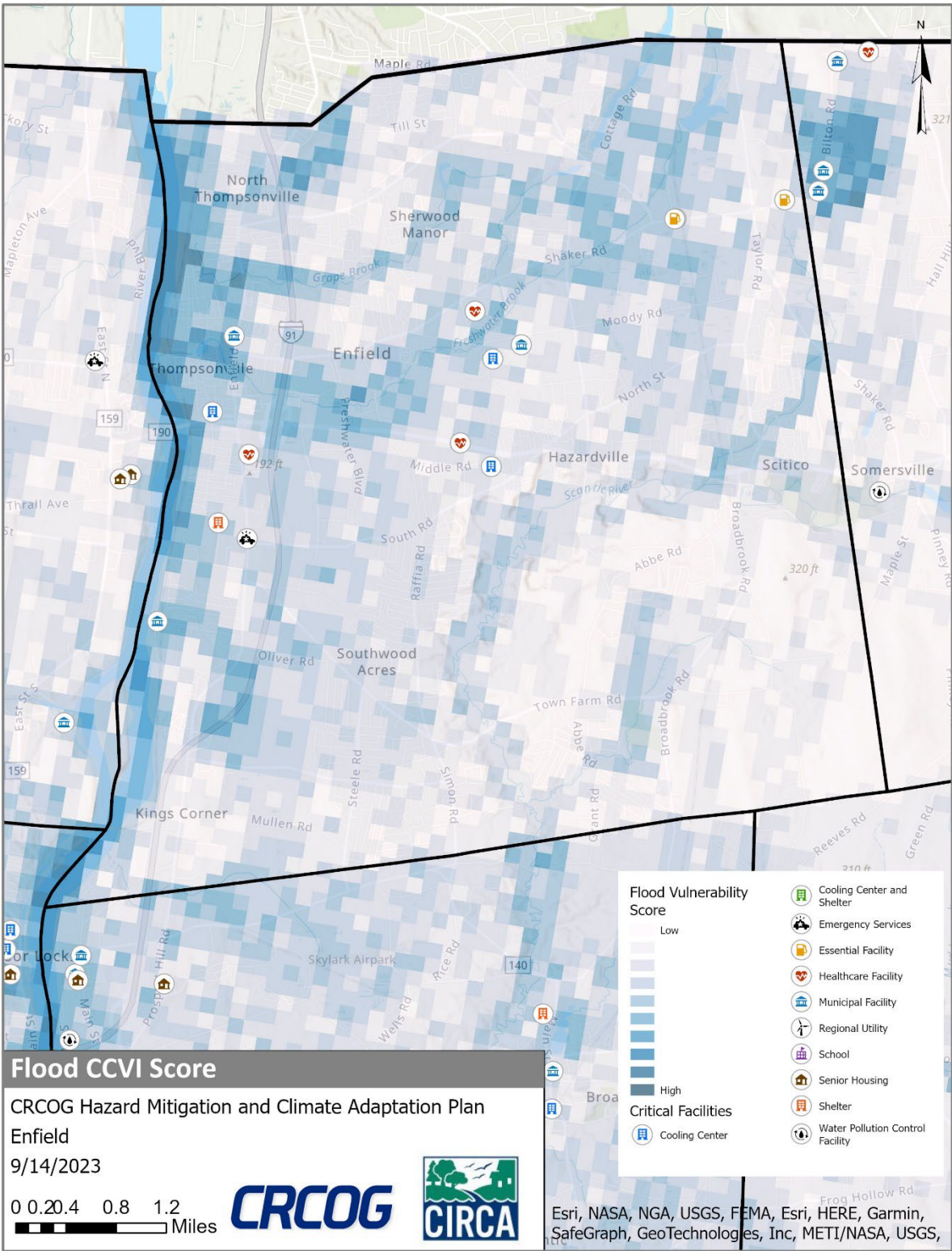


Figure 13-4: CIRCA Heat CCVI and Critical Facilities, Enfield

