



## 18 Hebron

### Community Overview

Hebron is a rural community in Tolland County that covers 37 square miles with an estimated population of 9,098 (2020 Census). Most of the residential development in Hebron consists of single-family homes. Recently, most new development has been constructed near the center of town.

Elevation in Hebron ranges from 300 to over 650 feet above sea level. Most water drains to the Salmon River Watershed, but a small portion in the northeast drains to the Willimantic Watershed. The principal watercourses in Hebron are Fawn, Mint, Raymond and Senate Brooks. The 184-acre Amston Lake is located in the southeast portion of Town.

Major transportation routes through Hebron include state routes 66, 85, 207 and 316.

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.

### Critical Facilities

A number of Hebron critical facilities are listed here.

**Table 18-1: Critical Facilities, Hebron**

Facility	Shelter	Cooling Center	Generator
Town Hall (EOC)		X	X
Library		X	X
Senior Living Facility			X
RHAM High School	Regional Shelter	X	In Process
RHAM Middle School			X

During extreme heat events, Hebron Town Hall (EOC), Douglas Library and Rham High School can all be opened as public cooling centers. The town hall and library currently have generators. Town is working on getting a generator for Rham High School which also serves as a regional shelter

Hebron, Andover and Marlborough share a regional middle/high school (RHAM) located in the center of the town of Hebron. The high school is being considered for use as a regional general population shelter while the middle school is being considered for use as a special needs shelter. Electrical upgrades, generators and fuel capacity sufficient to provide power to operate bathroom and cooking facilities are needed to enable the schools to be used as emergency shelters.

The current generators at the Middle School and High School only run emergency lighting. Therefore, the Middle School is not usable as a special needs shelter unless the generator upgrade for the high school also adds heating/cooling, shower/toilet/sink water flow, and 120VAC outlet support for the Middle School as well.

## Capabilities

Hazard mitigation is incorporated into Hebron's Plan of Conservation and Development. The HMP document itself is cited.

Public water service, provided through a private water company, has been extended, and is available in several neighborhoods including the Town Center and the Amston Lake area. The center of town has a pressurized hydrant system fed by CT Water Co. The rest of Hebron has a fire suppression program that primarily relies on tanker trucks to transport water. The Fire Department routinely has inventories all fire ponds and dry hydrants in Town and is now working to develop a plan for additional dry hydrant locations. The High School has a sprinkler system and is serviced by the CT Water Co.

The Town of Hebron has worked to limit its vulnerability to flood hazards. No new construction has occurred in a floodplain since 2008. The building codes are based on FEMA requirements or reference FEMA recognized ASCE 24 construction standards.

Eversource has a contract with Asplundh Tree Services to provide tree maintenance services in Hebron. Additionally, the Town has its own bucket truck and crew for tree removal needs impacting Town property.

Amston Lake's water level is controlled by an earthen dam with a concrete spillway. The outlet of the lake is an unnamed watercourse that feeds into Raymond Brook. The dam was recently repaired and upgraded.

The Town actively seeks to protect sensitive lands. Approximately 20% of the Town's land area is permanently protected open space.

The Town Plan of Conservation and Development will be adopted in 2024 and assessed its infrastructure needs as part of that process.

A map modernization effort by FEMA is currently underway for Tolland County, but its full extent, and how much of Hebron it will cover, is unknown.

One bridge replacement was underway at the time of development of this Hazard Mitigation Plan.

The Hebron CERT team has increased three-fold in size since the 2014 HMP, and merged with the Andover CERT.

Hebron received the Bronze Certification within the SustainableCT program in October 2018.

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

- 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

The Town relies primarily on groundwater for its drinking water. Most residences and businesses have private wells. The Town's most extensive aquifer is located in the Raymond Brook Marsh area. Among

the challenges facing Hebron in the event of a natural disaster are providing adequate water supply and emergency shelter for residents. The Town and Chatham Health District will need to monitor the available capacity of the sewer treatment plant and ability of the Town's ground water reserves to address the needs of future development including fire suppression particularly in the event of drought. The Town will also need to assess the capability of the RHAM middle and high school to serve as regional emergency shelters.

There are no public water hydrants in Town; the Fire Department relies on dry hydrants and tanker trucks to find and transport water for fire suppression.

During the 2020 and 2021 storms, the town experienced some power outages. The town needed to open charging stations and hand out potable water during these outages.

The town has made improvements on the culverts on Mill Stream Rd but during some rain events, the culverts still overtops.

The town is working on elevating bridges in town due to flood related concerns.

The primary concern for the town is the 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.

Town staff reported that 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.

### [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 Hebron. 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 18-2: Average Annualized Losses, Hebron**

Hazard	Source	Average Annualized Losses (AAL)
Hurricanes/Tropical storms	NCEI	\$23,380.30
	NRI	\$550,030.42
	FEMA PA	\$3,295.81
Tornados/High Winds	NCEI	\$8,753.16
	NRI	\$88,566.54
Winter Storms	NCEI	\$6,934.06
	NRI	\$44,210.73
	FEMA PA	\$11,510.26
Flood	NCEI	\$7,086.90
	NRI	\$10,519.21
	NFIP	\$100.87
Drought	NRI	\$2,915.35
	USDA	\$3,976.35
Extreme Heat	NRI	\$1,629.85
Wildfire	NRI	\$742.56
Earthquakes	NRI	\$14,724.82
Dam Failure	HMP	\$595.00

*Losses Summary*

A review of the above loss estimates demonstrates that the community has experienced 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 primary focus of the Town is twofold: firstly, to oversee the accessibility of its groundwater reserves in anticipation of future development, and secondly, to ensure an adequate water supply for fire suppression during drought conditions.
- To address power outages during storms, the town should consider increasing tree trimming.
- Additional measures should be taken to prevent overtopping at Mill Stream Rd during heavy rain events. The town should consider upsizing this culvert.
- Hebron should focus on monitoring and regulating runoff impacts and development patterns to maintain water quality in the watershed.

## Status of Previous Mitigation Strategies and Actions

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

**Table 18-3: Status of Previous Mitigation Strategies and Actions, Hebron**

No.	Action	Notes	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.  UPDATE: RFQ for Electrical Engineering Services was issued. \$2 million grant from DECD.	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

No.	Action	Notes	Status
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 issued 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 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.	Complete/Retire
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

No.	Action	Notes	Status
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

## 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 18-4: Active Mitigation Strategies and Actions, Hebron**

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?	PERSISTS Score	STAPLEE Score	PERSISTS x STAPLEE =
HB1	Complete the installation of 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.	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; STEAP	07/2024 - 06/2025	High	All Hazards	No	19	5	95
HB2	Perform study to determine Town's ability to maintain sufficient water supply in the future given continued development. Consider the effect of droughts and climate change.	Reduce losses from other hazards.	Natural Resources Protection	Planning	\$50,000 - \$100,000	DCRF; FEMA HMA	07/2025 - 06/2027	High	Drought	No	19	5	95
HB3	Use the timber management plan as a resource to education residence and commissions members about Town-owned forested land.	Reduce losses from other hazards.	Education and Awareness	Planning	\$0-\$10,000	Municipal Operating Budget	01/2025-12/2025	High	Wildfires	No	18	7	126
HB4	Conduct a town wide assessment of stream crossings to identify vulnerabilities and develop a priority list for maintenance and upsizing.	Reduce flood Information erosion risks by reducing vulnerabilities Information consequences, even as system change increases frequency	Structural Project	Public Works	\$10,000 - \$50,000	DCRF; Municipal CIP Budget	07/2025 - 06/2027	Medium	Riverine and Pluvial Floods	No	18	6	108



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 =
		Information severity of floods.											
HB5	Ensure that options are available to help property owners make their water supply wells resilient to droughts, floods, and loss of capacity	More than one goal.	Water & Wastewater Utility Projects	Planning	\$0-\$10,000	DWSRF; FEMA HMA; STEAP	07/2025 - 06/2026	High	Riverine and Pluvial Floods /Drought	No	19	10	190
HB6	Expand public water systems to areas served by private wells when needed to address drought impacts and provide fire protection	More than one goal.	Water & Wastewater Utility Projects	Fire Department	>\$1M	DWSRF; FEMA HMA; STEAP	07/2026 - 06/2028	High	Drought/Wildfire	No	19	8	152
HB7	Develop more water supply sources and interconnections as needed	Reduce losses from other hazards.	Water & Wastewater Utility Projects	Planning	>\$1M	DWSRF; FEMA HMA; STEAP	07/2026 - 06/2028	High	Riverine and Pluvial Floods	No	19	8	152
HB8	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	No	19	3	57
HB9	Watch the DEEP Chemical Management and Climate Resilience Webinar: <a href="https://portal.ct.gov/DEEP/P2/Chemical-Management-and-Climate-Resilience/Chemical-Management-and-Climate-Resilience">https://portal.ct.gov/DEEP/P2/Chemical-Management-and-Climate-Resilience/Chemical-Management-and-Climate-Resilience</a>	Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods.	Education and Awareness	Emergency Management	\$0-\$10,000	Municipal Operating Budget	01/2025-12/2025	Low	Riverine and Pluvial Floods	No	17	7	119
HB10	Review the Connecticut Cultural Resource Information System (ConnCRIS) to identify and understand historic and archaeological resources in areas of hazard risks found here: <a href="https://conncris.ct.gov">https://conncris.ct.gov</a> .	Reduce flood Information erosion risks by reducing vulnerabilities Information consequences, even as system change increases frequency	Property Protection	Planning	\$0-\$10,000	SHPO; Municipal Operating Budget	01/2026 - 12/2026	Medium	Wildfires/Tornadoes and High Winds /Riverine and	No	18	9	162

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 =
		Information severity of floods.							Pluvial Floods				
HB11	Update town website to include hazard mitigation and emergency preparedness tips for town residents, including sections corresponding to each hazard considered in this Plan Update.	reduce losses from other hazards	Education and Awareness	Planning	\$0-\$10,000	Municipal Operating Budget	01/2025 - 12/2025	Medium	All Hazards	No	17	7	119

Figure 18-1: CIRCA Environmental Justice Rank and Critical Facilities, Hebron

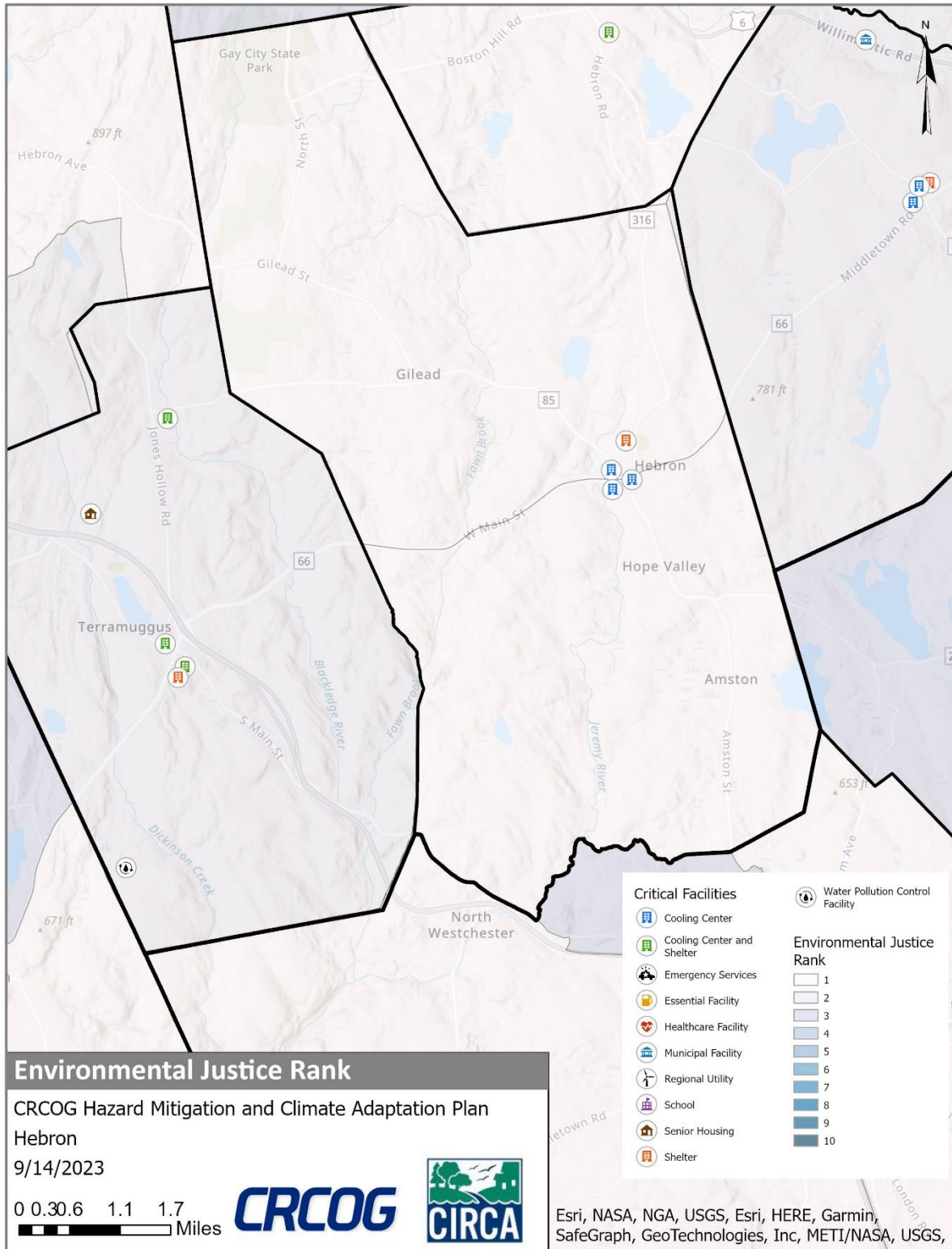


Figure 18-2: FEMA Flood Zones and Critical Facilities, Hebron

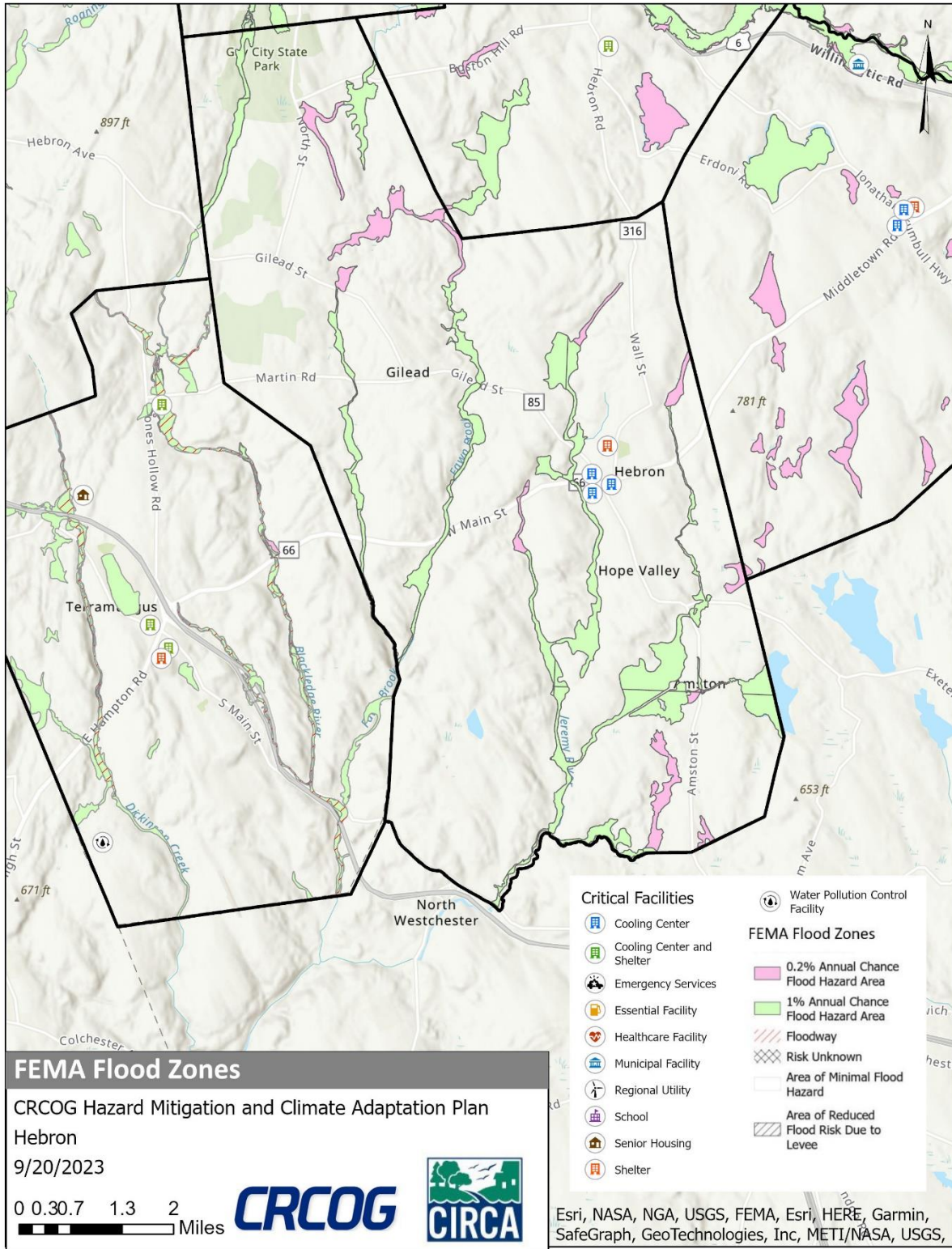


Figure 18-3: CIRCA Flood CCVI and Critical Facilities, Hebron

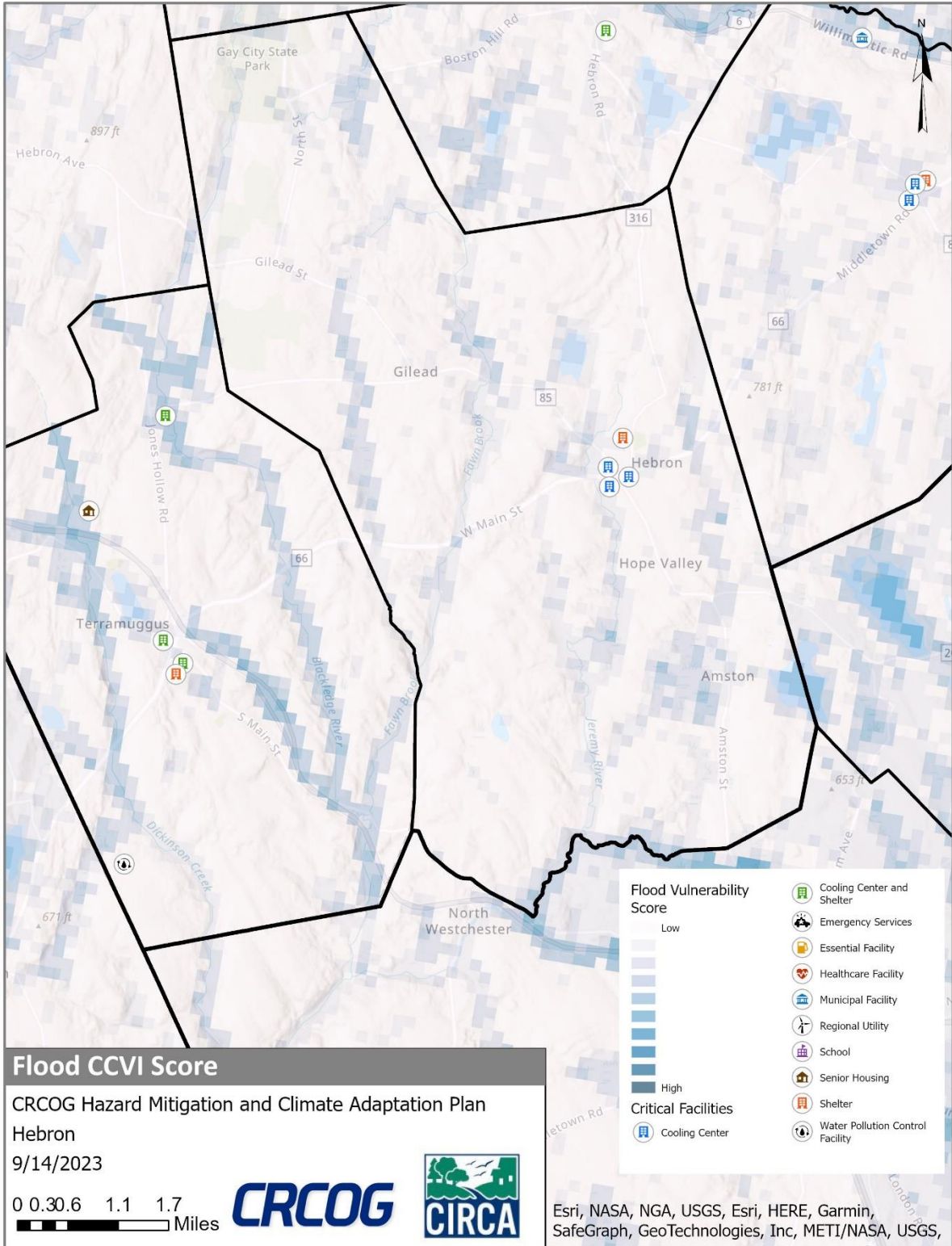


Figure 18-4: CIRCA Heat CCVI and Critical Facilities, Hebron

