

## 16 Granby

## Community Overview

Granby is a rural, low density residential community with a land area of 40.7 square miles and an estimated population of 10,903, resulting in a population density of only 284 persons per square mile. Population is growing, with an estimated 7 new single family homes constructed a year. A large multifamily residential development that includes 130 apartments and 75 additional units, consisting of a mix of single-family and duplex homes, was recently completed.

Granby's elevation ranges from less than 200 feet to over 1000 feet above sea level. The main watercourses running through Granby include Beech, Bissell, Dismal, Higley, Hungary, Mountain and Salmon (East and West Branches) Brooks; all drain eventually to the Farmington River.

Major transportation routes include state routes 10/202, 20, 189 and 219. Restaurants and retail space account for most commercial development in Town. The largest employers in Granby are the Town itself, the YMCA, Stop & Shop, Meadowbrook Nursing Home, and Geissler's Supermarket. The largest property owner is McLean Game Refuge.

Most homes in Town have their own private wells and septic systems. It is estimated that as many as 20% of single family homes have backup generators. Limits on access to public water and sewer infrastructure restrict high density development outside of the Granby Center area.

Since the last plan update, the town has had a bit of recent residential development, but not in high-risk areas. There are 235 apartment units under construction just north of the center of town. The development will consist of seven, three-story buildings, detached garages, and other site improvements. Development/redevelopment is not increasing risk to natural hazards.

#### Critical Facilities

In Granby critical facilities include the Town Hall, Police Station (EOC), public library, Department of Public Works, 3 Fire Houses, Salmon Brook Water Company, 2 Sewer Pump Stations, the Middle School (primary shelter), the Senior Center (backup shelter), the High School, the Elementary School, the Intermediate School, the Meadow Brook Nursing Home, the YMCA, and Stony Hill Village senior housing. The DPW stores emergency shelter cots and supplies, which are used at the Middle School. A portable generator that primarily serves the sewer pumping stations is also stored at the DPW; if necessary, this generator can be connected to the Senior Center and library. This portable generator is 40-50 years old. The Meadow Brook Nursing Home has agreed to shelter residents needing special assistance during a disaster. The YMCA is available for showering for those staying at shelters following an emergency.

Table 16-1: Critical Facilities, Granby

| Facility                   | Shelter                  | Cooling<br>Center | Generator |
|----------------------------|--------------------------|-------------------|-----------|
| Town Hall                  |                          |                   | Х         |
| Police (EOC)               | Charging Station         |                   | Х         |
| Public Library             | Warming/charging center. | Х                 |           |
| Department of Public Works |                          |                   | Portable  |

| Facility                   | Shelter            | Cooling<br>Center | Generator  |
|----------------------------|--------------------|-------------------|------------|
| 3 Fire Houses              |                    |                   | X          |
| Salmon Brook Water Company |                    |                   | Х          |
| 2 Sewer Pumping Stations   |                    |                   | 1 Portable |
| Middle School              | Primary            |                   | Х          |
| Senior Center              | Secondary/Warming  | X                 | X          |
| High School                |                    |                   |            |
| Elementary School          |                    |                   |            |
| Intermediate School        |                    |                   |            |
| Meadow Brook Nursing Home  | Special Assistance |                   | Х          |
| YMCA                       | Showers            |                   | Х          |
| Stony Hill Village         |                    |                   |            |

During extreme heat events, Granby Public Library and Granby Senior Center can both be opened as public cooling centers. Generators for these facilities are needed.

## Capabilities

Hazard mitigation is addressed specifically in Granby's Plan of Conservation and Development (POCD). The HMP document itself is cited. POCD actions specifically address natural hazards, including climate change.

Granby uses the Everbridge Reverse 9-1-1 system to warn residents of impending disasters.

The Department of Public Works is responsible for re-opening roads that are blocked by fallen trees.

The Town's YMCA can made available for residents to shower, and the Town can distribute water for residents who lose both power and water pressure.

The Town has a community emergency response team (CERT) that can be activated to help coordinate emergency response. The CERT was formed in 2010, following the guidelines of Homeland Security, and works closely with the Fire Department and Emergency Management Director. Large plastic coated maps have been created through the Town's GIS system and provided to every fire station along with multiple copies to the Police Department and CERT. The Town's GIS is fully functional and assists with hazard mitigation and response.

The Town has added generators to all of its fire houses, the Senior Center, and the Middle School. CERT is now working on a plan to utilize these buildings during future emergencies.

Granby has an excellent understanding of the unique challenges posed by its significant elevation variations. While the steep terrain can be difficult to navigate during winter storms, Town crews are well trained and equipped to address such circumstances. New equipment and personnel are made available as necessary.

The Lost Acres Fire Department (LAFD) has an excellent understanding of forests fires and is well equipped to address the situation should it arise. The LAFD regularly updates its equipment as needed.

The Town has an excellent understanding of local flooding and is prepared to address areas of flooding. In most cases this involves short term road closures. No new development is anticipated within the

areas of potential flooding. Granby has had no new construction or demolition since 2008 in floodplains or other vulnerable areas. The Town did a complete review and adopted modifications to Section 8.18 of the Zoning Regulation Special Flood Hazard Areas in September of 2008. These changes were adopted in accordance with recommendations of the Connecticut Department of Energy and Environmental Protection (DEEP). The changes are designed to decrease Granby's vulnerability to flooding.

Hurricane Irene, which occurred in August of 2011, provided an opportunity for the Town to test its preparation for such major events. Early on the Emergency Management team was activated. Many roads were flooded during the height of the storm and the Town quickly closed such roads and rerouted traffic. As expected the floodwaters quickly receded after the storm and the Town returned to normal. The October 2011 snowstorm proved a much greater problem. Again the emergency response team was called into operation. However, the heavy snowfall and resulting tree and power line damage completely crippled the Town. The power outages were extensive and prolonged. The Town's emergency shelter proved to be a great help in accommodating those without power, but also proved inadequate. In response to these events the Town has added generators to most of its public buildings and plans are being considered as to the future use of these building during prolonged emergencies.

Since the 2019 HMP, no new actions have been incorporated as capabilities and thus, capabilities to address natural hazards and the losses that they have caused, have not increased since the last plan has been adopted.

# Challenges

## Challenges Overview

Granby's large elevation variation results in unique hazard concerns. Winter weather often hovers around 32 degrees, and even a slight decrease in temperature due to the increase in elevation will result in a snow/ice division. This is a common occurrence in Granby, where ice/snow conditions may be found in half the town while rain falls in the remaining portion. Ice is becoming an increasing concern in Granby.

The Town contains significant forested lands, including state forest and the privately held properties of the McLean Game Refuge and Granby Land Trust; therefore wildfire is a significant concern. During storms, Town staff also report that the number and duration of power outages is high.

Only a small portion of the Town is within the 1%-annual-chance flood zone and very little development has occurred or is allowed to occur within the area; therefore the Town has had relatively minor losses due to flooding. Because of its steep terrain, when flooding does occur, the flood waters quickly recede following the storm. Areas at risk of flooding include sections of Mechanicsville Road, sections of ballfields in Salmon Brook Park that were lost to scour or erosion in 2021, and areas of Holcomb Farm where a pedestrian bridge was washed out.

Riverbank stabilization is a key concern in Granby due to the constantly shifting courses of small brooks. Although the town has managed some work in Salmon Brook Park to protect against erosion, ongoing bank stabilization is essential, including an area near the Donahue Road bridge. Town staff emphasized the critical need for bank stabilization in the community.

The Town is completely dependent on groundwater for its potable water supply. Most homes in Granby have individual wells, most of which are bedrock wells, though gravel pack or point wells are not

uncommon. The Town has no history of droughts seriously impacting local wells, though shallow wells can be temporarily impacted; however, wells cannot operate without electricity and prolonged electrical outages will result in potable water and sewage disposal issues. Most residents (and all of those who live at higher elevations) who lose power will also lose water. Areas that need to be prioritized during emergencies include the Meadowbrook Nursing Home and the water tanks and pumps that service the Salmon Brook Water District.

Granby is serviced by two water companies, the Salmon Brook Water District and the Aquarian Water Company. Both are supplied by well water. The Aquarian Water Company's wells are located in Simsbury. The Salmon Brook Water District has a 190,000 gallon water tank off of Pendleton Road and wells located near the Town's Salmon Brook Park. There is no history of water supply quantity problems. The Town works cooperatively with the Salmon Brook Water District to maintain the quality of the water.

The ability to access the animal shelter can be compromised due to flooding.

#### 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 Granby. 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 CRCOG 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 16-2: Average Annualized Losses, Granby

| Hazard                     | Source  | Average Annualized Losses (AAL) |  |  |  |  |  |  |
|----------------------------|---------|---------------------------------|--|--|--|--|--|--|
|                            | NCEI    | \$28,018.84                     |  |  |  |  |  |  |
| Hurricanes/Tropical storms | NRI     | \$429,418.02                    |  |  |  |  |  |  |
|                            | FEMA PA | \$2,688.02                      |  |  |  |  |  |  |
| Tornados/High Winds        | NCEI    | \$10,489.74                     |  |  |  |  |  |  |
| Torriados/ High Willus     | NRI     | \$114,026.61                    |  |  |  |  |  |  |

| Hazard        | Source  | Average Annualized Losses (AAL) |  |  |  |  |  |  |
|---------------|---------|---------------------------------|--|--|--|--|--|--|
|               | NCEI    | \$8,309.75                      |  |  |  |  |  |  |
| Winter Storms | NRI     | \$6,422.41                      |  |  |  |  |  |  |
|               | FEMA PA | \$4,314.48                      |  |  |  |  |  |  |
|               | NCEI    | \$8,492.91                      |  |  |  |  |  |  |
| Flood         | NRI     | \$12,642.10                     |  |  |  |  |  |  |
|               | NFIP    | \$1,978.08                      |  |  |  |  |  |  |
| Drought       | NRI     | \$112,629.14                    |  |  |  |  |  |  |
| Drought       | USDA    | \$7,411.50                      |  |  |  |  |  |  |
| Extreme Heat  | NRI     | \$12,687.15                     |  |  |  |  |  |  |
| Wildfire      | NRI     | \$4,802.31                      |  |  |  |  |  |  |
| Earthquakes   | NRI     | \$16,208.71                     |  |  |  |  |  |  |
| Dam Failure   | НМР     | \$20.00                         |  |  |  |  |  |  |

#### **Losses Summary**

A review of the above loss estimates demonstrates that the community 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 consider a forestry management plan to address concerns related to power outages and wildfires.

- An evaluation of options to improve access/egress to the animal shelter.
- The town should ensure they have ice removing equipment and the budget necessary to deal with ice removal.
- The town should continue to prioritize areas that need attention during emergencies including the Meadowbrook Nursing Home and the water tanks and pumps that service the Salmon Brook Water District.
- The town should replace the 40-50 year old portable generator.
- The town should replace/upgrade the generator at the Board of Education building and install generators at the Library and all schools.

# Status of Previous Mitigation Strategies and Actions

The community reviewed the mitigation actions proposed in the 2019 Capitol Region Natural Hazards Mitigation Plan Update and determined the status of each. That information is included in the table below.

Table 16-3: Status of Previous Mitigation Strategies and Actions, Granby

| No. | Action  | Notes   | 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<br>Forward<br>with<br>Revisions |
| 2   | Develop the Town's social media<br>presence and utilize that media to<br>improve public communication about<br>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<br>Forward<br>with<br>Revisions |
| 3   | Update the Town website to include up-<br>to-date information about natural<br>hazards.   | The town has recently revamped the website. Perhaps combine this action with #2.  | Carry<br>Forward<br>with<br>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 be coordinated with Inland Wetlands Commission.   | Carry<br>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/Re<br>tire                   |
| 6   | Develop and implement timber<br>management program for town-owned<br>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 townowned 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<br>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<br>Forward<br>with<br>Revisions |

| No.  | Action   | Notes  | Status                    |
|------|--|--|---------------------------|
|      |  | The EOC now has a new computer and monitor to  | Carry                     |
|      |  | replace the old projector. The communication system  | Forward                   |
|      |  | still needs work, and needs to upgrade from a radio  | with<br>Revisions         |
|      | Replace analog communication system  | system (estimated cost \$4 million). Perhaps make this its own action. The EOC is in the police department, but  | Revisions                 |
| 8    | and acquire new computers for the EOC.                                       | the police chief has noted that the facility might be at   |                           |
|      | and asquire new comparent for the rec  | 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                                    | This is complete. This was an in-kind replacement, not   | Complete/Re               |
|      | Street Bridge. Conduct outreach to local small                               | an up-size. This likely did not happen, and this action can be   | tire<br>No longer         |
|      | businesses with the aim of preventing  | marked as Completed because the need is not apparent   | needed/Retir              |
|      | the accidental release and pollution from                                    | in Granby.   | e                         |
| 10   | chemicals stored and used at their   | ·  |                           |
|      | facilities during or following natural                                       |  |                           |
|      | hazard events.   |  | 0 1 . /5                  |
|      | Coordinate with NEMO and CRCOG to<br>share resources and gain technical      | The town is part of MS4 and has this very well handled.  This action can be removed.   | Complete/Re<br>tire       |
|      | support for hazard mitigation actions  | This action can be removed.  | tile                      |
| 11   | involving stormwater management and  |  |                           |
|      | public outreach, which have parallel   |  |                           |
|      | benefits related to MS4 stormwater   |  |                           |
|      | permit compliance.   | The state of the s |                           |
|      | Pursue opportunities, including MOUs and CRCOG's service sharing initiative, | This can be removed, as the CRCOG initiative is no   | No longer<br>needed/Retir |
|      | for service and equipment sharing with                                       | longer active.   | e                         |
| 12   | neighboring communities. Specifically,                                       |  | C                         |
|      | the Fire Department needs access to a  |  |                           |
|      | utility vehicle.   |  |                           |
| 13   | Establish ordinance to prevent road  | There is still no ordinance. This can be removed, given the snow removal discussion above for action #1.   | No longer<br>needed/Retir |
| 13   | obstruction due to illegal snow removal.                                     | the show removal discussion above for action #1.   | e                         |
|      |  | There is no regulation, and this remains at the fire   | No longer                 |
| 14   | Draft a regulation requiring dry hydrant                                     | marshal's discretion to encourage the developer. This  | needed/Retir              |
|      | installation in new developments.  | allows the decision to be made case-by-case, which is  | е                         |
|      |  | the town's preference. This should be addressed within the timber  | Carry                     |
|      |  | management plan/program referenced in Action #6.   | Forward                   |
|      |  | Needs to be clear that the Tree Warden does not go on  | with                      |
|      | Conduct outreach to promote timber   | anybody's private property. The ordinances should not  | Revisions                 |
| 15   | management planning with major   | change, and any messaging should be completely   |                           |
|      | landholders.   | voluntary. More holistic forestry management is  |                           |
|      |  | needed, with clear distinctions between what is in the<br>Tree Warden/town's jurisdiction and what is not.   |                           |
|      |  | Revised/combined with actions 6/7 above.   |                           |
|      | Pursue MOUs with local vendors on an   | This is complete and now is a capability.  | Complete/Re               |
| 16   | annual basis to provide assistance during                                    |  | tire                      |
|      | and following storms.  |  |                           |
| 17   | Annually evaluate and update training  | The town staff feel that the training is important but   | Carry                     |
| 17   | protocols, particularly in relation to flooding.                             | merge with action below.   | Forward                   |
|      | Participate in EMI courses or the  | This can be merged with #17.   | Carry                     |
| 18   | seminars and annual conference held by                                       | Ĭ  | Forward                   |
| - 18 | the Connecticut Association of Flood   |  | with                      |
|      | Managers.  |  | Revisions                 |

| No. | Action  | Notes  | Status              |
|-----|---|--|---------------------|
|     | Evaluate and update the stormwater  | This is complete and part of MS4 so it doesn't make  | Complete/Re         |
| 19  | management plan to state requirements.  | sense to have it as a separate action. The town uses a consultant for assistance.                            | tire                |
|     |   | This can be removed, consistent with above discussions   | No longer           |
| 20  | Conduct outreach efforts to prevent road obstruction due to illegal snow removal. | about snow risks decreasing  | needed/Retir        |
|     | _   | This is a second like.   | e<br>Complete /Bo   |
|     | Evaluate and update the zoning, subdivision and wetland regulations to            | This is a capability.  | Complete/Re<br>tire |
| 21  | ensure they limit exposure to natural   |  | t c                 |
|     | hazards.  |  |                     |
|     | Conduct a wildfire vulnerability and needs assessment to guide construction       | This can be incorporated into the forestry/timber management plan action. The town has had some small        | Carry<br>Forward    |
| 22  | of additional dry hydrants and/or   | brush fires, maybe an acre at most.  | with                |
|     | cisterns and fire roads through forested  | , ,  | Revisions           |
|     | areas.  | The terms of CIC completition are protein and  | Campulata/Da        |
| 23  | Update GIS technology to coordinate and prioritize response.                      | The town's GIS capabilities are pretty good.   | Complete/Re<br>tire |
|     | Contact the owners of Repetitive Loss   | Granby has one RLP.  | Carry               |
|     | Properties and nearby properties at risk  |  | Forward             |
| 24  | to inquire about mitigation undertaken<br>and suggest options for mitigating      |  |                     |
|     | flooding in those areas. This should be   |  |                     |
|     | accomplished with a letter directly   |  |                     |
|     | mailed to each property owner.  Generate a list of priority bridge, culvert,      | Bridges are inspected regularly by the state or by the   | Carny               |
|     | and other drainage projects identified in   | town (depending on the size of the bridge). The town   | Carry<br>Forward    |
|     | the Capital Improvement Plan to be  | keeps track of the bridges in need of repairs—the  | with                |
|     | included as individual actions in the next  | bridge on Doherty Road is an example of a bridge in  | Revisions           |
| 25  | HMP update.   | need of repair/replacement There is a pedestrian<br>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.   |                     |
|     | Complete an analysis of costs and   | There are very few homeowners in Granby who have   | No longer           |
| 26  | benefits of joining the FEMA Community  | flood insurance, and the town does not have the staff time to work on this. Joining the program would not be | needed/Retir<br>e   |
|     | Rating System.  | cost effective.  | C                   |
|     | Coordinate with CT SHPO to conduct  | Revise this to something like "Request and use the new   | Carry               |
|     | outreach to historic property owners to educate them on methods of retrofitting   | SHPO data on historic resources to identify resources at risk."  | Forward<br>with     |
| 27  | their properties to be more hazard-   |  | Revisions           |
|     | resilient while maintaining historic  |  |                     |
|     | character. Coordinate with CT SHPO to conduct                                     | Combine with the previous action. The town has no  | Carry               |
|     | historic resource surveys, focusing on  | other plans to look for historic structures.   | Forward             |
|     | areas within natural hazard risk zones  |  | with                |
|     | (such as flood or wildfire hazard zones and areas near steep slopes), to support  |  | Revisions           |
| 20  | identification of vulnerable historic   |  |                     |
| 28  | 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.  |  |                     |

| No. | Action  | Notes  | Status                                |
|-----|---|--|---------------------------------------|
| 29  | Create a long-range plan for relocating<br>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 replacement project is underway—the project was put out to bid and a contractor selected. 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<br>Forward<br>with<br>Revisions |
| 30  | Purchase large wood chipper and new utility vehicle.                        | But the fire department might still be looking for an RTV, and this could be its own action.   | Complete/Re<br>tire                   |

# 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 16-4: Active Mitigation Strategies and Actions, Granby

| Number | Hazard Mitigation and<br>Climate Adaptation<br>Actions   | Hazard Mitigation and<br>Climate Adaptation<br>Goal  | Type of Action                          | Responsible<br>Department | Approx.<br>Cost Range   | Potential<br>Funding<br>Sources   | Timeframe            | Priority | Hazard(s)                             | EIJ | PERISTS<br>Score | STAPLEE<br>Score | PERSISTS x<br>STAPLEE = |
|--------|--|--|---|---------------------------|-------------------------|-----------------------------------|----------------------|----------|---------------------------------------|-----|------------------|------------------|-------------------------|
| GR1    | Create a long-range plan for relocating or flood-proofing the sewer pumping stations.  | Ensure that critical facilities are resilient, with special attention to shelters and cooling centers. | Preparedness<br>& Emergency<br>Response | Public Works              | >\$1M                   | CWSRF;<br>FEMA<br>HMA;<br>STEAP   | 01/2026 -<br>12/2026 | High     | Riverin<br>e and<br>Pluvial<br>Floods | No  | 18               | 2                | 36                      |
| GR2    | Acquire generators or upgrade existing generator for critical facilities.  | Ensure that critical facilities are resilient, with special attention to shelters and cooling centers. | Preparedness<br>& Emergency<br>Response | Emergency<br>Management   | \$50,000 -<br>\$100,000 | FEMA<br>HMA;<br>STEAP             | 07/2024 -<br>06/2025 | High     | All<br>Hazards                        | No  | 19               | 5                | 95                      |
| GR3    | Determine additional access/egress routes to access the animal shelter which can be compromised due to flooding or consider a new location for the animal shelter. | Ensure that critical facilities are resilient, with special attention to shelters and cooling centers. | Preparedness<br>& Emergency<br>Response | Emergency<br>Management   | \$10,000 -<br>\$50,000  | Municipal<br>CIP Budget           | 07/2025 -<br>06/2027 | High     | All<br>Hazards                        | No  | 18               | 5                | 90                      |
| GR4    | Review ice removal policy for emergency situations and adopt a policy that will limit road obstruction and be cost effective.                                      | Reduce losses from other hazards.  | More than one type                      | Emergency<br>Management   | \$0-\$10,000            | Municipal<br>Operating<br>Budget  | 01/2026 -<br>12/2026 | Low      | Severe<br>Winter<br>Storms            | No  | 18               | 8                | 144                     |
| GR5    | 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<br>& Emergency<br>Response | Emergency<br>Management   | \$10,000 -<br>\$50,000  | Transit; IIJA<br>BBFP             | 07/2024 -<br>06/2026 | High     | Extrem<br>e Heat                      | No  | 19               | 3                | 57                      |
| GR6    | Replace analog communication system for the EOC.   | Ensure that critical facilities are resilient, with special attention                                  | Preparedness<br>& Emergency<br>Response | Public Works              | \$50,000 -<br>\$100,000 | STEAP;<br>Municipal<br>CIP Budget | 07/2025 -<br>06/2026 | High     | All<br>Hazards                        | No  | 18               | 4                | 72                      |

| Number | Hazard Mitigation and<br>Climate Adaptation<br>Actions   | Hazard Mitigation and<br>Climate Adaptation<br>Goal   | Type of Action                          | Responsible<br>Department | Approx.<br>Cost Range   | Potential<br>Funding<br>Sources  | Timeframe            | Priority   | Hazard(s)   | EJ? | PERISTS<br>Score | STAPLEE<br>Score | PERSISTS x<br>STAPLEE = |
|--------|--|---|---|---------------------------|-------------------------|----------------------------------|----------------------|------------|---|-----|------------------|------------------|-------------------------|
|        |  | to shelters and cooling centers.  |   |                           |                         |                                  |                      |            |   |     |                  |                  |                         |
| GR7    | Fortify the EOC at the Police Department by retrofitting it with safety glass windows to mitigate the risk of wind damage and tree-related hazards.  | Ensure that critical facilities are resilient, with special attention to shelters and cooling centers.  | Preparedness<br>& Emergency<br>Response | Emergency<br>Management   | \$50,000 -<br>\$100,000 | Municipal<br>CIP Budget          | 07/2025 -<br>06/2027 | High       | Hurrica<br>nes and<br>Tropical<br>Storms/<br>Tornad<br>oes and<br>High<br>Winds | No  | 18               | 4                | 72                      |
| GR8    | Develop a standard operating procedure to address trees that fall into streams and block bridges and culverts.   | Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods. | Prevention                              | Public Works              | \$0-\$10,000            | Municipal<br>Operating<br>Budget | 1/2025 -<br>12/2015  | Mediu<br>m | Tornad<br>oes and<br>High<br>Winds  | No  | 18               | 7                | 126                     |
| GR9    | Develop and implement timber management program for town-owned property and Increase local budget for tree trimming. The plan should include a wildfire vulnerability and needs assessment to guide construction of additional dry hydrants and/or cisterns and fire roads through forested areas as well as a guide with distinctions between what is in the Tree Warden/town's jurisdiction and what is not. | Reduce losses from other hazards.   | Prevention                              | Fire<br>Department        | \$10,000 -<br>\$50,000  | Municipal<br>Operating<br>Budget | 07/2026 -<br>06/2028 | High       | Wildfire<br>s   | No  | 19               | 5                | 95                      |
| GR10   | Generate a town wide forestry management plan.   | Reduce losses from other hazards.   | Prevention                              | Fire<br>Department        | \$10,000 -<br>\$50,000  | Municipal<br>Operating<br>Budget | 01/2026 -<br>12/2027 | High       | Wildfire<br>s   | No  | 19               | 5                | 95                      |

| Number | Hazard Mitigation and<br>Climate Adaptation<br>Actions   | Hazard Mitigation and<br>Climate Adaptation<br>Goal   | Type of Action                            | Responsible<br>Department | Approx.<br>Cost Range  | Potential<br>Funding<br>Sources    | Timeframe  | Priority   | Hazard(s)   | EJ? | PERISTS<br>Score | STAPLEE<br>Score | PERSISTS x<br>STAPLEE = |
|--------|--|---|---|---------------------------|------------------------|------------------------------------|--|------------|---|-----|------------------|------------------|-------------------------|
| GR11   | Make progress with priority<br>bridge, culvert, and other<br>drainage projects identified<br>in the Capital Improvement<br>Plan.   | Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods. | Structural<br>Project                     | Public Works              | >\$1M                  | LOTCIP; IIJA<br>AOP, BIP;<br>STEAP | 07/2025 -<br>06/2027                               | Mediu<br>m | Riverin<br>e and<br>Pluvial<br>Floods                 | No  | 18               | 4                | 72                      |
| GR12   | 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 &<br>Wastewater<br>Utility Projects | Planning                  | \$0-\$10,000           | DWSRF;<br>FEMA<br>HMA;<br>STEAP    | 07/2025 -<br>06/2026                               | High       | Riverin<br>e and<br>Pluvial<br>Floods/<br>Drough<br>t | No  | 19               | 10               | 190                     |
| GR13   | Expand public water<br>systems to areas served by<br>private wells when needed<br>to address drought impacts<br>and provide fire protection  | Reduce losses from other hazards.   | Water &<br>Wastewater<br>Utility Projects | Fire<br>Department        | >\$1M                  | DWSRF;<br>FEMA<br>HMA;<br>STEAP    | 07/2026 -<br>06/2028                               | High       | Drough<br>t/Wildfi<br>re                              | No  | 19               | 8                | 152                     |
| GR14   | 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<br>Project                     | Public Works              | \$10,000 -<br>\$50,000 | DCRF;<br>Municipal<br>CIP Budget   | 07/2025 -<br>06/2027                               | Mediu<br>m | Riverin<br>e and<br>Pluvial<br>Floods                 | No  | 18               | 6                | 108                     |
| GR15   | Annually evaluate and update training protocols, particularly in relation to flooding. Participate in EMI and DEMHS courses or the seminars and annual conference held by CIRCA and the Connecticut Association of Flood Managers. | Reduce flood and erosion risks by reducing vulnerabilities and consequences, even as climate change increases frequency and severity of floods. | Preparedness<br>& Emergency<br>Response   | Floodplain<br>Manager     | \$0-\$10,000           | Municipal<br>Operating<br>Budget   | 01/2025<br>and<br>annually<br>during this<br>month | Mediu<br>m | All<br>Hazards  | No  | 17               | 6                | 102                     |
| GR16   | Contact the owners of<br>Repetitive Loss Properties<br>and nearby properties at  | Reduce flood and erosion risks by reducing  | Property<br>Protection                    | Planning                  | \$0-\$10,000           | Municipal<br>Operating<br>Budget   | 01/2026 -<br>12/2026                               | High       | Riverin<br>e and                                      | No  | 19               | 7                | 133                     |

| Number | Hazard Mitigation and<br>Climate Adaptation<br>Actions   | Hazard Mitigation and<br>Climate Adaptation<br>Goal   | Type of Action                          | Responsible<br>Department | Approx.<br>Cost Range | Potential<br>Funding<br>Sources           | Timeframe            | Priority   | Hazard(s)   | E1? | PERISTS<br>Score | STAPLEE<br>Score | PERSISTS x<br>STAPLEE = |
|--------|--|---|---|---------------------------|-----------------------|---|----------------------|------------|---|-----|------------------|------------------|-------------------------|
|        | 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.              | vulnerabilities and<br>consequences, even as<br>climate change<br>increases frequency<br>and severity of floods.                                |   |                           |                       |   |                      |            | Pluvial<br>Floods   |     |                  |                  |                         |
| GR17   | 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<br>Protection                  | Planning                  | \$0-\$10,000          | SHPO;<br>Municipal<br>Operating<br>Budget | 01/2026 -<br>12/2026 | Mediu<br>m | Wildfire<br>s/Torna<br>does<br>and<br>High<br>Winds/<br>Riverin<br>e and<br>Pluvial<br>Floods | No  | 18               | 9                | 162                     |
| GR18   | Enhance hazard communication by boosting the Town's social media presence. Continue to update the Town website with current information on natural hazards for a comprehensive communication strategy. | More than one goal.   | Preparedness<br>& Emergency<br>Response | Emergency<br>Management   | \$0-\$10,000          | Municipal<br>Operating<br>Budget          | 1/2025 -<br>12/2015  | Mediu<br>m | All<br>Hazards  | No  | 17               | 7                | 119                     |

Figure 16-1: CIRCA Environmental Justice Rank and Critical Facilities, Granby

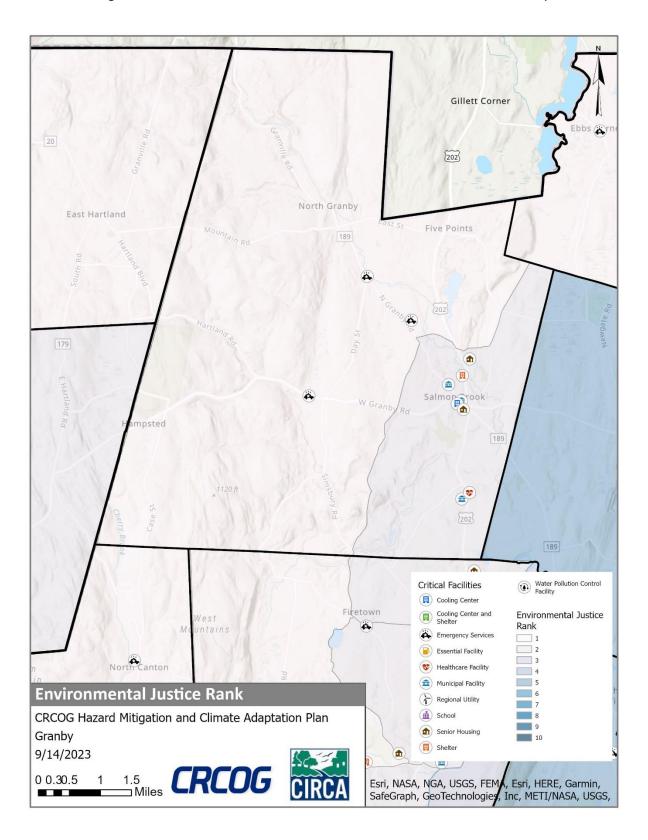


Figure 16-2: FEMA Flood Zones and Critical Facilities, Granby

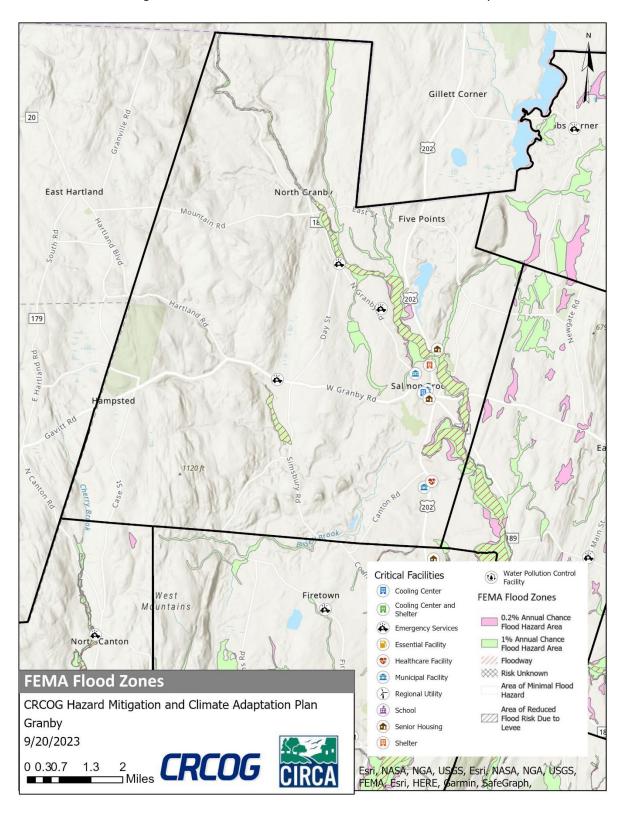


Figure 16-3: CIRCA Flood CCVI and Critical Facilities, Granby

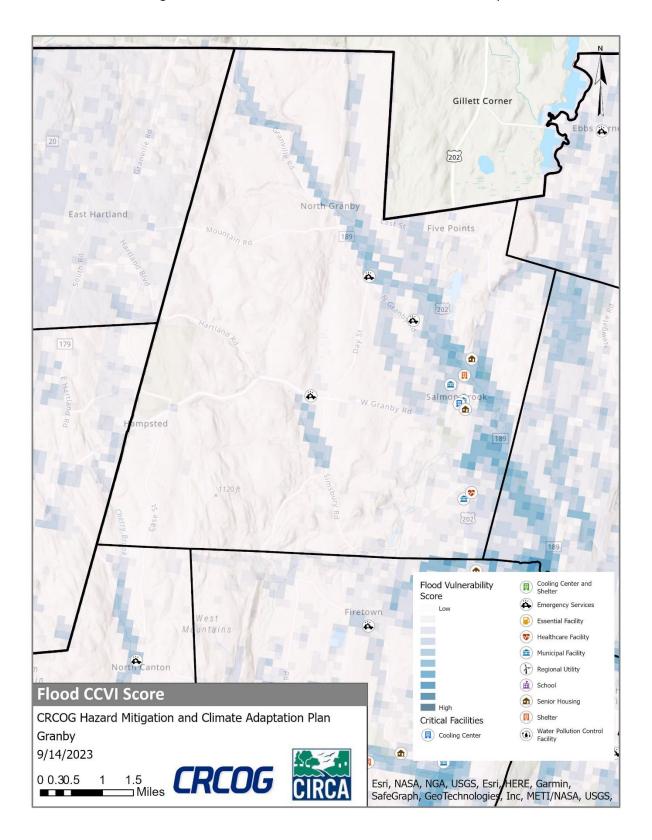


Figure 16-4: Dam Inundation Area and Critical Facilities, Granby

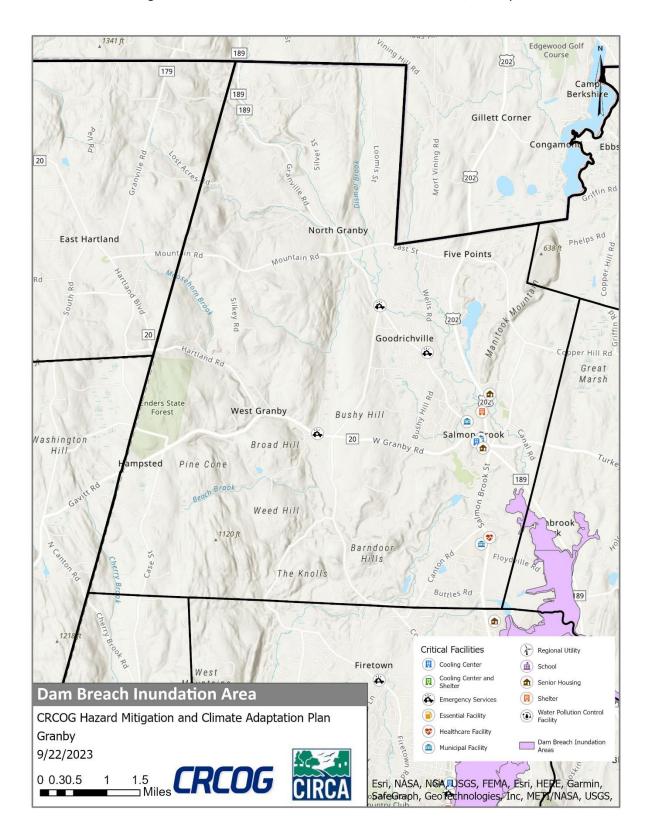


Figure 16-5: CIRCA Heat CCVI and Critical Facilities, Granby

