

Table 4-3: 2022 Heath Hazard Mitigation Prioritized Action Plan

Action Type	Action Description	Hazards Addressed	Responsible Department / Board	Estimated Cost	Potential Funding Source	Estimated Timeframe	Benefits: Society (S) Infrastructure (I) Environment (E)	2014 Priority 2022 Priority	Current Status
Critical Facilities and Infrastructure	Hire a consultant to complete an assessment of all drainage culverts and drainage systems in Town. The assessment should include an evaluation of the physical state of the culverts and GIS data to have record of where culverts are located. Based on the results of the inventory, prioritize repairs and replacements, including “right-sizing” of drainage culverts to accommodate more frequent and intense storms due to climate change.	Flooding	Highway Department	M	Town, DLTA, FRCOG’s 3C Program, MVP	Years 2-3	S, I, E	2022 High	New action item identified during the MVP workshop. Heath has already had High Risk Stream Crossings mapped by the FRCOG in 2018; this inventory would expand on that project. Rowe Road and Number Nine Road are priority areas based on recent, frequently occurring washouts after heavy precipitation events.
Critical Facilities and Infrastructure / Natural Systems Protection	Obtain funding for a Rural Roads/Dirt Road assessment to determine low maintenance, low cost climate resilient drainage and maintenance solutions on the Town’s gravel roads. Identify locations where nature based solutions would be most effective.	Flooding	Highway Department	M	Town, MVP	Years 2-3	S, I, E	2022 High	New action item identified during the MVP workshop. Drainage solutions should be prioritized on residential gravel roads so residents can safely evacuate/travel on local roadways, especially during mud season.
Critical Facilities and Infrastructure	Seek funding for the design and construction of road rehabilitation projects identified in the <i>Pavement Management Program for the Town of Heath</i> prepared by BETA Group.	Flooding	Highway Department	H	Town, Chapter 90 Funds, Mass Works	Year 0-1, to be reviewed annually for any changes or additional sites and implemented in subsequent years (Years 2-5), as appropriate.	S, I, E	2022 High	New action item identified during the MVP workshop. Sections of School House Road, Colrain Stage Road, and South Road have been overlaid, but funding is needed for other critical projects to keep roadways safe and open to residents and emergency responders during hazard events.
Critical Facilities and Infrastructure/ Natural Systems Protection	Seek funding to repair the structural issues at the Town’s Salt Shed, which is in danger of collapsing due to broken roof trusses.	Multiple Hazards	Highway Department	H	Town, MVP	Year 1	I, E	2022 High	New action item identified during MVP workshop. If the shed’s roof were to collapse, access to important materials such as road salts would be blocked off. Additionally, if a flood were to occur after a collapse the road salt could be

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									transported and pollute local surface water and groundwater supplies.
Critical Facilities and Infrastructure	Develop and implement a record management plan to digitize and/ or duplicate important records housed in the Town Hall and other town facilities to mitigate the potential loss of information from a hazard event.	Multiple Hazards	Select Board	L	Town, Pre-Disaster Mitigation Program, MVP	Year 1	S, I	2022 High	New action item identified at the MVP workshop. No Town records are digitized at the moment and are vulnerable to multiple hazards.
Local Plans and Regulations/ Natural Systems Protection	Seek funding for additional services through the Pioneer Valley Mosquito Control District, such as more extensive testing and trapping.	Vector-borne Diseases	Select Board, Conservation Commission	L	Town, MVP	Year 1	S, E	2022 High	New action identified during the MVP workshop. Through Heath's current plan with the PVMCD, they only receive one trap per season, which is not adequate for the amount of wetland cover in Heath.
Critical Facilities and Infrastructure	When updated, digitized FEMA FIRMs become available, expand and update the Vulnerability Assessment for properties located within the 100-year floodplain, including information on property and crop damages, if available.	Multiple Hazards	Planning Board, Board of Assessors	L	Town, Volunteers	Year 4	S, I	2022 High	New action item identified at the MVP workshop. Identifying properties that may be at risk of flooding damage due to climate change is a high priority.
Local Plans and Regulations	Update the Town's Floodplain Bylaw using the 2020 MA Model Floodplain Bylaw to ensure compliance with the NFIP program.	Flooding	Planning Board	L	Town, FRCOG technical assistance under the DLTA program	Year 2	S, E	2022 High	New action item.
Local Plans and Regulations/ Natural Systems Protection	Update the Town's zoning map to show the Floodplain and the Drinking Water Supply Protection Districts.	Flooding	Planning Board	L	Town, DLTA	Year 2	I	2014 High 2022 Medium	Action item description was carried over from the 2014 plan updated for the 2022 plan. No action has been taken by Planning Board to address this action item due to lack of funding and staff capacity.
Critical Facilities and Infrastructure	Identify priority areas for tree maintenance near utility lines in town and submit the list to National Grid for inclusion in its five-year action plan, which includes regular tree maintenance to reduce the number of limbs near overhead power lines, reducing the risk to infrastructure from heavy snow and ice events. Areas with a high concentration of dead, diseased, and	Multiple Hazards	Highway Department	L	Town	Year 0-1, to be reviewed annually for any changes or additional sites and implemented in	I	2022 Medium	Action item description was carried over from the 2014 plan updated for the 2022 plan.

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	poorly trimmed trees are a concern to the Fire Department in Heath. Meet annually with the utility to validate that priority areas are included in the plan.					subsequent years (Years 2-5), as appropriate.			
Local Plans and Regulations	Seek funding to hire a consultant to conduct a wildfire risk assessment to identify vulnerable areas and develop an action plan for the Fire Department.	Wildlife	Fire Department	L	Town	Year 1	S, E	2022 Medium	New action item identified during the MVP workshop. Areas near Burnt Hill/Shapiro Lands/South Side of Burnt Hill were noted to be difficult to access but the Fire Department would need to assess access routes and identify other high-risk areas.
Local Plans and Regulations/ Natural Systems Protection	Seek funding and hire a consultant to develop a regional comprehensive invasive species management from inventory stage through management planning and implementation to address existing invasive populations that threaten features such as open space or forests, both of which contribute to resiliency, as well as anticipate new invasives that are likely to move into the area as climates shift. Continue to manage the invasive plants in Town and explore alternative spraying options for Japanese knotweed. Assess biological control options for pests, including gypsy moths, and alternatives to spraying for invasives.	Invasive Species	Conservation Commission, Volunteers	M	MVP, MassWildlife Habitat Management, DCR	Year 1	E	2022 Low	New action item identified during the MVP workshop. Ideally, several towns would coordinate on this issue, as it extends beyond the borders of Heath and Heath does not have the capacity to address the issue on their own.
Local Plans and Regulations	Continue to participate in the Franklin County Regional Emergency Planning Committee (REPC), which is currently working to complete and operationalize the Debris Management Plan. Coordinate with state and regional agencies to identify a location(s) in the Town for the temporary storage of contaminated and/or hazardous flood debris.	Multiple Hazards	DPW, Franklin County REPC	L	Town	Year 0-1, to be reviewed annually and implemented in subsequent years (Years 2-5), as appropriate.	S, E	2021 Low	New action item.
Local Plans and Regulations	Support local and regional watershed-wide open space protection efforts, particularly in floodplain areas. This could be accomplished by having a representative of the Town attend any	Flooding	Planning Board, Select Board and Open Space Committee	L	Town, Volunteers	Year 2, to be reviewed annually	E	2014 Low 2022 Low	Action item description was carried over from the 2014 plan updated for the 2022 plan. Not accomplished due to the staffing

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	related meetings and convey information to relevant boards/departments in Town.					thereafter (Years 3-5)			constraints and high demands on volunteers.
Local Plans and Regulations/ Natural Systems Protection	Continue to review and update land use regulations to include climate resiliency provisions such as Best Management Practices for River Corridor areas (FRCOG's River Corridor Toolkit), further restricting or limiting new development within the 100-year floodplain and River Corridor, Low Impact Development (LID) stormwater practices, addressing pollinator habitat, etc.	Flooding, Hurricanes, Tropical Storms, Severe Thunderstorms/ Wind/ Microbursts	Planning Board, Conservation Commission	L	Town, FRCOG technical assistance under the DLTA program, Volunteers, MVP	Year 0-1, to be reviewed annually and implemented in subsequent years (Years 2-5), as appropriate	S, I, E	2014 Low 2022 Low	Related Action Items from the 2014 Plan have been consolidated and the Action Item description updated for the 2022 plan. Related Action Items not implemented due to lack of funding and staffing capacity. The town could consider requesting technical assistance from FRCOG under the DLTA program in future years (2022-2027) if the state continues to fund the program.
Local Plans and Regulations/ Natural Systems Protection	Review and amend existing land use regulations (zoning bylaws, general bylaws and subdivision regulations) as needed to include requirements that direct new development to stable slopes and soils, sets limits on land clearing to maintain stable slopes to reduce the risk of landslides, and protect existing development from potential landslides by ensuring that surface water and groundwater are properly managed.	Landslides	Planning Board	L	Town, Volunteers, FRCOG technical assistance under the DLTA program, MVP	Year 4	S, E	2014 Low 2022 Low	Action Item description has been updated and carried over from 2014 plan. No progress to date due to lack of staff capacity and funding, as well as other Town priorities.
Local Plans and Regulations	Require the review of subdivision plans by the Heath Fire Department to ensure fire trucks have adequate access and there is adequate water supply for firefighting purposes.	Wildfire	Planning Board	L	Town, FRCOG technical assistance under the DLTA program	Year 2	S, I	2014 Medium 2022 Low	Action Item description has been updated and carried over from 2014 plan. No progress to date due to lack of staff capacity and funding, as well as other Town priorities. This update could be made in concert with some of the other Zoning Bylaw recommendations listed in this section, depending on the capacity of the Planning Board.

Table 4-4: 2022 Heath Preparedness and Response Action Plan

Action Type	Action Description	Hazards Addressed	Responsible Department / Board	Estimated Cost	Potential Funding Source	Estimated Timeframe	Benefits: Society (S) Infrastructure (I) Environment (E)	2014 Priority 2021 Priority	Current Status
Local Plans and Regulation	Secure funding to train additional EMTs, as there are only two in Heath. Funding would be used to pay for residents to take EMT training and for their time.	Multiple Hazards	Emergency Management Director	L	Town, Rural Emergency Medical Services Training Grant (SAMHSA), MVP	Years 1-3	S	2022 High	New action item identified during the MVP workshop. A major concern for the Town during an extended hazard event is the lack of nearby medical services. Ensuring residents local to Heath are properly training would be an asset when ambulances cannot get to isolated areas in Heath during an emergency.
Critical Facilities and Infrastructure	Pursue public facilities upgrades that would increase resiliency, such as alleviating drainage and mold issues at the Town's Fire Department. Assess other municipal buildings for similar issues and implement mitigation efforts to prevent extensive mold issues.	Multiple Hazards	Fire Department	H	Town	Years 2-3	S, I	2022 High	New action item. The Fire Department was requested to vacate the EOC portion of the Fire Station due to mold and poor drainage. Administration and training are being held at the former Elementary School building, but it is over a mile away from the regular facility, which can hamper the Fire Department's ability to respond to winter emergencies and any long duration events.
Critical Facilities and Infrastructure	Construct additional dry hydrants in HO Cook State Forest/surrounding areas that could be used year round.	Wildfire	Fire Department	L-M	Town	Years 2-3	I, E	2022 High	New action item. Civilian Conservation Corps era fire ponds are available in the HO Cook State forest, but are only for seasonal use and have limited access.
Public Education and Outreach	Identify vulnerable populations and foster a communications network in advance of a hazard event to facilitate communication efforts and outreach to those most in need of information and assistance. Focus should be on populations that may be more vulnerable to climate-induced risks, such as extreme temperatures, that may lack appropriate shelter during increasingly intense storms, or	Multiple Hazards	Board of Heath, Council on Aging	L	Town	Year 0-1, to be reviewed annually and implemented in subsequent years (Years 2-5), as appropriate	S	2022 High	New action item. The Board of Health/Council on Aging has a practice of reaching out to known vulnerable residents to make sure they have enough medications/food ahead of a storm event, but the list needs to be updated. The COA is actively working on a new resident survey.

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	that may be unprepared if stranded or cut off from supplies due to flooding or storm events.								
Public Education and Outreach	Provide information on 'home survival kits' to residents via the Town website and the Heath Herald. Access printable materials and online information at www.ready.gov . Additionally, prepare information about emergency preparedness that will cover short-medium- and long-term actions. Prepare extra home survival kits that can be housed at the Fire Station and distributed to residents.	Multiple Hazards	Emergency Management Director	L	Town	Year 1	S	2014 High 2022 High	Action item carried over from previous plan and was updated for the 2022 HMP.
Public Education and Outreach	Utilize Community Development Block Grant (CDBG) funding for home rehabilitation work for low to moderate income households to bring existing homes up to code and to better withstand high wind events. Work with the Franklin County Housing and Redevelopment Authority (HRA) to develop and distribute a brochure to publicize the program at the Town Hall, public events, through tax mailings, and on the Town website.	Multiple Hazards	Select Board, FCRHRA	L	Town	Annual	S, I	2014 High 2022 High	Action item carried over from previous plan and was updated for the 2022 HMP. The Town has an agreement with the HRA to run the program on a yearly basis when funding is available. The Town still participates in this program.
Critical Facilities and Infrastructure	Continue to upgrade municipal buildings to make them more energy efficient. Buildings used as heating or cooling shelters should be prioritized.	Multiple Hazards	Heath Energy Advisory Committee	L	DOER Green Communities	Years 1-5	S, I	2022 High	New action identified during the MVP workshop. Weatherization and lighting work is ongoing at the former Elementary School Building.
Public Education and Outreach	Explore options for enhanced and effective emergency communication with residents. Utilize the Town's recently installed broadband internet, and increase transparency and awareness in Town. Make communications with residents more interactive. Pursue higher enrollment in the Reverse 911 Program.	Multiple Hazards	Emergency Management Director, Select Board	L	Town	Year 1	S	2022 Medium	New action item. The Town uses a Reverse 911 program, but it is generally difficult to get people to enroll in the program because there is a high rate of turnover and the Town doesn't have an easy way of reaching out.
Critical Facilities and Infrastructure	Seek funding to install a dual axis tracker solar PV system at the former Elementary School building.	Multiple Hazards	Heath Energy Advisory Committee	H	Town, MVP	Years 1-5	S, I	2022 Medium	New action identified during the MVP workshop. This project could be hooked up to battery storage at the school, which will

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									be designated as the Town's official shelter this summer. The project could make the shelter more resilient, and could provide a small revenue stream to the Town from net metering credits.
Public Education and Outreach	Formalize plans for Town sponsored emergency response activities and disseminate information to residents in the Town Newsletter.	Multiple Hazards	Emergency Management Director, Select Board	L	Town	Year 1	S	2022 Medium	New action item. Procedures to be formalized include: setting up cooling shelters, distributing water and food during an extended hazard event, and general sheltering plans.
Public Education and Outreach	Conduct more education and outreach on available weatherization, insulation, energy efficiency, and renewable energy technologies available through Mass Save and other state programs.	Extreme Temperatures	Senior Center Coordinator, Select Board, Energy Advisory Committee	L	Volunteers, Mass Save Community First Partnership	Annual	S, E	2022 Medium	New action item. The Senior Center Coordinator helps residents with weatherization, but there is generally a gap between the awareness of programs such as MassSave & residents being able to navigate the programs.
Public Education and Outreach	Conduct public education and outreach about vector-borne diseases such as Lyme disease, Anaplasmosis/Ehrlichiosis, Babesiosis, Powassan, Chikungunya, Eastern Equine Encephalitis (EEE), Zika and West Nile Virus.	Invasive Species, Extreme Temperatures	Board of Health	L	Town	Year 1	S	2021 Low	New action item identified during the MVP workshop. Tick-borne diseases are the greatest concern for the Town.

Table 4-5: Completed or Obsolete 2014 Hazard Mitigation Actions

Action Type	Action Description	Hazards Addressed	Responsible Department / Board	Estimated Cost	Potential Funding Source	Benefits: Society (S) Infrastructure (I) Environment (E)	Priority in Past Plan	Current Status
Critical Facilities and Infrastructure	To mitigate the potential for further harm to people and property, install middle mile infrastructure for broadband to the Emergency Operation Center in Heath.	Multiple Hazards	MLP	H	Town	S, I	High	Complete.
Critical Facilities and Infrastructure	Develop a formal system for departments to record costs and property damages from natural hazard events. Encourage businesses and residents to report property damages, and farmers to report crop damages.	Multiple Hazards	Town	L	Town	I	Medium	Obsolete. As of the writing of the 2022 plan, Town Departments have their own systems for recording costs, and when it is necessary to coordinate on reporting damages they do so. The current practices were deemed sufficient by Town officials.
Critical Facilities and Infrastructure	Develop and maintain a list of areas where repetitive power outages occur. Meet with National Grid to discuss potential opportunities to underground existing utility lines in priority locations on the list. Work with National Grid to identify funding sources and to develop funding applications as needed.	Wind-related Hazards	Highway Department	L	Town	I	High	Obsolete. This action item is cost prohibitive in Heath.
Critical Facilities and Infrastructure	To reduce the risk to property and infrastructure during severe winter storm events, work with the State to implement a tree maintenance and trimming program along State-owned roads. The DPW should identify any areas where tree trimming which is the responsibility of the State is not being carried out in a timely fashion and a Town Official should contact the State with the information.	Wind-related Hazards	Highway Department	L	Town	I	High	Obsolete. The Highway Department reported the utility company has their own schedule and priorities for tree trimming.
Critical Facilities and Infrastructure	To reduce the risk of flooding and damage to infrastructure, cut brush immediately surrounding bridge abutments and culverts to allow for an unobstructed flow of water.	Flooding	Highway Department	L	Utility	I	Medium	Obsolete. The Highway Department reported the Utility already clears vegetation when needed.
Local Plans & Regulations	The town should determine whether to join FEMA's Community Rating System. They can do so by weighing the benefits and costs to the community and whether they could afford to support the required CRS Coordinator position.	Flooding	Planning Board	L	Town	S, I	High	Obsolete. This Action Item is cost prohibitive for communities in Franklin County.
Critical Facilities and Infrastructure	Obtain inundation area maps for Papoose Lake (located within privately-owned Mohawk Estates) and distribute materials to appropriate municipal officials.	Dam Failure	Mohawk Estates Board of Directors, Conservation Commission, EMD	L	Mohawk Estates	S, I, E	High	Complete.

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Critical Facilities and Infrastructure	Develop emergency action plans for the Papoose Lake Upper Dam. Review the emergency action plans annually.	Dam Failure	Mohawk Estates Board of Directors, Conservation Commission, EMD	L	Mohawk Estates	S, I, E	High	Complete.
Critical Facilities and Infrastructure	To reduce the risk to public safety and infrastructure, identify the locations of beaver dams in Heath and neighboring towns that have the potential to flood private property and town infrastructure if the dams were to fail. Map potential inundation areas associated with beaver dams in and adjacent to Heath.	Dam Failure	EMD, Conservation Commission	L	Town	E	High	Obsolete. The Town reported there haven't been any substantial issues related to beaver dams and flooding in Heath.
Critical Facilities and Infrastructure	Seek funding and technical assistance to review municipal buildings and structures to determine if they are particularly vulnerable to earthquake damage and determine if any retrofitting measures could mitigate this vulnerability.	Earthquakes	Building Inspector	L	Town	S, I	Low	Complete. The Town's sheltering facilities were deemed to be structurally sufficient. Additionally, the Select Board has a list of needed capital upgrades and is working on securing funding for the work.
Local Plans & Regulations	Compile a list of the types, quantities and method of on-site storage of agricultural chemicals used by the farms in Heath. This information could assist first responders in being adequately prepared to protect human health and prevent contamination of the environment in the event of a major spill or other accidental release of hazardous materials.	Manmade Hazards	EMD	L	Town	S, E	Medium	Obsolete. There are no longer enough active farms in Heath for on-site storage of agricultural chemicals to be of concern to Town Officials.
Local Plans & Regulations	Develop an evacuation plan and notification system in the event of a chemical spill in a fixed structure or on Route 8A.	Manmade Hazards	EMD	L	Town	S, I	Low	Complete. In the event of such an accident, the EMD would coordinate with Shelburne Control and send information to residents via the Reverse 911 system.
Critical Facilities and Infrastructure	Assess the Heath Elementary School suitability as a shelter by validating that is earthquake resistant and has sufficient back-up utility service in the event of primary power failure.	Multiple Hazards	EMD	M	Town	S, I	High	Complete. The building has been determined to be earthquake resistant, and a generator will be installed during the summer of 2022.
Natural Systems Protection	Conduct regular monitoring of brooks and streams during the winter months, particularly in areas prone to ice jams.	Ice Jams	Highway Department	L	Town	I, E	Low	Obsolete. The Highway Department regularly does this, but there aren't areas in Heath that are prone to severe ice jams as winters are not as cold as they used to be.