

Community Resilience Building Risk Matrix



www.CommunityResilienceBuilding.org

Top Priority Hazards (tornado, floods, wildfire, hurricanes, earthquake, drought, sea level rise, heat wave, etc.)

H-M-L priority for action over the **S**hort or **L**ong term (and **O**ngoing)

V = Vulnerability **S** = Strength

Category	Features	Location	Ownership	V or S	Flooding	Wind	Heat & Drought	Responsible Dept./Organization	Priority	Time
									H - M - L	Short Long Ongoing
	Infrastructural									
Emergency Response	Senior Center Cooling Center	Downtown	Public	S			Clarify location + publicize	Board of Health Senior Center Emergency Mgmt.	H	S
Emergency Response	National Guard Armory	Specific	Public	S	Improve communication; identify proper chain of command/point of contact				H	O
Emergency Response	Emergency Generators @Town Hall, Sr. Center, Fire Station	Multiple	Public	S	Continue to use in case of need				L	S
Emergency Response	Disaster Sirens	Multiple	Public	S	Conduct testing + implementation				L	O
Emergency Response	Baystate Mary Lane	Downtown	Nonprofit	V/S	Create Evacuation Plan Use hospital during emergencies Use as refuge + heliport	Main campus sound (siren) Use as refuge/shelter			H	O
Emergency Response	Fire Station	Downtown	Public	V/S	Use as remote station for emergency vehicles				M	O
Infrastructure Safety	Upper Church Bridge	Specific	Public	V	Widen bridge				H	S
Infrastructure Safety	Upper Church Pump Station	Specific	Public	V	Relocate out of floodplain				H	S
Infrastructure Safety	Bridges (MassDOT + Other)	Multiple	Public/ Private	V	Continue monitoring & state inspections				H	L/O
Infrastructure Safety	Quabbin Reservoir Dams	Multiple	Public/ Private	V	Coordinate with DCR to plan solutions for breaches			DCR Emergency Mgmt.	H	S
Infrastructure Safety	Cell Phone Towers	Multiple	Public	V	Increase in number + design for high winds				L	O
Infrastructure Safety	Propane Facility near Elec. Grid Substation (Rte 32)	Specific	Private	V	Establish communication regarding potential for hazards				M	O
Infrastructure Safety	South St + Church St Flooding	Downtown	Public	V	Raise road (Church St) Drainage maintenance (South St)	Tree cutback		DPW Tree Warden	H	L
Infrastructure Safety	Low Hazard Dams, channels, levees	Downtown	Public/ Private	V	Annual inspection + maintenance			Emergency Mgmt. DPW	H	O
Infrastructure Safety	Flood Levees + Pumps	Multiple	Public/ Private	V/S	Maintenance + upgrades to system to protect downtown Ensure available portable generators for pumps			DPW DCR (Quabbin Res.)	H	O
Infrastructure Safety	Rail Trail	Multiple	Public	S	Implement flood protections	Remove downed trees			M	O

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Category	Features	Location	Ownership	V or S					H - M - L	Short Long Ongoing
Power, Sewerage and Water Supply	Hydropower	Downtown	Private	S	Consider acquiring to protect public utilities, increase sources of power + revenue				M	O
Power, Sewerage and Water Supply	Water Supply	Upper Church	Public	V	Maintenance + protection of supply		Maintenance + protection of supply	DPW Planning & CD East Quabbin Land Trust (EQLT)	H	O
Power, Sewerage and Water Supply	Town Wells in Floodplains	Multiple	Public	V	Expand water infrastructure to avoid contamination (check flood protection options)			DPW MCRA (water use agreement in case of need)	M	L
Power, Sewerage and Water Supply/Social Capacity	Town Wells in Floodplains	Multiple	Public	V			Raise awareness of low-interest loans for wells Plan for loan non-qualifiers		M	L
Power, Sewerage and Water Supply	Sewage System	Multiple	Public	V	Maintenance + expansion of sewer lines		Conduct aquifer mgmt., use restrictions	DPW	M	O
Power, Sewerage and Water Supply	Microgrid	Multiple	Public	S	Consider implementation				L	L
Power, Sewerage and Water Supply	Satellite Elec. Substations for Parking Lot Solar	Multiple	Public	S	Consider implementation				L	L
Power, Sewerage and Water Supply	Solar shading for Car Ports	Multiple	Public/Private	S	Consider implementation				H	S
Power, Sewerage and Water Supply	Public Safety Substations	Multiple	Public	S	Consider implementation				L	L
Town Design Components	Bike Path System	Multiple	Public/ Private	S	Improve with public/private funds to increase use, request state funds				L	L/O
Town Design Components	Transportation Improvement Grant - Complete Streets	Downtown	Public	S	Continue + expand implementation			Planning	H	S
Town Design Components	Commercial Strip/Downtown	Multiple	Private	V/S	Require rain gardens for new developments Move school bus storage out of floodplain		Redesign + revitalize Main St to draw visitors Focus on walkable downtown (parking garage) Combine beautification w/ sustainability	Planning DPW	M	O
Societal										
Emergency Response	Alert System/Code Red (reverse 911)	N/A	Public	S	Create system of cell/email alerts targeted by demographic use of cell/email Publicize more broadly + add cell phones; relocate placement of signup on town website			Town Manager Emergency Mgmt.	H	S
Emergency Response	Poverty/Income/Female Headed Households/Elderly	Downtown	N/A	V	Conduct emergency response planning between Highland + Hillside Apts., Ware Housing Auth., Sr. Center					
Emergency Response	Public Transportation (& Quaboag Connector)	Multiple	Private	V/S	Use school bus + Quaboag Connector to evacuate/transport vulnerable pop. to shelters/cooling centers; reverse 911 calls to carless residents			PVTA Quaboag Valley CDC Town Manager Board of Selectmen Planning	H	S

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Emergency Response	Low Income Housing (Hillside, Highland, South Str, Valley Views)	Downtown	Private/ Public	V	Use 2 exits from connector road at Valley Views				H	O
Emergency Response	Trailer Parks (Upper North St & Munson Turnpike Rd)	Multiple	Public/ Private	V	North: Use as shelters, emergency communication; reinforce waterways Munson: Improve tree mgmt	Ensure trailers are anchored (for new trailers only?)	Have cooling center equipped for large #s of people; use portable generators to cool certain areas			
Emergency Response	Full Service Ambulance	Multiple	Private	S	Continue to use in case of need				H	S
Facilities	Council on Aging	Downtown	Public	S	Upgrade senior center					
Facilities	Low Income Housing (Hillside, Highland, South St, Valley Views)	Downtown	Private/ Public	V			Create heating/cooling centers (need new generator)		H	O
Facilities	Community Benefit Advisory Committee of Baystate members (churches, hospital, food pantry)	Downtown	Private	S	Plan agreement to provide shelter			Baystate & Board of Health Emergency Mgmt.	H	S
Food Supply/Emergency Response	Food Outlets	Multiple	Private	S	Use for access to food/water				H	O
Planning	Public Transportation	Multiple	Public	V	Address lack of availability				H	O
Planning	Public Education	N/A	Public	S	Inventory + Planning (all features + hazards)					
Planning	Emergency Response in Remote Areas	Multiple	Private	V	Create emergency plans + exit routes Utilize satellite police/fire/amb. for western Ware			Town Manager Board of Selectmen	M	L/O
Planning	Faith Community	Downtown	Nonprofit	V/S	Inventory + Planning (all features + hazards)					
Social Capacity	Hospital/BHN Social Services/Faith Comm./Sr. Ctr/Education 2 Employment/Education/Ware Adult Learning Center/Quaboag Hills Community Coalition/Substance Use Alliance	Downtown	Public/Private/ Nonprofit	S	Create regional volunteer emergency response team + wellbeing checks			Emergency Mgmt.	H	S/O
Social Capacity	Other Key Social Infrastructure + Institutions (Big Y, Walmart, Kanzaki, Lowes, Quabbin Wire, Baystate, Schools, Gas stations)	Multiple	Public/Private	S	Improve coordination/communication network					
Social Capacity	Council on Aging	Downtown	Public	S	Re-activate Are You OK? Program					
Social Capacity	Aging Population	Multiple	N/A	V	Hold sessions to encourage intergenerational communication/preparedness awareness			Senior Center Schools Faith Community	H	O

Social Capacity	Communication between Community Groups	N/A	N/A	V	Establish neighborhood networks + incentivize building relationships Improve communication between social organizations (churches, etc) and emergency facilities for use of shelters, recovery facilities during/after emergencies	Citizen-led	H	O		
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Category	Features	Location	Ownership	V or S						
Social Capacity	Elderly population outside of downtown	Rural	Private	V		Apply for Maria Hastings Trust grants for ACs			H	O
Town Policies	Low Income Housing (Hillside, Highland, South St, Valley Views)	Downtown	Private/ Public	V		Tree trimming, strategic planting			H	O
Town Policies	Low Income Housing (Hillside, Highland, South St, Valley Views)	Downtown	Private/ Public	V	Increase units, restrict development in floodplain using zoning				L	L
Town Policies	Renters/Vulnerable Housing Stock + Owners	Multiple	Private	V	Home repair + buying initiative Require home insurance					L
Town Policies	Elderly population outside of downtown	Rural	Private	V	Create beaver + stormwater mgmt plan		Tree trimming, strategic planting, road clearing		H	O
Environmental										
Emergency Response	Grenville Park + Ware River	Downtown/ Upper Church	Public	S			Use as cooling destination, adding public access		M	O
Food Supply/Emergency Response	Local Farms/Food Production	Multiple	Private	V/S	Nut/fruit tree planting	Nut/fruit tree planting	Design community gardens for heat/drought prevention			
Land Acquisition	Grenville Park + Ware River	Downtown/ Upper Church	Public	S	Land acquisition in floodplains + wetlands, areas that affect flooding, wetlands preservation			EQLT DCR Cons. Comm. Landowners	M	L
Land Acquisition	East Quabbin Land Trust	Upper Church	Private/Non-profit	S	Facilitation for land acquisition					
Power, Sewerage and Water Supply	Town Forests	Multiple	Public	S		Propose study for wind turbines			M	O
Power, Sewerage and Water Supply	Solar Projects	Multiple	Public	S	Add solar to Senior Ctr. Bldg & parking lot				H	S
Power, Sewerage and Water Supply	Quabbin Reservoir + Tributaries	Multiple	Public + Private (tributaries)	V/S	Mobilize recreational visitors to help with monitoring of resources; explore development of a pilot water resource monitoring program using drones					
Town Design Components	Mass Central Rail Trail/Ecotourism	Downtown/ Upper Church	Public + Private	S	Increase non-motorized connectivity from trail to existing and potential entry/exit points along the trail					
Town Design Components	Pennybrook Area	Specific	Public	S	Add more accessible recreation space (here and to town overall)				L	O
Town Design Components	Grenville Park	Specific	Public	S			Add spray park Open beach access across from Janine's Frostee		H	S

Town Design Components	Impervious Surfaces (esp. in floodplains)	Downtown	Public	V	Rain gardens + tree planting Consider pervious pavement	Rain gardens + tree planting	Rain gardens + tree planting Cover parking lots with solar canopies		M	S
Town Policies	Impervious Surfaces (esp. in floodplains)	Downtown	Public	V	Zoning to require/request flood mitigation					
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Town Policies	Park System	Multiple	Public	S	Promote as a town benefit + valuable space that draws visitors, provides environmental + health benefits				M	O
Town Policies	Town Forests	Multiple	Public	S	Invest in advantageous forestry (selective cutting) Incentivize responsible mgmt of private forests				M	O
Town Policies	Solar Projects	Multiple	Public	S	Conduct intensive study on deforestation impacts of solar in Town				H	S
Town Policies	Town trees (including Grenville Park)	Multiple	Public	V		Maintain growth Implement Forest Mgmt Program + undergrowth mgmt for fire mitigation		DCR Tree Warden Cons. Comm. EQLT	H	O
Town Policies	Green Communities Grant	N/A	Public	S	Install energy upgrades + implement recycling				H	O
Town Policies	Slum + Blight Designation	Multiple	Public	S	Enforce code to secure possession of properties for demolition + conversion into recreational spaces Sell lots on Main St, take lots on Aspen/Vigeant Sts				H	O
Town Policies	MassSave	N/A	N/A	S	Advertise availability				H	S
Town Policies	Rain barrel program for homeowners	Multiple	Private	S	Consider implementation				H	S
Infrastructure Safety	Millyard Area	Specific	Public/Private	V	Bring water infrastructure into compliance w/easements & CDBG funds					
Infrastructure Safety	Town Pool	Specific	Public	V			Needs repair (use Community Preservation Grant)		H	S
Infrastructure Safety	Flat Brook	Specific	Public	V	Conduct culvert study for improvements				H	S