



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

1- Extreme Precipitation (Freshwater Inland Flooding)	2- Severe Weather - Snow, Ice, Wind	3- Coastal Storm Surge	4- Extreme/Fluctuating Temperature	Drought
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Vulnerabilities (V) and/or Strengths (S)	V / S	Location	Owner	Solutions	Top Priority Hazard #				High, Medium or Low priority for action over the Short or Long term and Ongoing	
									H/M/L	S/L/O
Woodsom Farm	S/V	Woodsom Farm	Amesbury	Protect flood storage value.	1,2,3,4,5		X	X	L	O
Lake Gardner Dam	V/S	Lake Gardner	Amesbury	Assess for earthquake vulnerability.	1,2,3,4	X			M	L
NGRID Substation on Powwow River, especially retaining wall	V	Downtown Powwow River	National Grid	Assess for solutions, consider infrastructural and Nature Based Solutions, work with NGRID to plan for the future, upgrade critical facilities management process, relocate substation.	1,2,3,4	X	X	X	H/M	O
Electric Utility redundancy/availability/supply	V/S	Citywide	National Grid	Increase communication/cooperation to increase reliability, decentralize power sources, locate utilities underground, switch to alternative sources of energy.	1,2,3,4	X	X	X	H	O
Rt 95 and other roads	V/S	Rte 110, I-95, I-495, Merrill St., Elm St.	MassDOT	Work with MassDOT & abutting communities, address road flooding, improve culvert capacity.	1,2,3,4	X			M	O
Emergency routes	V	Citywide	Varying	Develop a coordinated evacuation plan.	1,2,3,4	X	X		M	O
Wastewater facility	V/S		City	Assess opportunity to discharge to location other than Merrimack River (where currently discharges), conduct outreach and education to raise awareness.	5	X		X	M	O
Culvert and stormwater drainage system/infrastructure	V	Citywide, includes Arch Brook Culvert and R St Bridge	Amesbury DPW	Promote ecological restoration. See 24 South Hampton Road notes. Bailey's Pond hydrologic study, culvert replacement and stream restoration. Conduct town-wide stormwater and culvert assessment. Look for opportunities to use LID. Prioritize co-benefits and Nature Based Solutions.	1,2,3,4,5	X	X	X	H/M	S
Pleasant Valley Road/utilities/flooding	V	Pleasant Valley Road	Amesbury	Conduct hydrologic study and project to replace undersized culverts to meet stream crossing standards. Conduct coastal storm surge study to assess medium to long-term outlook for embankment, road and property viability over the coming decades, develop Nature Based responses/solutions. Address Merrimack River embankment erosion with living shorelines solutions.	1,2,3,4,5	X	X	X	H	O/S
24 South Hampton Road	V	24 South Hampton Road		South Hampton Road hydrologic study, culvert replacement and stream restoration, including invasive species removal, near school.	1,2,4	X	X	X	M	O/S



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					#				H/M/L	S/L/O
Downtown Center/Main Street Bridge/Upper Millyard/Commercial Areas	V	Downtown & commercial areas	Amesbury	Conduct flooding and stormwater management study and then replace undersized catch basins, install raingarden, tree wells, etc. Install stormwater sidewalks, develop incentives for businesses to install green roofs and walls. Conduct study to restore and stabilize Powwow River embankments, including removal of asbestos-lined pipe that runs over and along the Powwow River. Assess opportunities to reduce impervious cover and increase tree canopy at parking lot adjacent to Upper Millyard.	1,2,3,4	X	X	X	H	O
Shelters/Assembly Areas	V	Elementary, High, Innovation High, Middle, Cashman Elementary	Amesbury	Identify/establish backup energy generation, coordinate with NGRID, conduct community engagement & outreach effort, establish accessibility programs.	1,2,4	X	X		H	S
Vulnerable populations	V	Varying	N/A	Identify/ improve understanding of socially vulnerable populations, improve communication systems, improve access to information, conduct outreach, connect vulnerable to shelters/cooling centers during emergencies.	1,2,3,4,5		X		H	O
Community outreach/Community based support service coordination	V/S	N/A	N/A	Community outreach about climate resiliency and emergency response to city leadership, citizens and stakeholders. Plan and coordinate with regional partners, as Amesbury receives water from adjacent and upstream towns in both Massachusetts and New Hampshire. Look for opportunities to coordinate flood control on regional level. Conduct outreach/education at the local level. Consider tax breaks. Leverage state and local resources to expand capacity.	1,2,3,4		X		H	S
Disaster planning, evacuation plans, Hazard Mitigation Plan, Open Space Plan, Master Plan	V	Undetermined	Amesbury	Disaster planning, evacuation plans, Hazard Mitigation Plan, Open Space Plan, Master Plan	1,2,3,4		X	X	H	S
Evaluate regulatory approaches. Conduct Zoning, Ordinances, Regulatory updates to incorporate climate resiliency.	V/S	N/A	Amesbury	Conduct a regulatory review and do community outreach and education. Integrate climate considerations into regulatory changes (Zoning, and other Ordinances, Open Space planning) Develop a floodplain overlay district. Renew and permanently protect Open Space. Find room for flood mitigation. Include Nature Based Solutions, LID, Green Infrastructure, Flood zone regulation. Update planning and develop new policies for water supply (public and private) and for sewer, favoring use of town water and sewer.	1,2,3,4	X	X	X	H	O
Golden Triangle area	V/S	Vicinity of Elm Street, Route 110, Routes 95 and 495	Various	Conduct flood storage/hydrologic study to facilitate culvert replacement so that culverts meet stream crossing standards. Undersized culverts are located under Rt 110 and under Elm Street. Develop plans for streambank and ecological restoration: invasive species removal, potential increase in flood storage capacity, stabilize streambanks.	1,2,3,4,5	X	X	X	H	O
Back River and Clark's Pond	V	Back River and Clark's Pond	Various	Develop bank and river corridor management plans and maintenance program. Deepen pond/remove silt from Clark's Pond, improve gate to allow adjustments, continue invasive species control, consider a fish ladder.	1,2,3,4	X		X	M	O

