Municipal Vulnerability Preparedness Program

Community Resilience Building Workshop

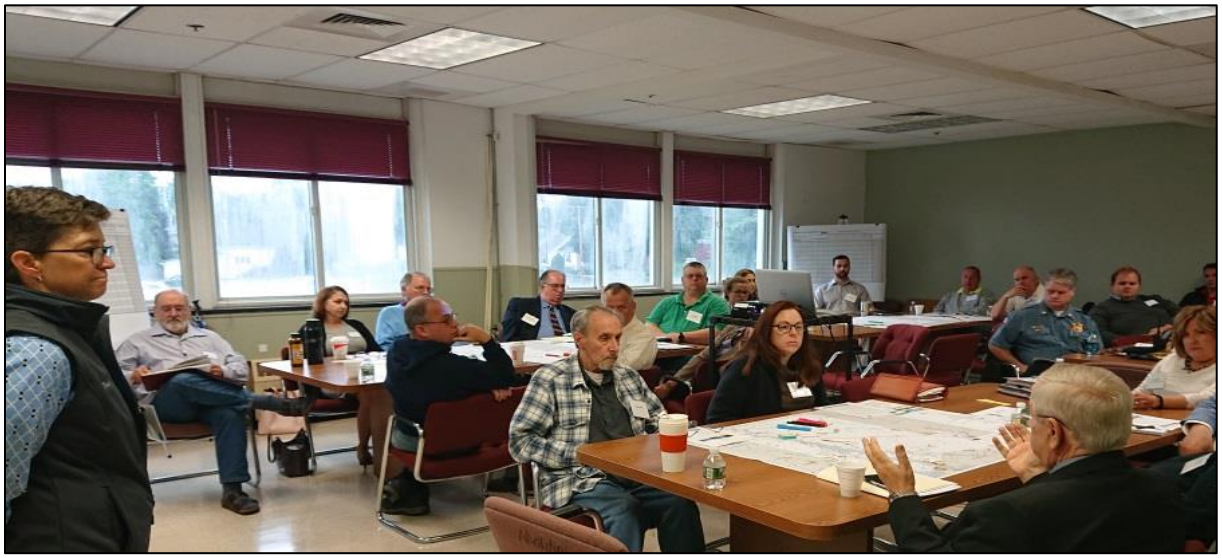
Summary of Findings for Uxbridge, Massachusetts

Town of Uxbridge and the Central
Massachusetts Regional Planning Commission

December, 2018

Contents

Workshop Summary

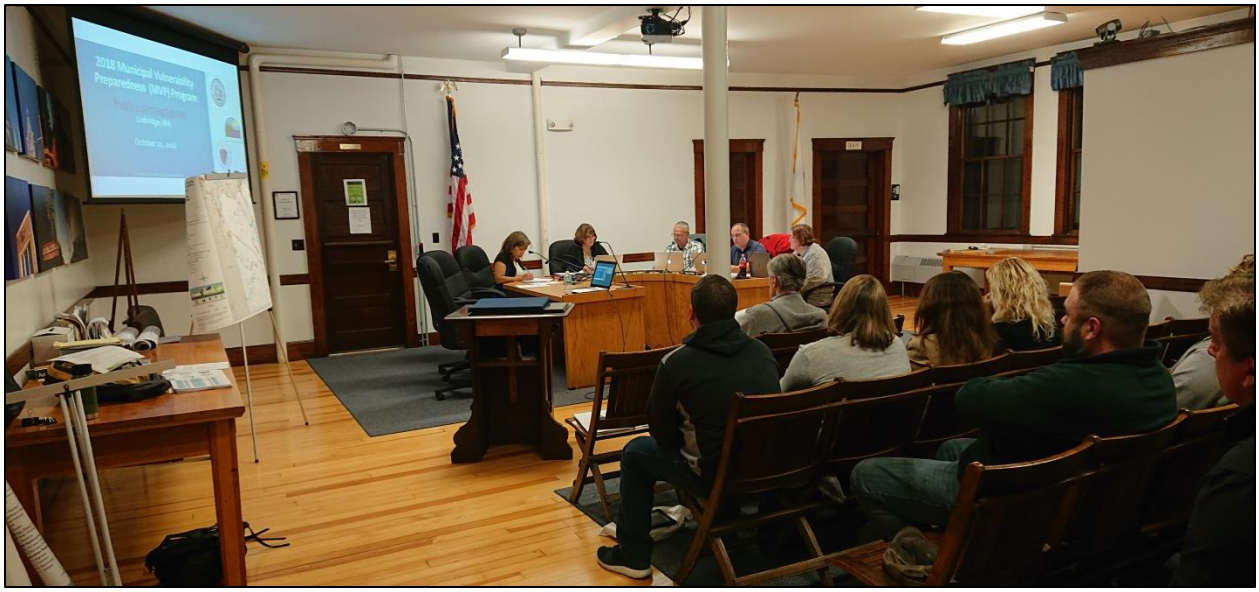


The Town of Uxbridge's Municipal Vulnerability Preparedness (MVP) workshop was held September 25, 2018 at the McCloskey Middle School. The goal of the workshop was to identify top hazards and develop strategies to enhance resiliency related to anticipated climate change. Uxbridge contracted with the Central Massachusetts Regional Planning Commission (CMRPC) to serve as the MVP provider, including completing the Community Resiliency Building (CRB) workshop. Through the CRB process stakeholders actively engaged in an ongoing discussion to determine the top hazards related to climate change that currently impact or may have the potential to impact Uxbridge. The main objectives of the workshop were to: define top local natural and climate-related hazards of concern; identify existing and future strengths and vulnerabilities; develop prioritized actions for the community; and identify immediate opportunities to collaboratively advance actions to increase resilience.

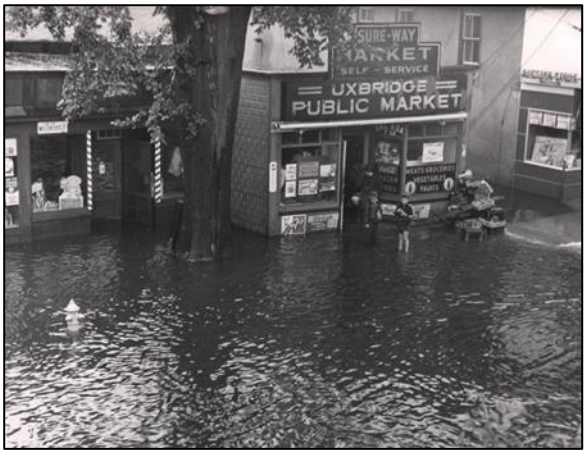
On the day of the workshop the Central Massachusetts Regional Planning Commission delivered three presentations to those in attendance. These presentations (1) provided an overview of the workshop and CRB process; (2) gave a summary of climate change projections, impacts, and mitigation strategies; and (3) provided a detailed profile of natural hazards in the Town of Uxbridge. After listening to the presentations given by CMRPC staff, workshop participants were asked to identify four climate-related hazards that impact the Town for in-depth discussion by small groups. After discussion and deliberation, participants identified the following hazards. These hazards are presented in no particular order and include: flooding; winter storms (including ice storms); droughts and wildfire; and severe storms (including hurricanes, heavy wind/rain, etc.). Having identified these hazards, workshop attendees were then broken into four groups to work through the CRB program's matrix and mapping exercise. These groups were divided so that one group discussed environmental areas of concern related

to climate change, one focused on social areas of concern related to climate change, and one focused on infrastructure areas of concern related to climate change. The fourth group included all three topics in its discussion of climate change impacts.

More than thirty people attended the MVP workshop, including representation from town government, the Core Team, CMRPC staff, environmental and economic development non-profit groups, former and candidate legislators and legislative staff members, housing providers, and Uxbridge High School students with interests in environment and climate change (scribes). A complete list of participants is included in the Appendix. Portions of the workshop were filmed by local cable as well. A public listening session to discuss MVP results and local and regional recommendations was held on October 22, 2018 in conjunction with a Board of Selectmen's meeting. Twenty three (23) people attended and the meeting was broadcast via local cable.



Top Hazards and Vulnerable Areas



Top Hazards

Following the presentations, a full-group discussion was held for approximately fifteen minutes to determine the top four hazards for breakout groups to further assess solutions. Participants were asked to develop a comprehensive list of hazards that the community has dealt with historically, currently faces, or anticipates having to face in the future due to climate change. Examples such as sea level rise, drought, and tornadoes were listed by the MVP provider to prompt discussion. After generating a comprehensive list, workshop participants were asked to collectively agree on the top four hazards impacting Uxbridge. Taking climate change projections, critical infrastructure, and other considerations into account, participants chose to focus on the following hazards. While these hazards represent the top hazards discussed at the workshop, they are presented in no particular order. These include:

- Flooding (all applicable types: riverine, stormwater runoff, and dam failure)
- Winter storms (snow, ice, and mixed precipitation)
- Droughts and wildfires
- Severe storms (hurricanes, tornadoes, thunderstorms and other damaging wind events)

Extreme weather in recent years demonstrates how the various hazards impact the town. There have been numerous flooding events over the years, and the Blackstone River and its tributaries have a large impact on stormwater drainage and downstream flooding in Uxbridge. Specific areas with critical infrastructure have been shown to be prone to flooding, thereby creating a variety of safety concerns. Winter/Ice Storms, a town wide problem each winter, are expected to be more intense, include more mixed precipitation, damaging trees, powerlines and other infrastructure.

Wildfires are expected to increase due to the impact of prolonged droughts. The drier forests and wooded areas will be more combustible in drought conditions. Drought will also likely lead to water shortages impacting the entire town whether residents or businesses are on town water or have wells. Heavy wind events are of primary concern as well. The Town and its surrounding area have experienced a recent uptick in storms with hurricane-level winds. This phenomenon can be linked in part to the previously mentioned increase in average temperature and rising precipitation rates. However, this fourth hazard focused primarily on the winds associated with these storms, leaving heavy rain events to be discussed under flooding. The workshop participants agreed that different hazards affect the town at different times of the year. Flexibility and comprehensive response by town officials is needed to ensure the safety of the citizens in different hazards situations exacerbated by climate change.

Vulnerable Areas

The vulnerabilities listed below were discussed in the workshop's breakout groups.

Properties located in the Flood Zone

Homes, businesses, and facilities located in the flood zone are at risk of increased damage due to rising precipitation rates. Specific areas include: High Street and Pleasant Street area; Howard Avenue; North Main Street; and the Sutton Street and Hartford Avenue area. The Department of Public Works facility is located within the flood zone and has flooded historically, significantly limiting the Town's ability to provide necessary services to its residents.

Transportation

Roads and bridges throughout town (especially those located in the flood zone); evacuation routes; and the railroad bridge in town center; high school access road and salt treatments.

Infrastructure

Stormwater drainage infrastructure throughout (culverts, storm drains, etc.); dams (esp. Ironstone Reservoir Dam, Whitin Pond Dam, and other privately owned dams); bridges (esp. Hecla Street Bridge); town wells; and the town information and technology system.

Populations

Seniors, low-income residents, and the disabled community are at greater risk to experiencing negative impacts resulting from climate change. Specific areas of concern include housing complexes like the Crown and Eagle, the Lydia Taft House and Uxbridge Housing Authority properties.

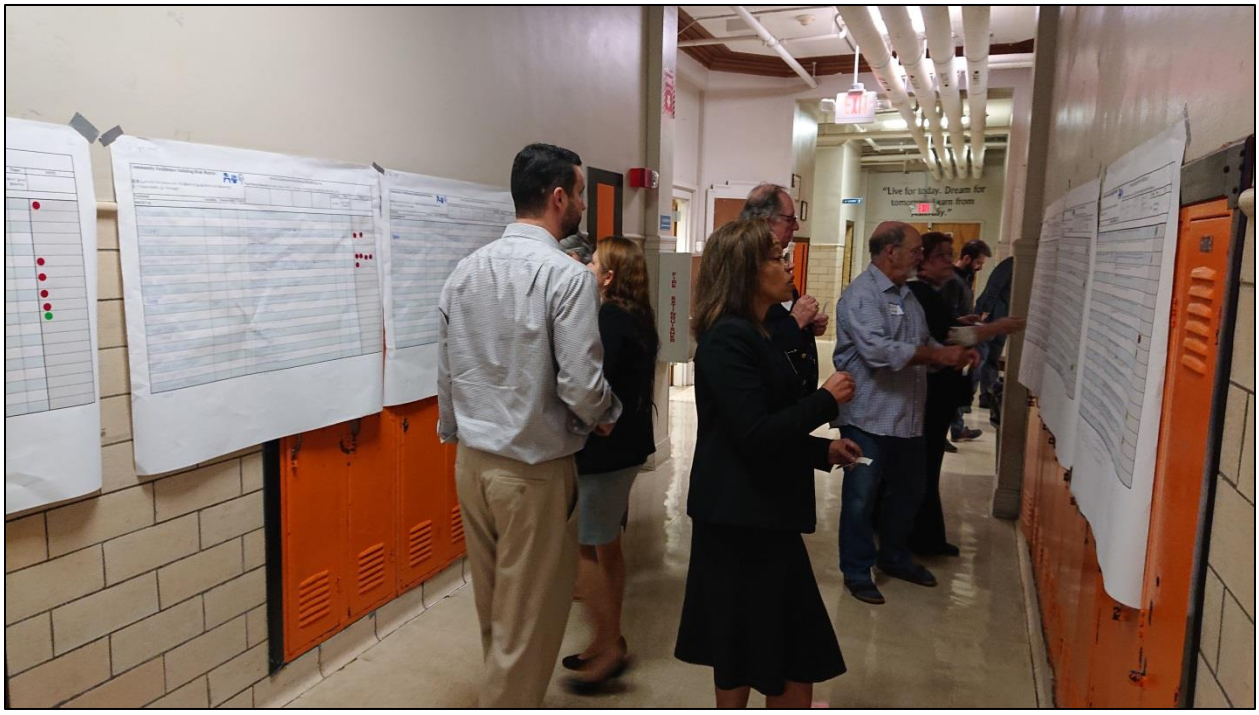
Facilities

Department of Public Works facility in the flood zone; older municipally owned buildings (Town Hall); lack of formal emergency shelters.

Natural Environment

The Blackstone River and its tributaries; pollution from Kempton Road groundwater plume; invasive species; soil erosion and habitat degradation; forested areas; and street trees.

Current Concerns and Challenges Presented by Hazards and Climate Change



CMRPC, the MVP planning provider, had the unique advantage of working on Uxbridge's hazard Mitigation plan concurrently with its MVP process. Meetings with the Core Team prior to the workshop as well as the hazard mitigation planning helped to identify past climate-related events that significantly impacted the Town. Disaster events of concern included frequent major winter storms (as in 2015 and 2018), ice storms (2008), severe rain events (2005, 2010, 2016), tropical storms (Irene, Sandy), extended drought (2015 to 2016), and infestations of invasive and otherwise undesirable species (gypsy moths, aquatic invasives, ticks). In 2018 the Blackstone Valley region experienced significant number of storms with damaging wind speeds. These storms, some of which were classified as small tornadoes, caused significant damage to the region and are indicative of the resiliency planning that is needed to address hazards.

At the workshop, CMRPC staff presented downscaled data on climate change provided by the State's Executive Office of Energy and Environment Affairs (EOEEA) and the Northeast Climate

Science Center at the University of Massachusetts, Amherst. Projections for the Blackstone River watershed show that by mid-century, annual average temperatures may increase in the range of 3 to 6 degrees from the historical baseline, hot days over 90 degrees may increase 7 to 29 days, days below freezing may fall 18 to 38 days, annual precipitation may increase 1 to 7 inches, yet seasonal drought conditions may become more frequent as precipitation becomes more concentrated in extreme intensity events and winter snowpack is reduced. Some of the challenges of these projected changes – many of which are already being observed – were discussed in a presentation at the workshop focused on specific hazards in the Uxbridge area.

Challenges highlighted in the presentations and/or discussed as a group or in the breakout groups included:

- In general, attendees expressed a concern that climate change will exacerbate problems that they are already dealing with and already lack the resources to address comprehensively – flooding and stormwater management, vulnerable roads, water and sewer capacity and resilience, ecological damage, and vulnerable populations, all within the context of a rapidly-growing community. This positive feedback loop created by climate change has the potential to have, and has already resulted in, increased risks from hazards.

- A larger number of hot and warm days may mean increased need for cooling (but less need for heating), especially among vulnerable groups such as children and seniors – this concern was elevated because of the Town's relatively limited formal shelter capacity. It is critical for the Town to identify proper means to shelter animals, too.

- Increased temperatures can also be expected to cause changes in the water cycle, leading to more intense rain events. Increased precipitation rates may lead to more frequent and severe flooding, including in areas outside of designated flood zones defined using historical data – particular in the heavily developed areas just outside the current Blackstone/Mumford/West River floodplains.

- Increased storm intensity may cause more tree damage leading to power outages and road closures, higher peak stream flows requiring new approaches to stormwater management, and increased erosion of stream banks and nearby infrastructure. Tree damage may occur from intense wind storms such as recent tornadoes or from heavy snow and ice storms.

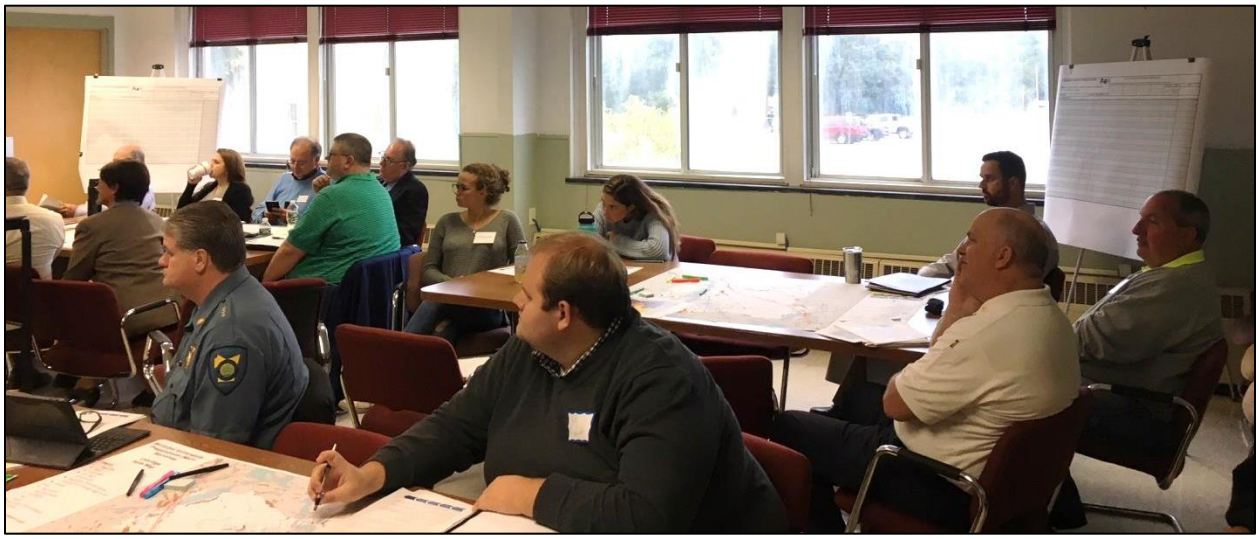
- More frequent and severe droughts may challenge water supplies and increase risks from wildfire. Increased risk of wildfire can lead to a wide-range of socioecological

outcomes including increased damage to human property and life, removal of suitable habitat space, and changes in ecosystem services made available by forest cover.

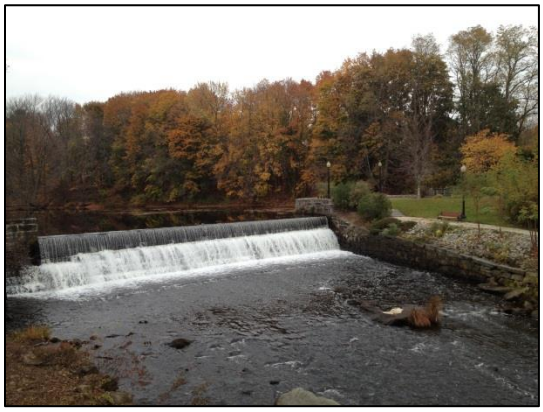
- Pests and invasive plant and animal species may impact public health through increasing numbers of disease vectors (ticks and mosquitoes) and by damaging key ecosystems such as forests and wetlands, thereby increasing wildfire and flood risks.

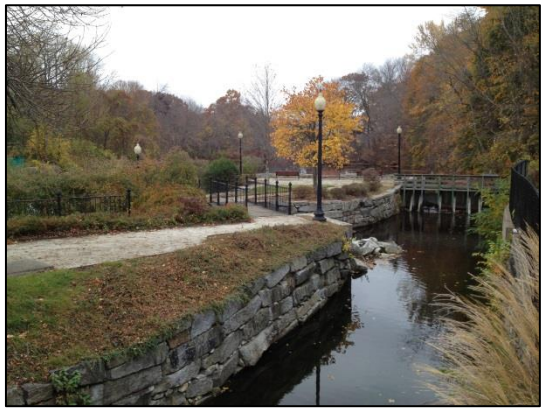
- Increased frequency of high-intensity storms may lead to increased stress on existing dams in Town. Without updated monitoring and assessment of the status of dams in Town residents and stakeholders are at risk of potential damage.

- As the climate continues to change and disasters increase in frequency and strength the need to communicate with residents, businesses, and other institutions will increase as well. Changing climate will dictate the need for enhanced communications systems and related infrastructure.



Specific Categories of Concerns and Challenges





The following topics were identified by workshop attendees as concerns or challenges related to Uxbridge's changing climate and natural hazards.

Infrastructure Topics

Communications/IT

As climate change exacerbates existing hazards and increases risk of additional damage, the Town's existing technology infrastructure will be hard pressed to meet demands. In the face of a large-scale storm event Uxbridge must be able to maintain necessary IT components to provide emergency response and (later) recovery services to residents. Workshop participants expressed concerns related to Town data storage and transfer, housing and displaying relevant information on Town webpages, and a lack of regional communication system. The vulnerability of emergency communication towers was also noted.

Shelters

Workshop participants expressed concerns related to sheltering facilities in Town. Attendees noted the fact that the Town does not currently have a Shelter Plan in place, which would provide a long-term vision for sheltering in Uxbridge as well as document necessary procedures to follow in the event of a disaster. Participants expressed concern that the Town lacks a sheltering feasibility study which might include items such as: safety codes, assessment of flooding risks, and power availability.

Town Water System

The Town of Uxbridge is served by the Uxbridge Water Division. In total there are three well fields in town and seven wells, all of which are clustered on the eastern side of Town north of Route 146. The water distribution network is also located in this area, leaving the remaining portion of Town at greater risk of experiencing drought conditions. In order to best avoid

drought conditions, the Town has partnered with adjacent Northbridge and is interconnected with its Whitinsville Water Company. This interconnection provides redundancy in drought conditions and helps to ensure the Uxbridge residents have adequate access to water. Uxbridge has also instituted a summer water use restriction policy, taking preventative action to preserve water supplies. The Town has implemented more severe restrictions during drought conditions as well. Despite these efforts, in recent years the Town has experienced events that significantly limited its water supply. In the 2015-2016 drought many residents reported low water pressure in areas outside of the town service area. In 2016 the Town experienced an outbreak of E. Coli, presumably linked to aging water supply infrastructure. This situation is exacerbated by the Kempton Road groundwater contamination plume, which potentially threatens one of the town's wellfields as well as surrounding private wells.

Drainage and Flooding

The Blackstone River and its tributaries pass through Uxbridge, leading to issues related to flooding in Town. FEMA has delineated 100 and 500 year flood zones, indicating flooding events that have a 1% or 0.2% chance of occurring each year. In total, there are 147 buildings in Uxbridge located in flood zones. These buildings are cumulatively assessed at more than $47 million. However, researchers indicate that current flood zones and their respective estimates are outdated and do not match current climate projections. As a result, there are likely many more structures at risk of flooding. The Hecla Street Bridge experiences routine flooding as do several other areas in Town. These areas include: High Street and Pleasant Street, Howard Avenue, North Main Street, and the Sutton Street and Hartford Avenue area. The Department of Public Works facility is located within the flood zone as well and has experienced flooding in recent years.

Evacuation Routes

Workshop participants expressed concern that signage may not be adequate to make evacuation routes clear to the public and that general communication to the public regarding route updates and general education surrounding evacuation routes may not be adequate.

Societal Topics

Emergency Preparedness and Communication

While generally considered a strength, there was some concern about emergency management and communications in Town. Some attendees mentioned there could be more effective communication and that the Town could expand on education and outreach programs for vulnerable populations, especially seniors and residents with pets and livestock. Workshop participants also noted a need to ensure that up-to-date information is readily available on the Town website. Participants suggested looking into expanding the existing Code Red system as well.

At Risk Populations

As the climate continues to warm residents living in designated flood zones will experience greater potential risk of damage caused by severe storm events. As indicated, currently designated FEMA flood zones likely do not accurately portray current areas prone to flooding. While the Town is a moderately wealthy community compared to Worcester County as a whole, lower income households tend to be clustered in certain areas including town center. Due to varying income levels, those households living below the town's median household income level can be expected to be more likely to lack the resources to adequately defend their homes from hazards or to recover from a disaster than when compared with those with higher incomes. Clusters of higher than town median income households tend to be located in the southern and northeastern portions of Town. Elderly populations are likely to be at greater risk to hazards as well. Seniors tend to distributed throughout Town relatively evenly with the highest concentrations occurring in the northwest area of Town where several senior housing complexes are located. Because the senior population tends to be distributed evenly, resources should be allocated and made available such that they are accessible in geographically dispersed areas, with particular attention to allocating resources to the northwest corner of Town.

Environmental Topics

Dams

The Blackstone Valley has the highest density of dams in the United States. Uxbridge alone has 14 dams located within town boundaries. These dams are owned by a variety of stakeholders. One dam is owned by the town, four dams are owned by the state, one dam is owned by the federal government, and the remaining eight are privately owned. Three of the 14 dams in Town are classified as High Hazard, indicating that there is a high risk of severe damage should a dam fail. As dam infrastructure continues to age and extreme precipitation events become more common, dams represent an increased flood risk to downstream areas in the event of a dam failure. The Ironstone Reservoir dam and the Whitin Pond Dam were indicated by workshop participants as being of particular concern. Other potentially hazardous dams include the Linwood Pond High Hazard Dam just upstream in Northbridge, and the other privately owned dams, especially the High Hazard Rivulet Village Pond.

Public Water Supply

Participants expressed similar concerns in the environmental topic in this section as they did in the "Town Water Supply, Infrastructure" section above. General concern was expressed regarding inadequate distribution of municipal water throughout town, which creates particular concern during drought conditions. Location of town wells in town was also noted as a potential limiting factor during firefighting operations – there is little rural firefighting infrastructure outside of the water service area.

Contaminated Sites

There are a number of MassDEP 21E sites located in Uxbridge at sites with historical industrial legacies. These sites pose a variety of challenges to the Town related to groundwater quality and other areas. In addition to designated 21E sites, there are a number of contaminated soil disposal sites in Uxbridge as well. These sites represent similar challenges to town officials and residents related to the environmental water quality in Town. The Kempton Road site was identified as being of particular concern and workshop participants commented on the need to continue to monitor this and other contaminated sites.

Stormwater Management

Some attendees were concerned that local and/or state regulations and policies should be strengthened to foster greater use of nature-based solutions to address existing stormwater issues. Drainage and flooding issues and areas of concern are identified in the above Infrastructure section. As mentioned, particular areas of concern in relation to flooding include bridges, culverts, and several specific neighborhoods in Town. There was a broad call for the Town to incorporate climate change challenges related to stormwater management into future strategic planning efforts. Consideration of a stormwater utility fee was proposed.

Current Strengths and Assets

Uxbridge has taken limited steps to address natural hazards and climate change over recent years. Infrastructure was considered to be a mixture of strengths and vulnerabilities. For example, flood control dams provide essential flood mitigation but pose a risk if they are not monitored properly. Societal strengths were perceived in existing volunteer networks and local government's involvement and interest in the MVP and Hazard Mitigation planning processes. Environmental strengths included forested areas and open space that provide opportunities for nature-based mitigation, as well as active support in the community for continued protection of key open spaces.

Infrastructure Strengths

- Stormwater drainage assets that generally perform adequately for current needs, but which will need improvement for the future
- Dams that help manage moderate flood risks (some also present a dam failure risk in extreme scenarios)
- Emergency communications radio sites perform well, but may be vulnerable to storms
- The Uxbridge Fire Department recently finished construction of a new facility

Societal Strengths

- Local leadership that has demonstrated its commitment to mitigating and adapting to changing natural hazards and its support for emergency preparedness
- Volunteer groups with a wide variety of skills are willing to participate in future events
- The Town has demonstrated that it would like to work with the Central Massachusetts Regional Planning Commission on future mitigation projects moving forward to address needs

Environmental Strengths

- Numerous parks and other conservation and recreation lands
- The presence of large wetlands that can help mitigate flooding, and a strong Conservation Commission backed by local by-laws to protect these areas (wetlands can also be vulnerabilities, however)

Top Recommendations to Improve Resilience

Prioritization of recommendations was achieved through four steps: 1) informal discussion at each breakout table during the workshop; 2) voting using stickers placed on the participant's table's CRB matrix (each attendee was given five stickers to select his/her top priority actions, with at least one sticker required to be used for each general topic area); 3) report-back from each table to the full audience to discuss and discern consensus priorities; and 4) final review and reconciliation of duplicates at a post-workshop Uxbridge Core Team meeting.

For the environment, the top recommendation involved working with the Office of Dam Safety to ensure that the monitoring and assessment of dams in Town is up to date; reviewing ways to improve municipal water service and quality; to monitor contaminated sites; and to encourage nature based solutions to stormwater issues. To address issues that fell into the societal category participants suggested developing an Emergency Preparedness Plan; working to provide necessary resources to at risk populations; and developing an updated website to assist with emergency communications. Meanwhile, the following emerged as the top strategies to address infrastructure related issues: develop an updated IT plan; develop and implement a shelter plan; develop new town wells to mitigate drought impacts; perform upgrades on select bridges and roadways to reduce flooding; and to review evacuation routes.

A complete list of actions broken out by category is presented here:

Environmental Actions

General Topic	Specific Topic	Summary of Actions	Priority
Environmental	Dams	Work with the Office of Dam Safety to ensure monitoring and assessment of dams in Town is complete. Actively work to educate dam owners. See "Dams" in infrastructure for additional detail.	H
Environmental	Public Water supply-Zone 1, Zone 2 and Water bodies	Continue to review groundwater regulations to improve conservation bylaw resources. Improve existing infrastructure to maintain and protect flood storage. Expand town water supply. Continue to implement water bans as necessary. Continue to promote recreational use. Consider river festival.	H

Environmental	21E Sites: poss. Contamination/aquifer	Continue to monitor the Kempton plume, monitor at risk sites for disbursement, and improve conservation bylaw resources. Asses solid dump sites and seek funding for necessary clean up. Maintain and protect flood storage areas, continue to monitor ground water quality, and develop emergency plans. Enhance coordination with railroad and bridge in Town center	H
Environmental	Storm water/treatment	Encourage nature based solutions by looking into changes to designed standards and regulations. Assess existing infrastructure. Seek local, state, and federal funds to improve stormwater infrastructure and treatment. Explore possibility of implementing a stormwater utility. Identify critical infrastructure located in floodplain	H
Environmental	Forests	Conduct tree surveys to remove dead and dying trees and look for potential pest outbreaks. Encourage tree plantings. Change zoning to increase fire buffer and enforce regulations.	L
Environmental	Mills	Monitor mill-river interface. Encourage environmentally-conscious redevelopment. Assess contamination and strategies to remove.	L
Environmental	Farms	Develop an emergency plan for livestock. Integrate planning with the fire department	L
Environmental	Open space and state parks	Seek local and federal funding to expand open space and improve wildlife/fisheries habitat, generally encourage open space development, and educate private landowners to benefits. Develop an Open Space and Recreation Plan. Continue to maintain dam infrastructure and maintain flood plain.	L
Environmental	Private septic systems/ well systems	Educate private system owners on proper maintenance techniques including water testing. Map at risk homeowners and establish system to notify them. Discuss water conservation techniques with private system owners. Expand public water supply service area. Work with utilities to minimize risk of down lines	L
Environmental	Development impacts	Improve emergency communications and means to monitor air quality. Monitor erosion that may occur due to solar field	L

		development	

Societal Actions

General Topic	Specific Topic	Summary of Actions	Priority
Societal	Emergency Preparedness Plan: lack	Develop Emergency Preparedness Plan/CEMP, a process to update citizens, and make copies accessible. Look into table top exercises and robo calls	H
Societal	Elderly Population (nursing home, Canal Way, Crown and Eagle, Lydia Taft, Low income)	Identify elderly population in most need of assistance. Seek means to provide financial assistance for cooling costs during summer months. Create education materials that can be distributed to at risk population. Integrate Fire Department with. Consider reestablishing the Community of Caring program.	H
Societal	Emergency Communication	Coordinate with stakeholders to best use website and physical signs. Work with neighboring Towns to reduce costs. Look into expanding Code Red and simplifying use	H
Societal	Financial Models/Grants	Develop strategies for new revenue streams and growth	M
Societal	Database	Develop a database with relevant information related to emergency preparedness, contact information for all town departments and shelters, and steps to activate the National Guard. Include an organized list of volunteers including people to assist with handling livestock. Create organized database of local businesses, how to best communicate with them, and materials they may be able to provide	M

Societal	Health Facility (Tri-River, CVS minute clinic) and Food pantry	Create priority zoning areas for health facilities and communicate medic education and planning with existing locations. Work to make roadways to food pantries and health facilities accessible and explore current unmet needs related to supplies and communication	L
Societal	Preschool/daycare/ schools (public and Our Lady of the Valley)	Create an organized database of parent contact information, means to contact larger daycare facilities, and means to communicate information on the Town website. Seek opportunities to ensure facilities have generators, showers, bedding, adequate parking and room for busses, and ADA access	L
Societal	Evacuation Plan – Pets and livestock	Establish means to locate vets, animal rescue homes, grooming facilities, and barns/shelters. Establish an evacuation plan with animals in mind.	L
Societal	Municipal Event Planning	Explore means to improve logistics, food distribution, and general organization. Work to improve inter-departmental communication and consider scheduling regular meetings such as Friday lunches and monthly department head meetings once per month. Hold a workshop with all departments twice per year.	L
	Housing [Low income - Blanchard, Good Shepard, VFW]; non-resident landlords; Crown and Eagle	Develop means to communicate and provide transportation needs to at risk populations. Organize group of volunteers to assist single parents. Develop means to communicate information through tax and or utility bills. Increase education outreach to tenants and landlords with specific focus to those with links to properties in flood zones. Develop mailing and contact lists for this at risk population to assist with outreach.	L
Societal	Mutual Aid Fire Emergency	Expand to non-emergency services and explore regional organization.	L

Infrastructure Actions

General Topic	Specific Topic	Summary of actions	Priority
Infrastructure	Communications	Develop an IT plan to assist interdepartmental communication. Complete short term municipal system and prepare for a regional communication system. Work to rationalize town IT centers. Hire a consultant to update Town website modeled after a 'tourist town.' Explore capabilities of Code Red system. Increase social media use as means of communication.	H
Infrastructure	Shelters	Develop and implement a shelter plan that includes private shelters (churches, Polish Hall, Italian Club, shops in mills and Town center). Conduct a feasibility study of shelters, safety codes, flooding risk, and power. Look into using community centers and motels as temporary shelters.	H
Infrastructure	Town Wells	Develop new Town wells and develop plans to mitigate potential drought risks. Look into expanding current capacity. Explore replacing aging or undersized systems such as Main Street. Develop a procedure for snow removal and updated ice treatment.	H
Infrastructure	Drainage and flooding	Consider implementing a stormwater fee. Upgrade Hecla Street Bridge to make area more resilient to flooding. Investigate and implement solutions to reduce runoff near Hecla Street Bridge. Investigate means to reduce neighborhood flooding in areas such as High Street and Pleasant Street, Howard Ave, North Main Street, and Sutton Street/Hartford Ave. Look into potential takings and FEMA funding. Coordinate future work with the TIP. Conduct an environmental assessment of brooks and culverts to improve drainage. Replace/upgrade necessary culverts. Enforce vehicle weight limits. Encourage nature based solutions	H
Infrastructure	Evacuation Routes	Review and update routes, education, and communications. Make routes clear to the public	H
Infrastructure	Dams	Inventory, ownership; Coordinate w/ owners & ODS to monitor maintenance; See Dams in environmental section for additional detail.	M

Infrastructure	Energy Substation and Power delivery	Create list of gas stations and town pumps with generators. Conduct generator and generator safety trainings. Assess climate change impacts on power delivery. Actively work to reduce damage from flooding and storms. Explore electric vehicle infrastructure	L
Infrastructure	Public Safety Buildings	Ensure buildings are capable of withstanding storms	L
Infrastructure	Water Treatment Plant	Assess flooding risk and power supply	L
Infrastructure	Firefighting	Increase staffing at South Station. Coordinate with planning board on subdivision regulations related to cisterns	L

Workshop Participation & Acknowledgements

Workshop Invitees and Participants

Department/Commission/Organization	Name	Attended?
	Tony Lackey	
Andrews Survey & Engineering [found on google]	Steve O'Connell	
BJ's Wholesale Club	BJ's Wholesale Club	
Blackstone Valley Chamber of Commerce	Jeannie Hebert	X
Blackstone Valley Connector	Blackstone Valley Connector	
Central Mass. Regional Planning Commission	Adam Menard	X
Central Mass. Regional Planning Commission	Andrew Loew	X
Central Mass. Regional Planning Commission	Eli Goldman	X
Central Mass. Regional Planning Commission	Hoamy Tran	X
Central Mass. Regional Planning Commission	Trea Schumacher	X
Central Mass. Regional Planning Commission	Trish Settles	X
Central Mass. Regional Planning Commission - Transportation	Rob Raymond	X
Crown N' Eagle Apartments, Uxbridge-Millville Apartments	Valerie Lacouture	X
Family Continuity	Family Continuity	
H&M Bay	H&M Bay	
Koopman's Lumber	Koopman's Lumber	
Lampin Corp.	Scott Rossiter	
Lenze America	Floyd Spencer	
LW Tank Repair	Brent Wiersma	
Mass. Bureau of Forest Fire Control	Roy Liard	
Mass. DCR	Edward J. Hughes	
Mass. DCR	Guy LaChance	
Mass. DCR	James Comeau	

Mass. DCR, River Bend Farm	Kathryn Parent	
Mass. Office of Business Development	Debra Boronski	
Mass. Office of Dam Safety	Ed Hughes	
Our Lady of the Valley Regional School	Our Lady of the Valley Regional School	
Precious Ones Child Care Center	Precious Ones Child Care Center	
Precision Engineering	Liora Stone	
Salmon VNA & Hospice, Hospice of Greater Worcester	Ann Labonte	
St. Mary's Church, Uxbridge	Sue Leighton	
State Senator (former)	Senator Richard Moore	X
State Senator Fattman's Office	Bill Fredericks	X
The Hab	The Hab	
Town of Douglas	Bill Cundiff	X
Town of Mendon	Tom Merolli	X
Tri-River Health Center	Michelle Drew	
Uxbridge Board of Health	David Tapscott	X
Uxbridge Board of Health	Joann Lindenmayer	X
Uxbridge Board of Health	Kristin Black	X
Uxbridge Board of Selectmen	Brian Plasko	X
Uxbridge Board of Selectmen	Jeff Shaw	
Uxbridge Board of Selectmen	Jennifer Modica	X
Uxbridge Board of Selectmen	Susan Franz	X
Uxbridge Building Department	Larry Lench	X
Uxbridge Capital Planning Committee	Joe Marchand	
Uxbridge Citizens for Clean Water	Wendy Timmons	X
Uxbridge Community Television	Barry Giles	X
Uxbridge Conservation Commission	Andrew Gorman	
Uxbridge Conservation Commission	Dale Bangma	
Uxbridge Conservation Commission	Russ Holden	
Uxbridge Conservation Commission/Board of Selectmen	Jim Hogan	X
Uxbridge Council on Aging/Senior Center	Lisa Bernard	X
Uxbridge Emergency Management	Mark Blair	
Uxbridge Finance Committee	Peter Demers	
Uxbridge Fire Chief	Bill Kessler	X
Uxbridge High School	Michael Rubin	
Uxbridge Housing Authority	John O'Brien/Mike Megna	X
Uxbridge Planner/Economic Development Coordinator	Michael Gallerani	X
Uxbridge Planning Board	Barry Desruisseaux	

Uxbridge Planning Board	James Smith	
Uxbridge Planning Board	Lynn Marchand	
Uxbridge Police Chief	Marc Montminy	X
Uxbridge Police Department	Kevin Sullivan	
Uxbridge Police Department	Steven Prior	
Uxbridge Public Schools - Facilities	Scott Pashoian	X
Uxbridge Public Schools - Superintendent	Frank Tiano	
Uxbridge Public Works Department	Paul Hutnak	X
Uxbridge School Committee	Debbie Stark	
Uxbridge School Committee	Matthew Keane	
Uxbridge Senior Center	Gail Boutiette	
Uxbridge Stormwater Committee/Housing Assoc.	Mike Potaski	X
Uxbridge Town Manager	Angie Ellison	X
Uxbridge Veterans Services	Carl Bradshaw	
Uxbridge Zoning Board	Mark Wickstrom	
Virginia Blanchard Memorial Housing Association	Harry Romasco	
Whitinsville Christian School	Whitinsville Christian School	

Project Team

The following individuals were directly involved in planning and conducting the Uxbridge workshop.

Organization	**Name**	**Role**
CMRPC	Adam Menard	Facilitator/Presenter
CMRPC	Andrew Loew	Facilitator/Presenter
CMRPC	Eli Goldman	Facilitator
CMRPC	Hoamy Tran	Event support
CMRPC	Katelyn Rainville	Mapping support
CMRPC	Trea Schumacher	Facilitator
CMRPC	Trish Settles	Lead Facilitator/Presenter
Uxbridge Board of Health	David Tapscott	Core Team
Uxbridge Board of Health	Joann Lindenmayer	Local Lead/Core Team
Uxbridge Board of Health	Kristin Black	Core Team
Uxbridge Board of Health	Leslie Fowle	Core Team
Uxbridge Board of Selectmen	Susan Franz	Local Co-Lead/Core Team
Uxbridge Conservation Commission	Melissa Danza	Core Team
Uxbridge Conservation Commission/Board of Selectmen	Jim Hogan	Core Team
Uxbridge Council on Aging/Senior Center	Lisa Bernard	Core Team
Uxbridge Emergency Management	Mark Blair	Core Team
Uxbridge Fire Chief	Bill Kessler	Core Team

Organization	Name	Role
Uxbridge Planner/Economic Development Coordinator	Michael Gallerani	Core Team
Uxbridge Planning Board	Barry Desruisseaux	Core Team
Uxbridge Police Chief	Marc Montminy	Core Team
Uxbridge Police Department	Steven Prior	Core Team
Uxbridge Police Department	Timothy Burke	Core Team
Uxbridge Public Schools - Facilities	Scott Pashoian	Core Team
Uxbridge Public Works Department	Paul Hutnak	Core Team
Uxbridge Town Manager	Angie Ellison	Core Team

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