

# Rochester, MA



## Municipal Vulnerability Preparedness (MVP) and Community Resilience Building (CRB) Workshop Summary of Findings

March 2019

Submitted by:



## Overview

Rochester is a town of 5,575 residents located in southeastern Massachusetts' Plymouth County. Located 50 miles south of Boston, Rochester sits almost entirely within the Buzzards Bay Watershed. Its rural character and landscapes are a result of an intentional balancing of growth and protection, or preservation by design. Rochester's landscape is dominated by forests and waterways, with many surrounding towns benefitting from Rochester's abundant water resources. In fact, Rochester's aquifers provide drinking water for its own residents, as well as residents in neighboring towns, including Marion, Mattapoissett, and Fairhaven, totaling over 25,000 people served. In addition, the Assawompset Pond Complex, which acts as the primary source of drinking water for the City of New Bedford and a secondary source for the City of Taunton, is located partially within Rochester's borders. Rochester's two largest rivers, the Mattapoissett and the Sippican, both eventually empty into Buzzards Bay. Rochester's high water table, dependence on private wells and septic systems, and role as a local hub for drinking water supply, make water resources protection a central issue in town.

A historically agricultural community, Rochester's agricultural sector has waned in recent decades, though cranberry cultivation is still a common sight in town, with approximately 5% of the land area currently occupied by cranberry bogs. The sylvan landscape has experienced increased stress in recent years from impacts of the **flood/drought cycle**, which have resulted in elevated rates of tree fall. When combined with proliferating **pest and invasive species** populations, including the gypsy moth, and **stronger storms/high winds**, local **forestry health** has become a growing concern in Rochester. Local residents see collaborative planning as an effective way to ensure a resilient community and sustain critical shared resources, now and into the future.

To support the community in considering and prioritizing actions to improve its climate resilience, the Town of Rochester applied for and received a grant from the Massachusetts Executive Office of Energy and Environmental Affairs (EEA) to become a Designated Municipal Vulnerability Preparedness (MVP) Community. Core members of the Resilient Taunton Watershed Network (RTWN) were tasked with coordinating the workshop, specifically the Southeast Regional Planning and Economic Development District (SRPEDD), who acted as Rochester's Certified MVP Provider. Staff from The Nature Conservancy, Manomet, and Mass Audubon supported the Community Resilience Building (CRB) workshop process as Certified MVP Providers and members of RTWN. These planning workshops took place on two consecutive Fridays, March 15 and 22, 2019 at the First Congregational Church in Rochester.

Stakeholders from Rochester were present as workshop participants, including representatives from many of Rochester's municipal boards and departments. Also in attendance were representatives from Rochester's schools, local and regional land trusts, local businesses, state agencies, and more (see p. 15-16 for a full listing). Attendees were divided into four distinct groups that remained consistent in both workshops. Each group identified features in Rochester visually with a map (Appendix A), and verbally on a matrix (Appendix B). Each feature was related to hazards that the town is concerned about and participants determined whether a particular feature was considered vulnerable to those hazards or a strength that helps Rochester mitigate them. Each item listed on a group's matrix was numbered, and corresponded to a numbered dot they placed on their map. Three colors used on the map visually represent the different feature categories of infrastructural (red), environmental (green), and societal (blue).

Through facilitated discussion, workshop attendees:

- Defined top local natural and climate-related hazards of concern;
- Identified existing and future strengths and vulnerabilities;
- Developed prioritized actions for the community;
- Identified immediate opportunities to collaboratively advance actions to increase resilience

Several recurring themes emerged from the discussion, including the need for **proactive water resources management**, **tree trimming** and **power line undergrounding** to mitigate vulnerabilities from increased tree fall and stronger storms, and concerns around **land use** in relation to solar and other commercial development. **Public education** on multiple topics was identified as an imperative to ensure effective implementation. Specifically, workshop participants cited increased public education around well and septic management, particularly for new residents, and awareness-raising around public health risks associated with mosquitos and ticks as critically important for enhancing local resiliency.

## Top Hazards and Vulnerable Areas

Participants discussed past impacts from natural hazards they have experienced, and came to consensus on the top four concerns to their community, which were identified as:

- Flood/Drought Cycle
- Pests (vectors, invasive species)
- Storms/High Winds
- Forestry Health

### Flood / Drought Cycle

describes the threat to Rochester's roads, forests, and water management infrastructure posed by large precipitation events and more frequent, longer-lasting droughts. With the majority of town relying on wells for their water supply, and many roads experiencing flooding even during minor storm events, the stresses resulting from a more volatile

flood/drought cycle affect all residents, businesses, and institutions in Roches-

ter. Residents have also noted an increase in tree fall that can be attributed to this volatility, as forest soils and tree root structures become damaged by this cycle of extreme conditions.



SRPEDD facilitator Bill Napolitano introduces the Municipal Vulnerability Preparedness program to workshop attendees.

**Pests** refers to vectors that increase the risk of exposure to disease (e.g. ticks, mosquitos), and invasive species that threaten the ecological integrity of Rochester's abundant natural lands. Residents have noticed a dramatic increase in vector populations in recent years, leading to increased risks to public health. Invasive insects have devastated tree populations and led to increased tree fall, and invasive plants as well as mosquito populations have proliferated in the town's abandoned cranberry bogs, which are only expected to increase in prevalence as cranberry cultivation wanes in the region.

**Storms/High Winds** are a primary concern because during strong storm events, flooding can cut off access to major thoroughfares, and trees frequently fall, further limiting road access for residents and emergency personnel. High wind also threatens existing power infrastructure, and Rochester has recent experience with prolonged power outages after storms. Because most residents rely on wells for drinking water, power outages leave them without functioning pumps and running water, sometimes for days at a time.

**Forestry Health** speaks to the specific hazards posed by Rochester’s ubiquitous forest lands, which, though also a critical aspect of the culture and identity in town, have increasingly come under threat from the three previous hazards identified here. Invasive pests are causing major die-off, an exacerbated flood-drought cycle is weakening root structures and harming tree health, and stronger, more frequent storms have come together with these other factors to increase both the rate of tree fall and the severity of associated impacts. Protecting and enhancing Rochester’s forests is an important community value that will help to preserve the rural character of the town that residents cherish so deeply.



Risk matrices and maps (pictured here) were used to track strengths and vulnerabilities in Rochester. Each item listed in a risk matrix corresponds to a dot on the map.



Workshop participants share top hazards, strengths, vulnerabilities and action items identified during small group discussion with the entire group of attendees.

## Areas of Concern

Several locations in town were identified as important strengths or notable vulnerabilities, and some, because of their complex nature, were considered to be both strengths *and* vulnerabilities. The top four natural hazards identified by Rochester workshop attendees were the **flood/drought cycle**, **pests** (vectors, invasive species), **storms/strong winds**, and **forestry health**. Prioritization (high, medium, low) and time anticipated to complete each action is indicated in the digitized matrices (*Appendix B*).

**Infrastructural** concerns centered around water resource management and vulnerabilities resulting from the combination of above-ground power lines and increased tree fall. In particular, more frequent power outages and risks to water availability and quality under conditions of drought and increasing development were cited frequently.

### Power Lines and Outages

Rochester residents define their town identity around the beauty of its rural character, and its abundant forest lands are a testament to ongoing conservation work. However, pressures from an exacerbated flood-drought cycle, invasive species such as the gypsy moth, and stronger, more powerful storms have led to increased tree fall in recent years. This in turn has created major issues along power corridors, since power lines are almost exclusively above-ground in Rochester. Outages can last for extended periods of time, especially after large regional storm events when utilities are responding to a high volume of requests, and all downed lines are assumed active until they can be verified. Proactive trimming, power line undergrounding, and enhanced communications with utilities were three frequently-cited priorities to help mitigate the impacts of power outages in town moving forward.

### Water Supply and Management

Because the majority of town residents get their water from individual wells, but municipal wells owned by the Town of Marion receive their water from Rochester, and the Assawompset Pond Complex serves the community of New Bedford, Rochester residents face a unique situation wherein local water resources are not primarily locally-controlled. This means that when drought hits, the local water table may be drawn down to supply other communities, leaving Rochester residents without sufficient supply. Similarly, when flooding occurs, many residents experience flooding in their basements, an all-too-common problem that the Fire Department is called in to address. Water quantity and availability were also concerns for the purposes of fire suppression, especially at the Old Colony Vocational High School, which does not currently have its own sprinkler system or independent water source.

### **Dams, Bridges and Culverts**

Specific vulnerable infrastructural features highlighted during discussion included dams (Hatheway Pond Dam, Walnut Plain Dam, Hillers Dam), bridges (Hillers Bridge, Mary's Pond Road), culverts (Doggett Brook, New Bedford Road at Mattapoissett River), and buildings. This last category included the outdated Fire Station, and the Annie Maxim house, an income-eligible senior housing complex that does not currently have a backup generator in case of emergency.

**Environmental** concerns focused on water quantity in terms of both flooding and drought, and on water quality. In addition, threats to forest health from invasive species such as the gypsy moth, as well as threats to forests and cranberry bogs from solar development pressure, were frequently cited.

### **Water Resources – Quantity and Quality**

Water quantity and quality concerns are closely linked in Rochester. Workshop participants pointed to the interaction between increased precipitation, significant fluctuations in the water table, and improper septic management as increasing risks to public health. Rochester has been undergoing a transition from rural to bedroom community, with many new residents moving to town who are unaccustomed to country living and who may not be familiar with the maintenance requirements for wells and septic systems, leading to hazardous conditions and contamination risks. In addition, concerns were cited around excessive fertilizer, pesticide, and herbicide use as a potential contamination threat to groundwater resources. In addition, because the town's groundwater resources are interdependent, each time a well is drilled for a new development, others will be affected, and eventually a limit on new wells will be reached.

### **Invasive Species**

The non-native gypsy moth has deeply impacted local tree health and worsened the impacts of other stressors associated with climate change. The resulting increase in tree fall has impacted roads and power lines in significant ways, straining local capacity to respond and proactively manage for the future. Eurasian Milfoil, a non-native aquatic plant, has invaded local waterways, posing a threat to water quality and biodiversity in a place where protecting water resources is a top priority for climate resilience. Workshop participants stressed the need for greater public education on these topics, so that residents can be proactive in reporting potential hazards from tree fall and restoring water quality through invasive species management.

### **Solar Development Pressure**

Workshop participants expressed extreme concern about the increase in solar development they are seeing in Rochester. While appreciating the need for clean energy, participants lamented the clearcutting of forest for solar development that has been on the rise in town, and were concerned that the town's many cranberry bogs will be the next targets for solar development, further straining Rochester's ability to retain its rural and agricultural character. A review of the town's solar bylaw to include responsible siting and sizing guidelines was a recurring action participants were eager to take.

**Societal** vulnerabilities identified included public health risks posed by increased pest populations (most prominently ticks and mosquitos), especially for elderly and school-aged populations in town. Also noted were vulnerabilities arising from Rochester's transition to a bedroom community, with many residents commuting to other nearby cities for work. This transition has resulted in lower rates of participation in local governance and an overall lack of commercialism that creates conditions for economic vulnerability should major businesses such as SEMASS leave town.

### **Vulnerable Populations**

The 120-year-old Old Colony Vocational School building does not have its own independent water source and lacks a sprinkler system, making fire suppression a challenge on site. This is a high-priority hazard that workshop participants were eager to see addressed.

The Annie Maxim House was once again identified as a vulnerability under the Societal heading because of its lack of a backup generator and its location in a flood-prone area, making evacuation of its over-65 resident population more hazardous or perhaps impossible during emergencies.

### **Communications and Civic Engagement**

As Rochester's transition from rural to bedroom community continues, many new residents are moving in who are new to the rural setting. According to workshop participants, this has led to a downtick in local civic engagement, and to issues around proper maintenance of well and septic systems. Creating more opportunities for connection for newcomers, as well as assistance with acclimation to rural life, were intentions that workshop participants believed would help substantially improve Rochester's societal resilience.

### **Lack of Commercialism**

Rochester's current zoning severely limits the extent to which commercial and industrial business may be expanded in town. Workshop participants pointed to conflicting feelings on this issue, since the Town's current commercial tax base is heavily reliant on a single entity, the SEMASS Waste-to-Energy facility. Diversification of this commercial tax base was

noted as a desirable step, but concerns about potential increases in traffic tempered the group's enthusiasm here. Prioritizing incentives for commercial and industrial development that will have limited traffic impacts will help Rochester balance its competing demands for growth and preservation.

## Current Strengths and Assets

Rochester residents were well acquainted with the many strengths their town can leverage to manage risks posed by natural hazards. Supporting and enhancing existing strengths and assets into the future will complement newly-identified strategies to address vulnerabilities, further helping to build local resilience. The following strengths and assets were identified as essential for adapting to the impacts of a severe **flood/drought cycle**, **pests** (vectors, invasive species), **storms/strong winds**, and **forestry health**:



Workshop participants present their completed risk matrices, including top hazards, strengths, vulnerabilities, and action items.

## **Infrastructural Strengths**

- Strong communication channels and practices among the Town's key emergency response personnel, including the Fire Department, Police Department, and Highway Department, mean that emergency situations are planned for and handled exceptionally well at present. Ensuring that the next generation of emergency managers are trained and institutional knowledge is imparted will allow Rochester to maintain its strong emergency preparedness and response.
- The well-known, -managed and -staffed emergency shelter at the Rochester Senior Center. Rochester Memorial School currently acts as a backup shelter, and is also a licensed water supply area during emergencies. Ensuring that volunteers continue to be recruited and trained will support community resilience during emergencies.
- The presence of SEMASS Waste-to-Energy facility provides the Town with trash disposal services and a sustainable source of commercial tax revenues without negatively impacting traffic in the region. Retaining SEMASS's presence and creating opportunities for further low-impact commercial development will help Rochester to develop an even stronger, more diverse tax base.

## **Environmental Strengths**

- Rochester's rural character and abundant natural lands, particularly forests, are seen as important strengths in town. A history of effective open space conservation, attributable in large part to the highly active Rochester Lands Trust, has protected this rural character, as has Rochester's designation as a Tree City USA. Continued open space acquisition and bylaw review to encourage open space protection were viewed as critical strategies for maintaining this set of strengths.
- The Town's solar bylaw and ongoing solar development were frequently referenced as important strengths that benefit the community now and will continue to in the future as the impacts of a changing climate are increasingly felt. To promote smart solar development, residents expressed the need to review their bylaw to incorporate good siting practices that emphasize previously developed land and protect healthy, intact forests and farmlands, as well as to prioritize underground transmission lines consistent with the goal of reducing infrastructural vulnerabilities to tree fall.
- Rochester's abundant water resources and proactive approach to stormwater management were seen as valuable assets by participants. Rochester's subdivision rules and regulations, updated in 2015, include performance standards and design criteria for stormwater management systems to prevent development from creating conditions for new flooding and/or non-point source pollution. Participants emphasized the myriad benefits that the town's many rivers, ponds, and cranberry bogs

provide, including flood storage, recreational enjoyment, and cultural identity linked to events such as the annual Herring Run.

### **Societal Strengths**

- Community character is an important strength that was reiterated throughout the CRB Workshops. For participants, the local culture of volunteerism and strong sense of community, as well as good informal communication networks and neighborly helpfulness during emergencies, represented key aspects of community character in Rochester. A Facebook page maintained by a local resident currently provides up-to-date information on happenings in town, including hazards such as downed trees and vehicular accidents, and participants were eager to see this kind of informal network expanded to include all town residents (acknowledging that many do not use Facebook).
- Many local amenities were highlighted as societal strengths, including the Rochester Public Library, two grocery stores, three houses of worship, and the regional Post Office. Rochester's schools came up frequently in this category, also. As an example, Old Colony Vocational School's recent addition of a financial literacy course for young people was perceived as an excellent example of the kind of inter-generational skills transfer necessary to build a more resilient society.
- The presence of many over-55 housing communities in Rochester was noted as a strength, because this allows for greater inter-generational connectedness and stronger local and family networks. Continued development of over-55 housing, particularly affordable housing, will ensure that elderly populations in Rochester are supported, and focusing vulnerability preparedness in these areas can reduce risks for these vulnerable populations during emergencies.
- Rochester's status as a Right-to-Farm community was also identified as a strength, despite the acknowledged vulnerability of agriculture in the community. Ensuring that barriers to farming are minimized can help the town preserve its rural character, but residents agreed that greater farmer engagement and support will also complement this existing asset.

## Top Recommendations to Improve Resilience

Two days' worth of discussion was whittled down into three thematic priorities that workshop participants agreed were urgent for Rochester's resilience. Once actions were generated related to the list of strengths and vulnerabilities, all attendees came together to share their actions and discuss emergent themes. Facilitators then led the group in a voting exercise whereby each participant allocated three votes to their top priorities, and the three priorities with the highest number of total votes were identified. Additional discussion followed to ensure that the top priorities were consistent with overall workshop themes and small group conversations.



After facilitated small- and large-group discussion, workshop participants voted on their top priority recommendations to improve resilience in Rochester.

Participants were encouraged to consider action items that mitigated hazards through strengthening natural systems and processes, to complement technological or built fixes. An action that limits damage of natural hazards through conserving existing lands, integrating benefits of nature where they are critically needed (i.e. flood storage, water quality improvement) into ongoing construction, or restoring an ecosystem where it has been disrupted is referred to as a **Nature-based solution**. Nature-based solutions (NBS) are a category of emerging strategies in climate adaptation and their exploration is of interest to the Commonwealth of Massachusetts as a national leader in comprehensive hazard mitigation planning. Effective implementation of NBS means designing a community whose built infrastructure is reinforced by its natural environment and vice versa.

The workshops' three emergent themes included the **power grid, water issues, and land use patterns and zoning**.

### Power Grid

#### *Proactive forestry management*

- Develop a Forest Management Plan to address tree death from invasive species and resulting hazards; include utility resilience planning for private and public property.

- Couple Forest Management Plan with a utility infrastructure vulnerability study, prioritizing tree assessments along power corridors. Recommend power line undergrounding where feasible.
- Increase municipal budgets for Tree Warden, Fire Department, and pest control.
- Purchase bucket truck, chipper, and equipment to replace lost trees, and/or hire external contractor to do consistent tree trimming. Prioritize replanting of native trees.

#### *Communications best practices*

- Investigate options for improved communications practices during power outages, both internal and with Verizon and Eversource.
- Update and share priority infrastructure and list of high priority residents (especially those in critical care) with Eversource liaison.
- Increase public education and awareness around forest management and tree fall risk.
- Update Town website to include a section with “Information for New Residents” covering emergency procedures and contacts, in addition to other information noted throughout this recommendations section.

## **Water Issues**

#### *Advocacy and public education*

- Continue advocating for sustainable water management in Rochester with regional neighbors and the state.
- Increase public education about Rochester’s water resources, emphasizing protection of groundwater.
- Increase public education about adverse effects of residential fertilizer and pesticide applications in relation to water quality, citing specific examples from the Town’s past.
- Incorporate information about common septic and well issues on Town website’s “Information for New Residents” page (to be created).
- Implement a local grant program for homeowners experiencing basement flooding.

#### *Water resource management*

- Consider Low-Impact Development as part of stormwater management planning; incorporate rain gardens in vulnerable flood areas where feasible.
- Secure an independent water source for Old Colony Vocational School, to address access and fire suppression concerns.
- Conduct a vulnerability assessment for Rochester’s private wells, especially related to water quality, security, and the risk of landfill leaching.

- Develop a proactive long range water supply plan for the Town in collaboration with regional partners.
- Increase the number of fire hydrants in town to enhance fire suppression capacity.

## **Land Use Patterns and Zoning**

### *Energy infrastructure zoning and bylaws*

- Amend local bylaws and regulations to require undergrounding of utilities wherever possible.
- Amend the solar bylaw to prioritize underground transmission as much as possible.
- Review bylaws for opportunities to protect cranberry farmers from solar development pressures.
- Consider zoning changes to facilitate desirable commercial development, that is, commercialism that will not negatively impact local traffic.

### *Roadway and traffic concerns*

- Continue collaborating and planning with SRPEDD, consistent with the recently produced accident plan, to prioritize reconfiguration of dangerous intersections (for instance, Mary's Pond Road at Route 105). Focus on traffic increases along route to Wareham Mall.
- Conduct a traffic flow assessment of local schools, exploring alternative drop-off options to enhance circulation and reduce safety risks and barriers to first responders in cases of emergency.
- Improve signage for emergency evacuation routes in town.

## **Multi-Hazard Mitigation Planning**

### *General communications enhancements*

- Streamline municipal record keeping. Recommendations include storing information digitally and by property address, such that they are readily available for first responders.
- Identify all currently existing information channels in town, and encourage communication and collaboration between all residents about important town issues.
- Implement a reverse 911 or other system to spread information, and explore a text messaging system for alerts.

### *Infrastructural upgrades*

- Conduct engineering studies of the Hathaway Pond Dam and High Street-Walnut Plain Dam. Eventually rebuild and replace fish ladders.
- Replace the Mary's Pond Road Bridge and Millers Bridge & Dam.

- Replace undersized culverts at Mattapoissett River and New Bedford Road, Mattapoissett River and Wolf Island, and Doggett’s Brook.
- Replace outdated Fire Station on new site (current site is too small).
- Purchase a backup generator for the Annie Maxim House (currently none), and take measures to increase flood resilience at that site.

In making these recommendations, this cohort generated an array of potential actions that related back to the identified top priority hazards and how they impact Rochester’s infrastructure, environment, and society. A complete list of actions generated by the groups, along with their prioritization (high, medium, low) and time-frame (short-term, long-term, or ongoing) can be found in *Appendix B*.

## CRB Workshop Participants

<b><u>Name</u></b>	<b><u>Affiliation</u></b>
Laurell J. Farinon	Rochester Conservation Commission
Fred Underhill	Rochester Water Commission
Kris Stoltenberg	Rochester Finance Committee
Scott Weigel	Rochester Fire Department
Gene Jones	Old Rochester Regional
Karen Walega	Rochester Health Agent
Steve Starrett	Rochester Town Planner
Michael Conway	Rochester Water & Conservation Commissions
Andrew Daniel	Facility Manager
Woody Hartley	Rochester Selectboard
Dave Janik	Massachusetts Coastal Zone Management
Suzanne Szyndlar	Rochester Town Administrator
Kristina Gardiner	Annie Maxim House
Lynne Pires	Annie Maxim House
Jeffery G. Eldridge	Rochester Highway Department
Sharon Lally	Rochester Council on Aging
Brenda Sylvia	Barnes Tree Service

Kim Fleurent	Barnes Tree Service
Jim Buckles	Rochester Building Department
Lena Bourque	Rochester Conservation Commission
Charles B. Shea	Rochester Assessor
Mark Wellington	RAHI
Gianno T. Lettieri	RAHI
Richard Cutler	Rochester Zoning Board of Appeals
Susan Teal	Rochester Resident
Norene Hartley	Rochester Lands Trust
Aaron Polansky	Old Colony Regional Vocational Technical HS
Kate L.	Rochester Resident
Kevin Thompson	Rochester Conservation Commission
Halima Tiffany	Rochester Resident
Matt Monteiro	Rochester Lands Trust
Brian Mello	Eversource
Daniel Piché	Eversource
Winslow Dresser	The Trustees of Reservations
Jill Henesey	Old Rochester Regional
Paul Ciaburri	Rochester Emergency Management

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**Appendices** show different methods of recording the same vulnerabilities and strengths named by workshop participants through mapping and prioritized lists. Small groups recorded infrastructural, environmental, and societal features in Rochester and which hazard(s) they relate to. Each feature category (infrastructure, environment, society) was documented on a separate matrix (see Appendix B complete lists). On these short lists, or matrices, action items were identified corresponding to each feature that was named. Each action was then assigned a high, medium, or low priority value and expected short-term, long-term, or ongoing time frame to complete.

To account for spatial relationships between features, participants simultaneously placed points on a map that corresponded to items they named on the different matrices. Infrastructural features are indicated with a red point, environmental with a green point, and societal with a blue point. Items on the map are also labeled for what they represent from the written list, but do not represent prioritization or associated action(s).



## Appendix B: Digitized Risk Matrices

### Group 1

<u>Features</u>	<u>Location</u>	<u>Owner-ship</u>	<u>V or S</u> (vulnerability or strength)	<u>Flood/ Drought</u>	<u>Pests (vectors, inva-sives)</u>	<u>Storms/ High Winds</u>	<u>Forestry health</u>	<u>Priority</u> HML (high, med, low)	<u>Time</u> SLO (short, long, on-going)
<b>Infrastructural</b>									
Loss of power	Town-wide	N/A	V	Buy bucket truck chipper + equipment to replace trees; change bylaws - feasibility study - underground increase for mixed approach/retrofits; increase public awareness, forest management education + explore strategic native trees				H	S,L
Highway, fire, police - mgmt	Town-wide	Town	S	Feasibility study for best communications practices - internally + with Verizon + Eversource; update + share priority infrastructure + list of high priority residents with Eversource liaison				H	O
Water system (drinking water)	Town-wide	Town	V	continue advocating for Rochester with regional neighbors + the state; independent water source for Old Colony HS - continue water line @ Rochester Memorial School				H/M	O
Water	Town-wide	Town	V	public education about adversities of fertilizer + pesticide applications (residential) -> mention examples from the past				H/M	O
Outdated fire station	Pine St.	Town	V	Replace it on new site - it's too small. Add station #4				H	S
Lack of commercialism	Town-wide		V	Increase commercialism, look at Mattapoissett cannabis facility; zoning changes				H	S
Increased traffic	New Bedford Rd, Town Center	Town	V	Improve infrastructure to improve flow				L	O
Annie Maxim House (senior housing, no generator)	North Ave	Private	V/S	Buy generator!				H	S
Old Colony Vocational HS (needs water)	North Ave	Town	V	Independent water source - continue from Annie Maxim (see #3); Scott will write letter re: fire suppression				H	S
Shelters - elem. school + senior center	Pine St.; Dexter Lane	Town	S	Continue volunteer training, recruit				L	O
Hathaway Pond Dam	Hathaway Pond	Private	V	Engineering study, rebuild it, replace fish ladder, explore alternative materials				M	L
High St. Walnut Plain Dam	High St.	Private	V	"				M	L
Pilgrim Nuclear - Plymouth	Plymouth	Private	V	N/A				L	O
Gas plant + pipeline	Acushnet, Peckham Rd.	Private	V	N/A				L	O

<b>Environmental</b>						
Solar bylaw		Town	S	Amend - prioritize underground transmission as much as possible	H	S
Stormwater mgmt plan		Town	S	incorporate rain gardens in V flood areas	M	S
OS conserved	Town-wide	Town	S	continue acquiring	H	O
Treefall	Town-wide		V	see Infra #1		
<b>Societal</b>						
Financial literacy classes - schools	Public schools	Town	S	Continue	L	O
Transition: country living - > subdiv	Town-wide		V	see Citizen Participation; info for new residents on website (update)	M	O
Fragility of community ag	Town-wide		V	Change crops from cranberry, involve Dept of Ag + Cranberry Experimental Org	M	O
Dependence on tax base from SEMASS	Town-wide	SEMASS	V	see "lack of commercialism" actions		
Informal communication - FB page		Private	S/V	see Citizen Participation	H	S
Muni internal cooperation/comm.	Town-wide	Town	S	Keep it up, continue Explorer program	H	O
Institutional knowledge continuity (lack of)	Town-wide		V	Streamline record keeping - store by property address, digitized! Readily available for fire + 1st responders; ID all existing ways to spread info (i.e. bulletin board) + collab more	H	S
Citizen participation (lack of)	Town-wide		V	Reverse 911 or other system to spread info - build on town website - existing social networks communicate ways to enroll - right now it's calling Plymouth Country Sheriff; explore text message system for alerts while keeping diverse channels that work (senior center)	H	S
Library space + programming	New Bedford Rd.	Town	S	Continue providing resources - it's a community gathering spot	M	O

## Group 2

<u>Features</u>	<u>Loca- tion</u>	<u>Owner- ship</u>	<u>V or S</u> (vulnerabil- ity or strength)	<u>Flood/ Drought</u>	<u>Pests</u> (vectors, inva- sives)	<u>Storms/ High Winds</u>	<u>Forestry health</u>	<u>Prior- ity</u> HML (high, med, low)	<u>Time</u> SLO (short, long, ongo- ing)
<b>Infrastructural</b>									
Water with- drawal (Mar- ion, Middle- borough, Mat- tapoisett)	Matta- poisett Aquifer	Public (other towns)	V	Develop proactive long range water supply plan (new water dept) -> Old Colony School (WP)				H	S/L
Rochester pri- vate wells	all, ex- cept Marion wells	Private	V/S	Vulnerability assessment, water quality, security, landfill					
New Bedford withdrawal	NBW	New Bed- ford	V	WP					
Entitled to 50% of Mari- on's with- drawls/hy- drants	3 wells	Mar- ion/Roch- ester	V/S	WP					
Industrial Dis- trict	NE	Vari- ous/pri- vate	V/S	Emergency response capacity needed. Fire + Lad- der (40R)					
SEMASS (in- surance, reve- nue)	NE	Covanta	S	Emergency response capacity needed. Fire + Lad- der (40R)				M	0
Eversource outages	Var dist.	Eversource	V/S	Message about critical care enrollment (commu- nity liaison). Add to COP mailing (Sharon); check w/ emergency responses -> priorities for preven- tion/storm hardening, move underground) -> any requests				H	S
Algonquin Pipe	Across town	Private	V/S	Management exists, pipes 50 yrs old			Regional forestry manage- ment	L	0
Town road maintenance	72 miles	Various	V/S	Limited state funding, complete streets, not great?; culvert + dam replacement, priority re- placement (include roadway considerations)				M	0
Millers Bridge + dam		Private	V	Culvert + dam replacement, priority replacement (include roadway considerations)					
Causeway Snipatuit				"					
Doggett (DOT) culvert		DOT	V	"					
Hathaway Pond Dam		Private	V	"					
Culvert	Matta- poisett River + New Bed. Rd.		V	"					

Culvert	Matt. River Wolf Island							
Cranberry Bogs (2000 acres in town/bog)/Large owner/Ag	Var	Private	V/S	Bylaw review; stakeholder engagement/feedback	BR		H	S
New traffic up to Wareham Malls	New Bedford/Mary's Pd.		V	Continue collaborating/planning w/ SRPEDD [recent accident plan] -> prioritize dangerous interactions (Mary's Pond + 105) -> eval/emergency response			M	O
Treatment Plant (utilities underground); MRV -> slow to respond [~4 yrs for new pipe] - 225 houses in Rochester			V/S	WP				
<b>Environmental</b>								
High water table	All	Var	V	Cranberry/water management practices, various perc; see SWP				
Shallow wells -> water getting harder; wells [electric]; fire department on water				WP -> public?				
Trees dying -> New Bedford -> has forestry plan (could try coop.); Gypsy moth	All			Forest Management Plan; FP				
Vectors -> deer ticks/turkey; 50% wet -> mosq.	All		V	Public ed.; bug spray/tick ed. happens @ public schools				
Ponds (Snipatuit) -> no power boats			S	surface water management (plan group committee) -> forecast, discuss actions, coordinate water management; historic, cultural; bogs, ag; diadromous fish; MRV -> withdrawal/suppliers; Sippican -> withdrawal/suppliers			H	S/O
Mary's Pond			S	historic, cultural; bogs, ag; diadromous fish; MRV -> withdrawal/suppliers; Sippican-> withdrawal/suppliers; water department does ed/outreach [keep it up]				
Leonard's Pond; Grammar Hartly Pond + Matta River boat race			S	"				
Haskell Swamp		state	S	"				

Solar farms			V/S	Bylaw review (5% bogs) -> think about future dev. -> add planning staff capacity? -> phased; BR				
Rural characteristics/open space	All	var	S	Bylaw review	BR			
Bylaws, regs, ORD review	town		V/S	Bylaw review	BR			
Regional (?) Forestry Management Plan -> pests, die-off, trimming	town	var	V/S			Develop utility resilience planning for private, public property. Increase Tree Warden, pests, fire budget	M	O
Herring runs; Alewives Anonymous; Mattapoisett Sippican River		public	S	SWP				
Stormwater + erosion	VAR country drains, erosion	both	S	Develop stormwater management plan (consider LID); help w/ road maint.			M	O
<b>Societal</b>								
Dexter Ln > OA/PD -> SLOSH maps	Dexter Ln	public	V/S	Better understand risks here, develop vulnerability assessment/plan if needed. Think new devo. too			L	L/O
Old Colony -> pandemic back-up				Need more water access (WP + public water); emergency response. Keep up good work as pandemic shelter				
COA/emergency shelter	Dexter Ln	public	V/S	Better understand risks here, develop vulnerability assessment/plan if needed. Think new devo. too. Add shelter capacity; mem school, Old Colony, Civil Defense shelter(?), people capacity good, water; long-term				
Town Hall		public		Better understand risks here, develop vulnerability assessment/plan if needed. Think new devo. too				
Town Hall annex		public		"				
Fire department		public		"				
Unlined former dump (over Snip aquifer)		public	V	Vulnerability assessment to water supply. Incorporate into water planning				
Annie Maxim House		private	V/S	Increase flood resilience planning (outreach)			L	O
Grocery stores	2	private	S	Acknowledge as strengths			L	O
Churches	3	private	V/S	"				
Regional post office	Town center	public	V/S	"				

Trailside Campground/ Outdoor World (?)		private	V/S	Be aware in emergency			L	0
The Pines (over 55)		private condos	S	Acknowledge as strength			L	0
The Center (over 55)		private condos	S	Acknowledge as strength				
pending over 55 (Village at Plum Corner)		private condos	S	Acknowledge as strength				
40R - retail(?); housing; far from center		private	V/S	New fire satellite station (fire + ladder -> SE-MASS)				
Trailside - over 55		private	S/V	Acknowledge as strength				
Affordable housing - SR - Vet - Town employees	TBD	private		Open lot by COA -> affordable housing to keep SRs in town, develop relationship -> think about EM/H2O needs			M	0
Old Xmas tree farm	New Bedford Rd			Part of town character			L	0
Cemeteries	7 in town	private		Part of town character				
Solar CARS	1 in town	Eversource	S/V	What is threshold for electric car charging > plan for capacity			L	0
New Town Hall + annex	Dexter Ln	town	S	Need one -> think SLOSH Risk/resilience			M	S

### Group 3

<u>Features</u>	<u>Location</u>	<u>Owner-ship</u>	<u>V or S</u> (vulnerability or strength)	<u>Flood/Drought</u>	<u>Pests</u> (vectors, invasives)	<u>Storms/High Winds</u>	<u>Forestry health</u>	<u>Prior-ity</u> HML (high, med, low)	<u>Time</u> SLO (short, long, ongoing)
<b>Infrastructural</b>									
Power Grid	All town	Ever-source	V+S			Urban Forest mgmt.	Pest, disease, age	H	O
Warming shelter	One location	Town	S			More capacity, better comm.		H	O
Drainage/culverts	All town	State/local/private	V	Maintenance + inspection		Culvert replacement	Poor drainage impacts forest	M	O
Road network	All town	State/local	V	Truck traffic maintenance funding	Need state co-operation	Bylaw revision underway		M	O
Cell towers	loc. on map	Private	V			Need additional towers/coverage		M	O
Land use patterns/zoning	Town-wide	Town	V	Management of defunct bogs	Commercial opts	Revisit zoning, solar projects	Update master plan + implement	H	O
Lack of fire hydrants	Town-wide	Town	V	More public water infrastructure				H	L
Limited public water	Town-wide	Town	V	"				M	L
Lack of gas stations	Town-wide	Private	V	Zoning issue				M	L
Basement flooding	Town-wide	Private	V	Education, grant funds for homeowners				M	O
<b>Environmental</b>									
Use of pesticides + herbicides + fertilizer	Town-wide	Private	V	Education needed (homeowners)				M	L
Forest management	Town-wide	Mix	V+S	Assess + manage (consultant) consistent tree trimming				H	L
Wetlands	Town-wide	Mix	V					L	L
Ticks + other pests	Town-wide	Mix	V	Education, Ply. Cty. Mos. Control coordination; expand per app. by health dept.				H	O

Milfoil	On map	Private	V	Assessment of Snow's Pond; grant funding for public access ponds	M	L
Endangered species	Town-wide	Mix	V		L	L
Invasive animals	Town-wide	Mix	V	Education	M	L
Deer overpop./browse	Town-wide	Mix	V	Hunting/education; public access for hunting	L	L
River clearing	Town-wide	Mix	V	Volunteer effort needed	M	L
Cons. Land	Town-wide	Mix	S	Hunting access, links to tax base	M	L
Forest fire risk	Town-wide	Mix	V	Assessment + mgt.	M	L
Ag. Land conversion	Town-wide	Private	V	In flux		
<b>Societal</b>						
911 communications	Town-wide	Town	V	Monitor new 911 system, lack of radio system for emg. comm.	H	O
Emergency services	Town-wide	Town	V/S	Old fire equipment, study transition to full time service	H	O
Affordable housing	Town-wide	Mix	V	Nonprofit working on issue; service provision concerns; need assisted living	M	L
Emg. Transport	Town-wide	Town	V	Need plan, staffing issues	M	L
Disability services	Town-wide	Town	V	Regional ADA needed; ID access challenge	M	L
Lack of town staff	Town-wide	Town	V	Funding for new staff, engagement/involvement of new citizens in governance	M	L
Trash services/ recycling	Town-wide	Town	V/S	Revisit recycling	M	O
Educate citizens on emg. response/self sufficiency	Town-wide	Town	V	Welcome to town packet	H	O

## Group 4

<u>Features</u>	<u>Location</u>	<u>Owner-ship</u>	<u>V or S</u> (vulnerability or strength)	<u>Flood/ Drought</u>	<u>Pests (vectors, invasives; plant and animal)</u>	<u>Storms/ High Winds</u>	<u>For-estry health</u>	<u>Priority</u> HML (high, med, low)	<u>Time</u> SLO (short, long, ongoing)
<b>Infrastructural</b>									
Bridge @ Mary's Pond	Mary's Pond Rd	town	V/S	functionally obsolete; needs design for current conditions				H	S
More efficient/ underground utilities	town-wide	private	V/S	coordinate a utility infrastructure vulnerability study w/ forestry study w/ an independent contractor/expert working for the town				H	L
Sidewalks and streetlights	town-wide	various	V	shared use path study to highlight potential projects				M	S
Traffic @ schools during drop-off and pick-up - traffic congestion on roads - traffic flow assessment @ schools	town-wide	town	S/V	look at alternative drop-off options w/circulation + safety options; work w/ schools, parents, students, and first responders - there are multiple safety and vulnerability issues				H	O
Under MA Law, Roch. Elem. School is a licensed water supplier			S						
Improve the Town website/tech infrastructure - the ability to access and use information; get the word out			V/S	Implement the "one" "1 call" system or something similar. We want to continue to improve the website to meet the needs of the people of Rochester, including those outlined in this plan and other municipal plans				H	S/O
<b>Environmental</b>									
Water quality in our ponds	town-wide	public/private	V/S	Existing data collection on status of ponds - what do we know?				M	O
Flooding @ Doggett Brook	Rte 105	state	V	Work with MA DOT to assess problem & plan for solution				M	S
Churches Wildlife Forest	Rte 105	town	S	see #6					
Solar - designing to work w/ environment	town-wide	various	V/S	Look @ design standards in our bylaw to better retain our assets				M	O
Vector borne diseases - ticks/mosquitoes	town-wide	various	V	Additional resources to conduct continuous training/public awareness				H	O
Assessment of our forests/trees'	Town-wide /roadways	various	V/S	Prioritize along power lines; forestry management planning town-wide				H	O

health and viability									
Unintended consequences of abandoned bogs (assessment)	town-wide	various	S/V	Work with CCCGA, Experiment Station, DER to educate on the issue				M	L
Protection of our groundwater resources	town-wide	various	S/V	Public education about our water resources/where it is/where it goes/etc.				M/H	O
More environmental education	town-wide			see above				H	O
Retention of edge habitat area, pollinator habitat (enhancement as well)	town-wide	various	S/V	see above; work w/ Plymouth county pollinator program				M/L	L
Land Trust properties and the opportunities that they provide (community & volunteering)	town-wide		S						
Tree city			S						
<b>Societal</b>									
Education on vector borne diseases and how to recognize them	town-wide		V/S	more resources from state & Plymouth county for continuous ed.				H	O
Address elderly population risks (vector borne diseases)	town-wide		V/S	more resources from state & Plymouth county for continuous ed.; tie this in with cooling stations				H	O
Address the needs of youth/students (vector borne disease)	town-wide		V/S	more resources from state & Plymouth county for continuous ed.; tie this in with cooling stations				H	O
Assessment of our ability to handle emergency situations for vulnerable populations (heating stations, cooling stations)	town-wide		S/V	Support our volunteer network; look at mentoring program that emphasizes tradition of volunteerism				M	O
Town departments work very well together during emergencies			S						
Progressing towards a full time Fire Chief			S						

Improved in- tra-town com- munication abilities	town-wide		V/S	see tech/web/improved communication w/ vol- unteer F.D				M/H	O
volunteerism & sense of community	town-wide		S	see #4					
Provide more housing & liv- ing options for our senior population	town-wide		V/S	New Affordable Housing Trust				M	L
Right-to-farm community	town-wide		S	We need farmers to be- come in- volved				M/L	O