Easton, MA



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

December 2018

Submitted by:



Overview

Easton is a community of about 23,000 residents in 29.23 square miles. It is located in the Greater Brockton area of Massachusetts and in the headwaters of the Taunton River Watershed. Neighboring towns and cities are Sharon and Stoughton to the north, Brockton and West Bridgewater to the east, Raynham, Taunton, and Norton to the south, and Mansfield to the west. This inland community balances its development with conservation efforts, and is partial home to the Hockomock Swamp Area of Critical Environmental Concern (ACEC) the Canoe River ACEC, and Borderland State Park. Participants expressed the imperative of preserving community character, resident safety, and environmental integrity as the town develops.

Easton, along with 4 neighboring towns, pumps its public water from the Canoe River Aquifer. About 3,660 acres of this sole source aquifer is located in Easton. Other town wells

tap the aquifers of Mulberry Brook in Furnace Village and Queset Brook in North Easton. Each of these public water sources and the Hockomock Swamp in South Easton are safeguarded by Aquifer Protection Zones.

Forests make up about 45% of Easton's land, water/wetlands



Land Use Map from Part 1 of Easton's Comprehensive Master Plan, Envision Easton

make up 23%, and residential zoned areas account for about 20%. Easton, as of 2015, has permanently protected 15% of its land. The protected land provides Easton's residents with some of the highest quality drinking water in the state (Open Space and Recreation Plan 2017).

Easton has already begun to feel the predicted effects of climate change. An increasingly severe flood-drought cycle has been felt throughout the town. Other major concerns include an increasing number of extreme storms and more days of extreme temperatures.

The traditional commitment to open space to preserve community character as well as for ecological benefits is also threatened by increasing population density.

The town sees collaborative planning as the most effective way to ensure the future safety of town residents and infrastructure, and this process will build on the content of <u>Easton's</u> <u>Comprehensive Master Plan</u>. Also, <u>Easton's updated Hazard Mitigation Plan</u> describes increasing population density while maintaining a commitment to open space for community character as well as ecological benefits. Over the last five decades the town has tried to balance development with conservation efforts. Town meeting adopted the Community Preservation Act in 2001, a decision that has provided thousands of dollars for land purchases and other conservation projects. In 2009, the town created the Green Communities Committee with a charge "to help raise awareness, and educate Easton residents and businesses to reduce waste, reduce energy use, conserve resources, reduce emissions/carbon footprint, and to embrace clean and renewable energy options."

The Workshop

To help the town consider and prioritize actions to improve its climate resilience, the Town of Easton applied for and received a grant from the Massachusetts Department of Energy and Environmental Affairs to become a Certified Municipal Vulnerability Preparedness (MVP) Community. Core members of the Resilient Taunton Watershed Network (RTWN) were critical for coordinating the workshop, specifically the Southeast Regional Planning and Economic Development Division (SRPEDD), who acted as Easton's 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, November 30 and December 7, 2018, at Easton Town Hall

Stakeholders from Easton were present as workshop participants, including members of the Board of Selectmen, Conservation Commission, Community Preservation Act Committee, Planning Board, Green Communities Committee, Public Works (Water, Highway, and Building Divisions), Fire and Police Departments, National Grid, the Council on Aging, Easton Mobile Homeowners Association, Old Colony Planning Council, and Easton Public Schools. Attendees were divided into two distinct groups that remained consistent in both workshops. Each group identified features in Easton 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 each feature was considered vulnerable to those hazards or a strength that helps Easton mitigate them. Each item listed on a group's matrix was numbered, and corresponded to a numbered dot they place on their map. Three colors used on the map visually represent the different feature categories of infrastructural (red), environmental (green), and social (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.

Three striking themes emerged from the working groups by the end of the process, including: forest management and utilities, water and stormwater management, and evacuation access for vulnerable populations. Participants expressed enthusiasm and steadfastness in combining their collective knowledge.

All features and actions were discussed in the context of three major hazards that are impacts of climate change, and are described in the next section.

Top Hazards and Vulnerable Areas

Participants discussed hazards they've experienced in the past as and named these three natural hazards to their community by coming to consensus. Hazards of highest concern included:

- Wind from Extreme Storms
- Flood-Drought Cycle
- Extreme temperatures

Extreme Storms describes the impacts Easton feels from heavy rain and snow fall in short periods of time as well as from strong winds. Residents said that during heavy rains, saturated ground is very obvious in many parts of town. Most Easton residents have septic systems in areas where the water table is high, and acute precipitation poses risk of contamination. Strong winds during storms have damaged utility lines, toppled trees, and blocked vehicles on the roads.

Flood-Drought Cycle describes the challenges of managing volumes of rain and snow that strain water management infrastructure and cause floods, while often having periods of drought in the same year. The Canoe River Aquifer was <u>designated</u> an area of critical environmental concern (ACEC) in 1991 when it had a prolonged drought that impacted water resources throughout the town. This pattern of intense storms and longer dry spells is expected to grow more intense as the climate changes. With this in mind, one workshop participant suggested a ban on lawn watering during the summer to conserve water.

Extreme Temperatures refers to the growing frequency of days over 90 degrees Fahrenheit with fewer winter days near or below freezing each year. Although the past two winters have seen unprecedented seasonally early and sustained single digit temperatures and longer periods of temperatures dropping into the teens, severe heat and cold combined with the risk of power outages from extreme storms leave residents at risk of losing heating/cooling.

Areas of Concern

Several locations in town were identified as important strengths, notable vulnerabilities, and some could be considered a little of both. The three natural hazards of highest concern are extreme storms, the flood-drought cycle, and extreme temperatures. In the context of those hazards, the workshop participants identified infrastructure, environmental, and societal impacts, which were then prioritized as high, medium, and low. As solutions were discussed, the time anticipated to complete each action was entered in the digitized matrices found in *Appendix C*.

Infrastructure concerns were broad and deeply interconnected. Generally concerns related to stormwater, wastewater, and public water management, access to utilities during and after storm events, as well as the need for shelters that function in the long term.

Infrastructure related to water management and emergency shelters were rated a high priority by consensus in both groups. Storm impact on many roads were combined under one category with vulnerable dams and culverts that have histories of collapse or failing. Easton has seven remaining dams with mixed public and private ownership. More details on each can be found in the <u>2015 Hazard Mitigation Plan</u> by Old Colony Planning Council. Easton dams include:

- French Pond dam
- Langwater Pond dam
- Long (Ames) Pond dam
- Old Cabot Pond
- New Pond dam
- Shovel Shop Pond dam
- Morse Pond Dam

Dams have been breached at Flyaway Pond and Monte Pond Dams

Culverts and localized flooding areas of concern included:

- Sawmill Pond Rd at Bay Rd around #486
- Prospect Road around #80 and #33
- Culvert under Route 138 near the mobile home park
- Bay Rd near #224 has a confluence of three culverts
- Purchase Street at the "Dog Leg" near Easton Country Club

Septic systems were another frequent talking point across town given the high water table of Easton's surrounding environment, and use of septic by the vast majority of residents (estimated 96-99% by participants). One group mentioned ponds created with mounded septic tanks, which saturate the ground downstream and flood public roads during heavy rains. Replacing old septic tanks can be cost prohibitive for homeowners, though the town

provides Septic Betterment Loans. Some participants raised the possibility of bylaw review to address projected rising groundwater, require low impact development (LID) alternatives to comply with the MS4 permit, and address capacity maintenance challenges.

Some other infrastructural concerns that were rated high priorities included:

- Vulnerability of the power grid in storms and increase on the power grid
- Vulnerability of the gas infrastructure to leakage and water infiltration
- Schools without air conditioning
- Basement flooding during storms
- Potholes in roads

Environmental concerns frequently related to themes of either water quality or preservation of ecosystems/their services. For instance, Easton's wetlands and forests are important to mitigate riverine flooding, but are also particularly vulnerable to damage from storms. Top environmental concerns included:

- Drought in the three aquifers in town including the Canoe River Aquifer and overall limits to water availability
- Changes in forest from fallen trees, especially white pines, during strong storms, increased risk of fire, erosion, degradation from ATV use, and failure to implement forest management plans
- Population increase of mosquitos, ticks, and other pests
- Decline of air quality
- Stormwater management including encouraging Low Impact Development
- Nitrification of groundwater, decline in water quality from septic system challenges

Most residents in town have private septic systems and leaching issues are common.

Societal concerns highlighted in the workshops included:

- Vulnerability of the 305 Turnpike St/ Mobile Home Park residents to flooding and septic system failure
- Identification of oxygen or medically dependent citizens
- Maintaining and improving emergency communication
- Additional funding to equip town emergency shelters with showers and kitchen space for potential long-term use
- Provide shelters for pets and transporting livestock,
- Quality of life/mental health/community character
- Access to public transportation for aging and low-income populations
- Public education on infrastructural, environmental, and social issues
- Funding for a generator for the Main Street nursing home

One of the more frequently mentioned sites of concern was the privately-owned mobile home park at 305 Turnpike St, from which a resident and community leader participated in

the workshops. Listed both as a vulnerability and strength, some points of concern mirrored the larger discussion on infrastructure throughout the town:

- Culvert under Route 138, which has no existing drainage
- Outdated wastewater treatment system, clay pipes allow groundwater infiltration
- Unreliable private plowing during snow storms
- Flood risk from proximity to swamp, high water table, and stormwater system

Easton currently has one emergency shelter at the Olmstead-Richardson elementary school, a cooling shelter at the Council on Aging, and potential for additional short-term sheltering at the town high school. Workshop participants want to work with the Fire Chief to fund kitchen updates, increasing showering capacity, and an updated heating system at the Olmstead-Richardson elementary school. Funding could also be used to expand kitchen capacity at the high school, and designate it as a second emergency shelter. When planning the new elementary school serious thought should be given to maximizing its use as a shelter as well. The cooling shelter at the Council on Aging is a well-known asset, while participants stated the need for either longer operating hours or additional locations. Ultimately the group recognizes sheltering in Easton to be among the town's list of assets, while improvements continue to be made.

Current Strengths and Assets

With local consciousness on Easton's vulnerabilities, community members have begun addressing many of the above concerns through planning and ongoing actions. Specific strengths also include natural areas or broad cultural practices that are important ingredients for a resilient community.

One unanimously named strength is the southeast regional Emergency Operations Center, which will service Easton, Mansfield, Norton, and Foxboro. The new building will be constructed in 2019 to meet the town's sheltering needs and provide a centralized location for emergency services. Related to emergency management, the town's alert system was cited as another strength.

Hockomock Swamp is an invaluable environmental feature; its nearly 17,000 acres across five towns makes it the largest vegetated freshwater swamp in Massachusetts. Many environmental features in Easton were named strengths, and overlap with infrastructural assets:

- Hockomock Swamp provides flood control
- Amount of protected land (15% of total area) for recreation, aesthetics, infiltration, and other multiple benefits
- Strong wetland bylaw
- Agricultural land contributing to the local economy and utilizing local resources
- Renewable energy (streetlights in subdivisions and promoting solar power)

Additionally, despite the challenges with Easton's majority septic wastewater treatment system, the initiative of the Department of Public Works (DPW) to begin transitioning parts of town to sewer was cited as a strength. Participants from DPW expressed an aspiration toward state-of-the-art water management technology to deal with the community's problems, beyond their excellent track record of compliance with state and federal regulations.

Other strengths include wide-reaching features. For one, the agreement with Mansfield, Norton, and Foxboro for wastewater district was named. Considering these communities share water resources and plan to share an emergency response shelter as well, regional collaboration seems to emerge as an implicit strength in Easton.

A complete list of strengths and assets can be found in *Appendix C* in the digitized feature matrices.

Top Recommendations to Improve Resilience

More robust and widely known emergency planning, water management, and forest management emerged as the most pressing needs in Easton. These actions seek to address widespread infrastructural, environmental, and societal concerns in tandem.

Two days' worth of discussion was whittled down into three thematic priorities that workshop participants agreed were urgent for Easton's resilience. Once actions were generated related to the list of strengths and vulnerabilities, each of the two groups identified their top three actions with their facilitator. The two groups then shared their top themes, which overlapped organically. Facilitators then lead a discussion with all attendees to best incorporate each group's suggestions into common themes.

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're critically needed (i.e. flood storage, air 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. Effectively implementing NBS means designing a community whose built infrastructure is reinforced by its natural environment and vice versa.

Easton's workshop



Bill Napolitano (SRPEDD) facilitates group discussion to rank Easton's highest priority actions

concluded with three major groupings of priority actions. The first was a mixture of environmental and infrastructural actions around forest management and utilities. The second considered water supply, management of natural waterways, and stormwater infrastructure. The third group of priorities dealt with social concerns of having an evacuation plan, the 305 Turnpike St mobile home park, and general quality of life. Incremental action items were identified within each priority theme.

Forest Management & Utilities

- Plan and increase implementation capacity for **fire-mitigating** forest management
- Plan and increase enforcement capacity to **limit** littering of cigarette butts and **subsequent fire hazard**
- Plan and increase enforcement capacity to **limit all-terrain vehicle use** on conserved lands to prevent subsequent erosion and increased fire hazard
- Research and leverage partnerships to learn more about benefits of **native planting and integrated pest management** (IPM) best practices
- **Conserve land** to continue to minimize impacts of flood/drought, extreme temperatures and to provide a cohesive ecosystem for wildlife
- Activate forest management according to **existing plans, consider adding new areas** for climate management, specimen trees and/or street tree protections
 - establish age and strategic species diversity of trees
 - consider expected pests, diseases and stress with longer dry seasons, hotter summers and select species that could be resilient to these challenges
- Host at least one **educational workshop** for the public on topics such as:
 - How to file Chapter 61
 - Strategic street tree planting for utility safety and aesthetic
 - Additional community discussion on hazards mentioned in MVP process
- Create strategies to **optimize utility safety** through tree cutting/trimming based on needs in different areas of town
- Encourage and support National Grid to transition **from 5 year tree cutting plans to 4 year plans**, identify possibilities to overlap with municipal vegetation management
- Look for **regional opportunities** for forest management grants

Water Supply, Wastewater & Stormwater Management

- Evaluate the stormwater drainage map to match key stormwater conveyance issues to sensitive environmental and social areas identified by <u>2017 Stream Continuity</u> <u>Report</u> (Consider SRPED's Geographic Roadway Runoff Inventory (**GRIPP**) **Program**)
- Establish **regular maintenance schedule** for Langwater Pond dam (located on Queset Brook at Main St)
- Consider regulating water use during drought, control vegetation and aesthetics
- Attention to **Morse Pond dam**; verify ownership, maintain communication with owner, observe regularly for upkeep
- On Prospect Street map **potential storage areas** for headwater storage program for the watershed scale, consider already conserved areas
- Explore **nature-based solutions to manage storm/waste water**

- Add regulations to Title 5 inspection that requires an increased **3 foot separation of soil absorption system from groundwater**
- Evaluate **size and state of catch basin** near 33 Prospect St & railway; floods regularly
- **Identify** cold water fisheries, **certify** them through Division of Fisheries and Wildlife
- Seek funding to implement new **MS4 permit requirements,** consider an establishing an Enterprise Fund for stormwater management
- Normalize the **consideration of LID in redevelopment**; Building and Conservation Departments keep up the good work and continue receiving support.

Evacuating Vulnerable Populations

- Acquire resources to support **more consistent management and oversight** of 305 Turnpike St mobile home park (ongoing through Board of Selectmen)
 - O Modify site's stormwater management to reduce flooding
 - O Monitor and enhance septic system as needed to prevent contamination
 - Snow plowing and street access in extreme storms
- Expand on **existing emergency planning** information from the town; prioritize being self-sufficient for 72 hours in an emergency
- Increase transportation access for elderly and low-income populations day-to-day
- **Pet and livestock-friendly** sheltering options, short and long-term

In making these recommendations, this cohort generated an array of potential actions that related back to the themes identified by facilitators. A complete list of actions generated by the groups, along with their prioritization can be found in *Appendix C*.

Additional Themes

Priority actions were elevated at the end of workshop discussions by consensus. Many other action items were identified over the course of the workshops that will contribute to Easton's comprehensive planning and resilient development.

Public education emerged as a theme across a breadth of subjects. Depending on the topic, Easton can tap into potential partner organizations, agencies, and municipalities to serve its population. Some opportunities for the town to develop resources for the public through written materials or events included:

- Expansion on Department of Public Health's annual tick and mosquito kit
 - Reach a broader audiences with specific info for kids, adults, and seniors
 - Relate topic to pets, drought/water bans, farmers markets
- Create deer feeding station where tick repellent can be applied to deer
- Continue allowing licensed hunting on public land to foster community connection to open space and wildlife, use as an educational opportunity
- Examine feasibility of putting pet repellent dispensers and tick cards in town kiosk

Another ongoing piece of discussion centered on **peace of mind/sense of connectedness** for the community at large. Beautiful public spaces and scenery (like aesthetic and functional green space) are important for residents to feel like that have places to go and interact with others. Connectivity and socialization among Easton's aging population is of particular concern, since operating hours of public transportation and the Council on Aging are limited. Preserving community **character and aesthetics** by conserving land can maintain community peace of mind while making Easton resilient to natural hazards

Expanding resources for the agricultural community, which was identified as a major strength in town. Participants mentioned increasing and encouraging partnerships to rotate fields with young farmers and unused land areas, as well as analyzing Chapter 61 lands productivity and opportunities for support there. Diverse and unconventional farming techniques can also be explored through workshops, printed materials, or incentives to use apiaries, livestock, berries, and silviculture practices (potentially in Easton's town forest). A desire to support farmer's market expansion to include more products and advertise more.

This is not an exhaustive list of additional items that were discussed, but an additional grouping of larger themes that did not get included in the priorities. Additional actions can be tracked by their related feature in *Appendix C*.

Regional Themes

On April 11, 2019 the conservation staff of Easton, Norton, and Mansfield met with Bill Napolitano of SRPEDD to evaluate common themes that cross town boundaries. See *Appendix D* for notes and maps.

Citation

Town of Easton (2018) Community Resilience Building Workshop Summary of Findings. Resilient Taunton Watershed Network. Easton, MA

CRB Workshop Project Team

Thank you to the Core Team who helped plan the workshops and the overall process: Patricia Howe-DiRenzo, Michael Blanchard, Stephanie Danielson, Kristin Kennedy, Ed Hands, Kevin Greiner, Andrea Langhauser, Kevin Partridge, Gary Sullivan, Gregory Swan and Laurie Muncy, (Old Colony Planning Council).

CRB Workshop Attendees

Name	Affiliation
Todd Sandstrum	Agricultural Commission
Craig Barger	Board of Selectmen
Gregory Swan	DPW, Assistant Town Engineer
Michael Goodman	Easton Conservation Commission
Andrea Langhauser	Easton Environmental Planner
Pam Widdop	Easton Housing Authority
Stephanie Danielson	Easton Planning Director
Mark Taylor	Health Inspector
Jenifer Cummings	Natural Resource Trust of Easton
Laurie Muncy	OCPC
Faith Simon, rep (MA Rep Claire Cronin)	Rep Claire Cronin Office
Ed Hands	Resident - Ag & Open Space
Scott Nelson	SE Regional Technical School
Kyla Bennett	524 Depot Street Master Plan Committee
Dottie Fulginitti	Board of Selectmen
Joe Cardinal	National Grid
Lisa Sullivan	OCPC
Keith Nunes	Easton Police Department
Jack Marsh/Josh Ford, rep	Easton Water Department
Kevin Partridge	Fire Chief
Christina Refford	Green Communities Committee

Acknowledgements

The Easton Core Team and Facilitation Team would like to thank the following for their contributions to the MVP Workshop process: staff of the Easton Town Hall for providing a wonderful meeting space, assistance with room set-up, and tech support; the Commonwealth of Massachusetts, EEA, Municipal Vulnerability Preparedness Program and North Easton Savings Bank for their funding support of these workshops, and; all of those who participated in the workshops and contributed to the plan resulting from these workshops.

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 Norton and which hazard(s) they relate to. Each feature category (infrastructure, environment, society) was documented on a separate matrix (see Appendix B and C for 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, longterm, 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 A** <u>Map of Easton</u> marked with red dots indicating infrastructural features, green indicating environmental, and blue indicating societal, both working group points combined.



Appendix B

Photos of matrices used by each group to list features in town that are impacted by natural hazards. Natural hazards of concern are listed across the top, on the right side of the matrix. Feature names and details are written in black ink, action items and prioritization are written in red ink.

Group 1 Environmental Feature Matrix

Community Resilience Bu	ilding Risk Ma	atrix 📕	2.222	()		www	.CommunityResilien	ceBuilding	.com
	The are the	the comment		Top Priority Hazards	(tornado, floods, wild	fires, earthquake, dro	ought, sea level rise, h	eat wave, ef	tc.)
<u>H-M-L</u> priority for action over the Sho V = Vulperability S = Strength	ort or Long term (an	id Ongoing)		EXTREME	FLCC D / DROWG ANT	EXT.		Priority	Short Long
Features	Location	Ownership	VorS	STORMS	CYCLE	TEMPS		HML	Ongoing
Environmental		1			and the second second				
PEST CONTROL	TOWM	PAB/PRI	V		STANDING WATER	OF PESTS	POLICY	H	0
WATERWAYS	ON MAP	PAB/PRI	V	SAME	DEBALS/VEG, ENTRY, FERT + PER	SAME	EDUCATION	5 #	0
FOREST	TOWNWIDE	PUB/PRI	V	HEALTH ISSUES	BIN DUE TO CHAN	SIMG CONDITION	ANNUAL REVIEW	Las H	0
CONSERVED LANDS	ON MIP	PUBIPRI	V/S	MAINTENCE ISSU	ES / OPEN. SPK	E PLAH.+	DEV. ACTION PLA	M	L
	TOWN WIDE	1		The second second		PECLIHE OF	EXP. COL EMISS	ICH M	0
HR QAALITY			V			HR QUALITY	EXPAND TESTIN	CAL)	
WATER QUALITY/SUPPLY			5.				INVES, DEMAND I	NAT. IT	0
EDUCATION				STOKA RESPONSE			ZOMM,	14	0
							10 × 10		
							· · · · · · · · · · · · · · · · · · ·	1	
				Collector Tale					
					and the second se	Contraction of the local division of the loc	and the second sec		

Group 1 Infrastructural Feature Matrix

	Commur	Storm water War cursider Carent	.11X	44	- Call toner	Turnpike IT Malater PK	www	CommunityResilier	ceBuilding	.com
					Top Priority Hazards	(tornado, floods, wild	fires, earthquake, dro	ought, sea level rise, h	ieat wave, e	etc.)
	<u>H-M-L</u> priority for action over the Short V = Vulnerability S = Strength	or Long term (an	d Ongoing)		Extreme	FLOOD	EXTREME		Priority	Time
	Features	Location	Ownership	V or S	Storms	DEOUGHT	TEMPERATURE		HML	Ongoing
	Infrastructural	0011	A BUTY	ers I			1 million of		1 a a	
	BESEMENT FLOODING	ALL OF TOWM	PUB ARIVAT	EV	REVIEW OF REVISIO	HOF REVIEW	T DEV.		m	0 .
1	DHAS	LOC. OM	PUB+ PRIVITE		POTENTIAL FOR	REVISIT OR PLAN DISCUSSION W/ OWNE	MORRIS POND DI	DAM	н	0 -
l	CULVERTS	TOO MUTNY	PUBLIC	V-OLD, FHUMS	POT. FALLURE	POT. PALLURE	1 2 2 2 2 2 2 2		Ħ	0
	POWER GRID	TOO MUTHY	PUBLIC	V	MAJOR BANAGE	IMPACT ON VEG	LOAD INCREASE	EXP. J.G. UTIL.	H	0 -
ł	GAS INFRACTURE	TOWHNIDE	PUBLIC	V	IT SINING SIDE (FALLURE OF	ANALYSIS OF	LITY	H	0
ł	CEPTH SUSTEHS	T W.	PUBLIC	V	H.P.S WATER	IMCREASING FALL	PLANMING	ED. ON FAMDING	m	0
ł	CTOPALLATED INE	T. W.S.O	PUBLIC	V	SLINE ->	NUTINYENTACE/	REVISIT BHOMME	POLICY	H	0
ŀ	CAEITER	2 FACILLING	S PUB.	V/S	LACK OF SEM.	SAME SIE. REG	SAME LONG TER	ENT. PAC.	L	15
		OH MAD	QuB		ATIC / AITCHE H	SHI COOKD.	LACK A/C	PLAN AC IN HE	~ L	ØL
	SCHOOL	ON MAD	Dug	5	1	WHEN NEW PAB	SHETY BLD.	TO JUMOUS	L	L
	DALLS CENTER	TOWM	10010	VIC	COLVERT	INC. EOC	POTITCLES ADVA	ACE DIRE 4	M	0
	ROAD)	WIDE		1/5	CONTINUE DISCUS	SIONS ON EST.	SERVICE	2 /Mr.	L	L
	TRANSIT			1.00044	EXANNE RESS	MONITOR CHAN	ING FLOOD	MOBILE HOME	M	0
	HOUSING	TOWN			LIP, CPA	TAREAT, OL	P FUEL STORAGE	COMMUNITY	1	0
	WHOLE MITHINGEMEN	WIDE	PUR		DURING STORE	PLANNING FOR	BICKUP		1	84 40
	CELL TON TOWERS				51515 7.511			12 - Carlos Carlos	-	
Í									-	
ĺ									-	
-									-	-
									-	

Group 1 Societal Feature Matrix

<u>H-M-L</u> priority for action over the Short or \underline{V} = Vulnerability \underline{S} = Strength Features	Long term (a								.com
Features		nd Ongoing)		STORMS	FLOOD/DRONGHT	fires, earthquake, dro モメて、	ught, sea level rise, t	Priority	tc.) Time
	Location	Ownership	V or S			TENPS		HML	Short Lo
Societal									Ungoin
EVAC. PLAN		PUBLIC	5	GOOD SYSTEM	IN PLACE /		EDUCATION	11	To
ELDERLY / MOBILITY CHALLEMES	ON MAP	PUB/RRIV	V	TRANSPORT/EL	eo Ac	ASSESS EQUID	(P142)	14	0
MOBILE HOME PIRK	OH MAP	PRI	V	IN AREA VULN.	TO PLOODATS	NEEDS	VULH POP.	H	0
MENTAL HEALTH ANALITY OF	TOWHWIDE			INGREASING	. ,	ACCESS TO OFEN	APLE DEC TO	M	
D. OF FOP. THAT IS	OH MAD		V	CHALLENGES		ACCESS TO SUPPOR	T NETWORK	* **	0
XY. DEP. OR MEED MEDS			V	Elle				H ·	5
MMUNITY DI HUNING			V	COORDINATION				Ħ	L
				CLIMATE MIGR	ATION : UPDATE M	ASTER 4 0. 5. PLAN	ACPA	H	5
VESTOCK /TRANSPORT			V	APRICE TO	COMPOM	ENT OF EVAC.F	LAN	H	3
DUCATION			Files and	APPLICABLE TO	ALL 3PAGE 5			H	10
			100						
			-			and the second second		-	-
			- Constanting			and the second second			1
			1. 1. 1. 1.	The second second		and and a start of the			
			-						
			1000						
						124			
			-						
	MOBILE HOME PARK MENTAL HEALTH/QUALITY OF .D. OF POR THAT IS 2XY. DER OR REED MEDS COMMUNICATIONS DOMMUNICATIONS DET SHEDTER/TRANSPORT DUCATION	MOBILE HOME PARK ON MAP MENTAL HEALTH/QUALITY OF TOWNWIDE D. OF FOR THAT IS DAM OF TOM THAT IS DAM UNICATIONS DAM UNICATIONS DAM UNICY PLANNING ET SHELTER/TRANSPORT DUCATION DISCUSSION DISCUSION DISCUSSION DISC	ACOBILE HOME PARK OH MAP PRI MENTAL HEALTH/QUALITY OF TOWHWIDE D. OF POP. THAT IS ON MEDS OH MAP COMMUNICATIONS ONMMUNICY PLANNING ET SHELTER/TRANSPORT PACATION DATE	ANOISIZE HOME PARK OH MAP PRI V MEHITAL HEALTH/QUALINY OF TOWHWIDE V D. OF POP. THAT IS OH MAP V DOMMUHICATIONS OH MAP V DOMMUHICATIONS OH MAP V DAMMUHICATIONS V V DAMMUHITY PLANNING V V VESTOCK V V DAMON V V DAMON V V DAMON V V DAMON V V VESTOCK V V DAMON V V VESTOCK V V VESTOCK V V VESTOCK V V VESTOCK V V	Include Notes Include Include	ANOISIZE HOME PARK ON MARP PRI V INTRISTRUTION TO PLONDARS MENTAL HEALTH/QUALINTY OF TOWHWIDE V INTRIBUNCT TO PLONDARS D. OF POP. TRATIS ON MAP V INTRIBUNCT CALUENSES DOMMUNICATIONS ON MAP V CONDUCTIONS DOMMUNICATIONS ON MAP V CONDUCTIONS DAMMUNICATIONS V EMAG. CONDUCTIONS DEST SHELTER/TRANSPORT V HEALSPACE FOR HEALSPACE DAMUE NPPLICADLE MALL SPAGES INTERPLANSPORT DAMUE INTERPLANSPORT V HEALSPACE DAMUE INTERPLANSPORT INTERPLANSPORT DAMUE	ADDILE HAME PARK OH MAD PRI V IN AREA VALUE. TO PLONDARY MEHTAL HEALTH/QUALITY OF TOWNWIDE V IN AREASING ACCESS TO OFEN .D. OF FOR. TRATIS OH MAD V INARPASING ACCESS TO OFEN .D. OF FOR. TRATIS OH MAD V INARPASING ACCESS TO OFEN .D. OF FOR. TRATIS OH MAD V INARPASING ACCESS TO OFEN .D. OF REALEDS OH MAD V INARPASING ACCESS TO OFEN .D. OF REALEDS OH MAD V INARPASING ACCESS TO OFEN .D. OF REALEDS OH MAD V INARPASING ACCESS TO OFEN .D. OMAUNICATIONS OR NECS V EMG. CONDUCTION .D. OMAUNICATIONS ON MAD V EMG. CONDUCTION .D. OMAUNICATIONS ON MAD V EMG. CONDUCTION .D. OMAUNICATIONS ON MAD V EMG. CONDUCTION .D. OMAUNICATIONS CONDUCTION V EMG. CONDUCTION .D. OMAUNICATION V CONDUCTION APPLICATE MISSENTER 40.5, PLM .D. OMAUNICATION MODIFICATION CONDUCTION APPLICATE MISSENTER 40.5, PLM .D. OMAUNICATION	MONSTER MARCH VILLAL ON MARP PRI V INARCH VILLAL TO PLONDARY INTERDS VILLA ROP. MENTAL: HEALTH/AUALITY OF TOWHUIDE V IMAREA VILLAL TO PLONDARY MARCE VILLAL NORESTARY D. OF FOR TRAFTIC TOWHUIDE V IMAREA VILLAL TOWHUIDE MARCE VILLAL NACESS TO SUPPORT SMEEL, SMEEL, BEC. OFF D. OF FOR TRAFTIC OH MADD V EMAL NACESS TO SUPPORT NETWORK DOWMUNICATIONS OH MADD V EMAL CONDUCTION DOWMUNICATIONS V EMAL CONDUCTION MARCE MUSTER SMEEL, BEC. OFF DOWMUNICATIONS V EMAL CONDUCTION MARCE MUSTER SMEEL, BEC. OFF DOWMUNICATIONS V EMAL CONDUCTION MARCE MUSTER SMEEL, BEC. OFF DOWMUNICATIONS V EMAL CONDUCTION MARCE MUSTER SMEEL, BEC. OFF DOWMUNICATIONS V EMAL CONDUCTION MARCE MUSTER SMEEL, BEC. OFF DOWMUNICATIONS V EMAL CONDUCTION MARCE MUSTER SMEEL, BEC. OFF DOWMUNICATIONS V MARCE MUSTER SMEEL CONDUCTION MARCE MUSTER SMEEL DOWMUNICATION MARCE MUSTER SMEEL MARCE MUSTER SMEEL MARCE MUSTER SMEEL DIMA	ADDISIZE ADDIS ANT PARK OM MAR OM MAR MAR MMEHTAL HEALTH/QUALITY OF TOWHUNDE V IMARPENUER MAR D.D. OF PRT. TARK 15 OH MAP V IMARPENUER MCREATURE. RECEDS TO SEPARAT METAGE. M D.D. OF PRT. TARK 15 OH MAP V IMARPENUER MCREATURE. RECEDS TO SEPARAT METAGE. M D.D. OF PRT. TARK 15 OH MAP V IMARPENUER RECEDS TO SEPARAT METAGE. M DOWNUMICATION OH MAP V CAMULANY. RECEDENT DEPRESSION OF THE SEC. M DOWNUMICATION ON MAP V CAMULANY. PRESSON OF SERVICE METAGE. M DAMMINITY DLANNING V CAMULANY. PRESSON OF SERVICE MARCH NETAGE. M DAMMINITY DLANNING V CAMULANY. PRESSON OF SERVICE MARCH NETAGE. M VESTOCK. V CAMULANY. PRESSON OF SERVICE MARCH NETAGE. M DAMMINITY DLANNING V CAMULANY. PRESSON OF SERVICE MARCH NETAGE. M VESTOCK. V MARCH NETAGE. V MARCH NETAGE. M DAMMINITY DLANNING V MARCH NETAGE. M M DAMAPORT V M M

	Community D. III			-	the second							
	Resilience Build	ing Risk Ma	atrix 🛔	- 44			www	v.CommunityResilie	nceBuilding	g.com		
	H-M-L priority for action over the Short	or long term (a	nd Onnaise)		Top Priority Hazards (tornado, floods, wildfires, earthquake, drought, sea level rise, heat wave, etc.)							
	\underline{V} = Vulnerability \underline{S} = Strength	a cong centi (a	nu Ongoing)		Extreme	FLOOD	EXTREME		Priority Time			
ł	Environmental	Location	Ownership	VorS	Storms	DRONGHT	TEMP.		HML	Short Long		
t	Annountal Ribert 1 1					01000				Ougoing		
ŀ	Chora line of the solution of the	Townurde	Variaa	S	Evaluate land -	of flood strage cops	city / overlag G.I.	mosts of moster, Mon	4	0		
ŀ	Fire to cal Wetland Bylaw	Townwide	-	S	Evaluate			we TWC into to	1	0		
	Freest Wangement Frie ATV	Toronwide	Various	SIV	Implement axist	tory F.M. Plans / ON	proting work between	vario pareno for	Hla	0		
12	Advicultaral lova (Active)	Townwill	Various	S	New partnushis	5 / work w/ arrive yo	una lavalua lu	Starts Justinuz / Clima	e strees (1)	0		
	Vector barre diseases (Hels Hasquitas, al.	Transved	Vanoe	V	Education / Au	acrese / web link-	/hash anti al	al pring / work of 3	NAP & AS GOOM	0		
	Botter Environmental Education	-	Town 4 stane	- s/U	May conservation	a notion la consular	Krock Material	how To a Multo	H	5/0		
	Stonmwater Management	-	Town & office	SIV	Sack Sundingo A	nasil motores the	-/ work of Nr. 1, Weak	Lit (1) - and mouses,	et. H/M	\$0		
(Stoundwater Flystration	Townwide	_	SIV	* Dec thing of	This of magic meguzin	17 Kap socaregars	LID / make velg mont	H	0		
11	Revisit what we consider villabilies	Image		44	" (peger 40 hafra	otracture)						
-	Transitioning vegetation	Jourgewal		AV.	Check of potici	of vegetation and	update our lists	so needed /	L/M	0		
1	mange in definition of surface				energie of mult	solves /more soluces	ton on succession y	eroap/movement				
-	weles in federal protection /1005		Section and		Follow this to	it due loss						
/	ulater Durcha 10 - a seculari						Contraction of the second			-		
0	wine prairing sources of containing			XS	Refer to refractiv	uetare)						
-												
D	welopmant pressure	Taurunide		V	Evoluate Zonines.	for Aquite Plotertin 1	Elaluote acount m	IPD	11	-		
1	Kan Energy Development	Townwide		.s	* pear to intrastruc	tare	6-1 m		H	0		
5	urface Water Elevation Flex .	Terunide.		V	K (Pala to into to	Mus Bat Again	- 54	-1				
1		,		-	(refer is nigrooth he	owe) and champes	n Anoline autili	Ø				
ľ						and the second second						
										-		

Group 2 Environmental Feature Matrix

Group 2 Infrastructural Feature Matrix

Group 2

	\underline{V} = Vulnerability \underline{S} = Strength	or Long term (a	nd Ongoing)		C V ((tornado, floods, wild	fires, earthquake, drought, sea level rise,	, heat wave,	etc.)
	Features	Lonting	10		Zxtreme	FLOOD DROMGHT	Extreme	Priority	Time
	Infrastructural	Location	Ownershi	p V or S	Storms	CYCLE	Temperature	HML	Short L
1	Queset Brook /20 Contare ala	1 11	10:	1 (-	0.00
2	111 /m.: Cili	11	garvate	V	Verify asners	ip & keep good a	ommunication / regular observation	m	0
?	Dame Im in in im		Public	V	establish a r	gulor maintener	a schedule /regelet a water levels in ra	and no	1
	Given Som Legional HIII Plan	Isted (9)	listed /varia	w V	willing flow	((Bay Rd) Sain	mill fal Den / potentil to and	ing m	0
	Cullveit @ Elm		toron	V	maintain / chi	of the see of it is	mil 1 Stor Low Power BC SYGNE	p_m	0
ł	303 Tumpike / Mobil Home Park	1/	Printe	VIS	existing inter	finalate in lat	randiga foc grous / ourse w/ norter	m	5
Į	Stream Continuity data have for	11	VAL MOD.	V	main in the	- individe la proper	/ stourdater-stanaeter afittation - 81	xrt H	5/0
l	caluerts a streams		100.00		March ky Storm	the conveyance is	ever to rensitive scales nulfscal scene	m	0
	Rollin's Rives Pockage Treatment	Nexton Ary	Painta	11	D L d II	1			
ľ	Barr Road (274) / Construence	"	France	V	Regiber the other	leach field / cont	tol oders (seal sido m menhalso)	H/m	S
ŀ	Cankir Mandary	- · · · /	Town	IV,	Priority somat	n retroat pile		nA	1
ŀ	acpric managements	Townwar	Voursue	V/5	New regulation of	Title 5 nigettois	to incorporate soundanter flagastin	(suc 25) m	0
	00 Prospect (1000 mg Blowing)	И	Privade	V	& Broken auluer	t - ourner should	L Siv (DER be grown)	11/00	0
	Prospect @ the rois ROW	11	private	V	Charly sin the	kuloent)/state	al (au long) (and 1 1 -	HADI	S
	Purchase @ the das-leg	b	privota post	V	Charle Dine I a	Prot lat al	-D(currey/ and boom	H/M	5
	Summer St. /Patty's Path / Baltic - Oratric	h	public lornus	ch/	Mar and ga	iver state of a	weder	L	0
-	Electric util then (trung vide)	h	auto langet	spo	1400 Labstallor	anould help add	up outege + you than in the 1	Br. L	0
	Contraction Carlos (Fundamente)		queix/private	SV	100K @ all prose	ema, large or shall	ll, equally / work with Town	HIM	D
-	(miller alling (chiegeneres)	Townwide	Trun	5	HA could age -	portable radios		m	0
	Ammed Fublic Transit / Elderly	Townude	-	V	anvestino a	Brackton about	& extending BAT / ettend	1	0
	s. Vulperable Survice				COA house	& capabilitien	recistal services and so had		0
1	Azreement u/ MFN Wookawetter 7	Five Corners	Town	5		1	- Dum menore Ploch contract :		-
4	Can Pressy Development	Townwide.		S	Streetlights on re	newable energy u	new sub-five time a march	4 hole	
1	Water Lighty & Gualdy (Farm)	11	1	5			Microstile / Took @ Microstile	= m/L	0
V	vaar septy & quality (bur)	11	-	S					10

Group 2 Societal Feature Matrix

i samence Buildi	ng Risk Ma	trix		(aps)	the second second second	line eetheuske di	wought can loval rise	neat wave.	etc.)
<u>H-M-L</u> priority for action over the Short o \underline{V} = Vulnerability S = Strength	r Long term (ar	d Ongoing)		Top Priority Hazards	(tornado, floods, will	EXTREME	ought, sea level rise, i	Priority	Time
Features	Location	Ownership	VorS	Xtreme	1-LOOD DRUNGHT	TEMP.		НМГ	Ongoin
Societal		1	1	0,00,0	- Cruce	1.4.1			
325 Tampike /Mdail Home	11	Private	V/5	* (Reke to infras	ructure) / Needo	projan manazence	nt		
R/O Elementory School / weed for	Lothop St	Pablic	SV	Need fando to	enhance copabili	tis * (see F.C. con	ments	H/m	S
Frothingham Holl / Halth a Bec / cooling	15 Borrow St.	Public	S	Shut-term (a	laustinie 2 weekday	opportanty); ater	un expansion for watereds	4	0
Porken Terrace (EHA)	Boldwini	Public	V/S	2 2 2 2 2	10.0	1 IRALI- ADT INT	mak compliant	m	0
Elise Circle (EHA)	Baldwin	Pable	VIS	> and and Con	alel Ingrochica	5/0000000000000000000000000000000000000	newcon, by Service o	-14	
Main St. Nurson's Home	mai / Oliver	Phiviate	V	Aland a back-up	querata,				
Adequate Howards / update Howards	Tavneside		slv	Chock on statas	I wak a OCPC -	tonicido update		m/H	C
Disraption of the Senool	Townwide	Public	SIV	But their when	Ala la sur An	and an Ell that		1	2
Schedule & the Impacts on society			4.	Duroung retto	gets / war your op	a community stra	12	4	0
BERT Team & Suestare weturk	Tashwide	Public	S						
Rensif Zoning	-		0	* (D. m to Guin	topaut)			and the second	
BOH Reps.				& (Reports One service	e lucante			and the second	
Storehell College,	Rte 138	Privato	SM	1 al a mall is	Charlin (1.50	and and the second of the		1000	
6,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1	-/-	regeo mor y	stonence (re. o	anoenvos; mataral d	appendighter (4	0
								1.1	
								and the second	
				Margan					
									-

Appendix C Digitized Feature Matrices

These tables are identical to matrices photographed in Appendix B and are reformatted for convenient data entry. Each Feature is characterized as a vulnerability (V), strength (S), or both (V/S). Where no ownership is listed, ownership is not applicable.

<u>Features</u>	Location	<u>Ownership</u>	<u>V</u> <u>or</u> <u>S</u>	<u>Extreme</u> <u>Storms</u>	<u>Flood-</u> drought cycle	Extreme Temperat ures	_	<u>Priority</u>	<u>Time</u>
Infrastructural								<u>HML</u> (high, <u>med,</u> low)	<u>SLO</u> (short, long, ongoing)
				Review +					
Basement	Town-	Pub +		revision of	Review impa	cts of			
flooding	wide	private	V	dev. controls	recent dev.			M	0
					Revisit op. pla	an Morris			
	-				Pond Dam; D	iscussion			
Dama	TOWN-	PUD +	· ·	Potential for	with owner o	of Central St.			0
Dams	wide	private	v	Tallure	Dam	Γ		П	0
	Town-			Potential failur	e; assess				_
Culverts	wide	Public	V	management p	blan		_	H	0
						Load increa	se; Exp.		
	T			Major	Impact on	U.G. Util. p	anning,		
Dowor grid	TOWN-	Dublic	V	damage in	veg. along	strat., +	tions		0
Powergrid	wide	PUDIIC	v	spring storm	griu Failura af	Applysic		п	0
					Failure of	Analysis			
Gas	Town				nineline/wa	vulnerabil			
infrastructure	wide	Public	v		ter	ity		н	0
innastructure	wide	Fublic	V			ity	Education		0
							on		
							funding		
						Monitor-	look at		
	Town-			M.P.S. water	Increasing	ing +	alternativ		
Septic systems	wide	Public	v	pol.	failure rate	planning	e svs.	м	0
						Devisit as I			-
Champion	Taura	Dublie /		Maintenancet	م ماما	Revisit poli	cy Rev.		
Stormwater	TOWN-	PUDIIC/	V	Waintenance t	0 010	rund, main	enance		0
Inirastructure	wide	private	V	system/inc. no	1			п	0
						Same; upgr	ade ext.		
				Lack of		fac.; long-te	erm: new		
	2		V/	Gen./AC/Kitc	Same; S.E.	facility			
Shelter	Facilities	Public	S	hen	reg. coord		1	L	S
			1				Plan AC in		
							new		
School	On Map	Pub				Lack AC	schools	L	L

Group 1 Digitized Feature Matrix

	1	1	1	1	L		-	1	
-									
Emergency					When new p	ublic safety			
center	On Man	Public	s		FOC	rporate			1
center	On Map	1 ublic	5		100	Potholes: a	dvance bike	L	
	Town-		V/	Culvert		+ pedestria	n		
Roads	wide	Public	s	repair	Same	infrastructu	ıre	М	0
Lack of mass	Town-								
transit	wide	Public		Continue discu	ssions on est. s	ervice		L	L
				Examine					
				regulations,					
				Low Impact	Manitanahan	ation flood			
				Community	threat old fu	el storage			
	Town-			Preservation	(focus on mo	bile home			
Housing	wide	Public		Act	community			м	0
_				Support system	n function				
Waste	Town-			during storms					
management	wide	Public						L	0
				Assess					
Cell towers		Private		vulnerability	Plan for back	un		1	
Cell towers		Thvate		vullerability				L	
Environmental		1		T	1		1	1	1
						Changing			
	Town-	Public/			Standing	set of	Education		
Pest control	wide	private	V		water	pests	policy	н	0
							Education		
							analysis +		
		Dublic		Debric (veget	tion /outrophic	ation from	testing		
Waterways	On man	private	v	fertil	izer and nestici	de	tation	н	0
Waterways	On map	private	•		izer und pestien	uc	Annual		0
							review +		
							imp. of		
	Town-	Public/					existing		
Forest	wide	private	V	Health issues d	lue to changing	conditions	plan	H	0
Consorved		Public/	V/				Develop		
lands	On map	private	S	Maintenance is	ssues/open spa	ce plan	plan	м	
	en nap	pinate	-				Expand		-
							CO2		
							emission		
A. 19	Town-	5.1.1	.,			Decline of	reduction		
Air quality	wide	Public	V			air quality	s (local)	M	0
Motor.	Tourn					Expand test	ting, domond		
quality/supply	wide	Public	s			manageme	nt	н	0
quanty/supply	WIGC		5	Emphasize		manageme			
				storm					
	Town-			response		Pursue mul	tifaceted		
Education	wide	Public		information		communica	ation	Н	0

Societal										
Evacuation Plan		Public	S	Good system in place/some improvement needed		See Education (P1+2)	н	0		
Elderly/					Assess	Improve list of vulnerabl e				
challenges	On map	private	v	evacuation	equipme nt needs	populatio ns	н	0		
Mobile home park	On map	Private	v	In area vuln. to flooding			м	L		
Mental health/quality of life	Town wide		v	Increasing challenges	н	0				
ID of pop. that is oxygen dep. or needs meds	On map		v	Update existing list that fir	Update existing list that first responders have					
Communica- tions	Town- wide		v	Emergency coordination			н	L		
Community planning	Town- wide			Improved planning for futu migration: update master a	re growth + clim nd O.S. Plan + C	nate PA	н	S		
Pet shelter/transp ort livestock	Town- wide		v	Include as a component of	Evacuation Plan		н	s		
Education	Town- wide			Applicable to all 3 pages (Se features)	e previous 'Edu	ication'	н	0		

			<u>V</u> or	Extreme	<u>Flood</u> Drought	Extreme			
<u>Features</u>	Location	<u>Ownership</u>	<u>s</u>	<u>Storms</u>	<u>Cycle</u>	Temperature		<u>Priority</u>	<u>Time</u>
<u>Infrastructural</u>				_				<u>HML</u> (high, <u>med,</u> low)	<u>SLO</u> (short, long, ongoing)
Queset Brook/20 Central St./dam	Town-wide	Private	v	Verify ownershi observation	p + keep go	od communicati	on/regular	м	0
Queset Brook/Main St./dam	Town-wide	Public	v	Establish a regu water levels as i	lar mainten needed	ance schedule/re	egulate	м	0
Dams from regional HM Plan	listed (9)	listed/various	v	Localized floodi Dam/potential f	ng @ (Bay R for storms	d) Sawmill Pond		м	0
Culvert @ Elm	Elm St	Town	v	Maintain/check flows/check w/	to see if it i owner	s undersized for		м	S
305 Turnpike/Mobile Home Park	305 Turnpike	Private	V/S	Existing infrastri stormwater infi	Existing infrastructure is broken/groundwater- stormwater infiltration - fix it				
Stream continuity database for culverts & streams	Town-wide	Various	v	Match key storr ecological/socia	Match key stormwater conveyance issues to sensitive ecological/social areas Replace the other leach of cold/control odors (seal				0
Rolling Pines Package Treatment	Norton Ave.	Private	v	Replace the oth lids on manhole	Replace the other leach of cold/control odors (seal lids on manholes)				S
Bay Road (224)/Confluence of 3 culverts	Bay Rd	Town	v	Priority stormwater retrofit site – retrofit it				м	L
			246	New regulation for Title 5 inspections to incorporate groundwater fluctuation – gather more information					
Septic management	Town-wide	Various	V/S	on groundwater	r impacts			IVI	0
80 Prospect (localized flooding)	80 Prospect	Private	v	Broken culvert - program)	owner sho	uld fix (explore D	DER	н/м	S
Prospect @ the rail									
ROW	Prospect	Private	V	Check size of cu	lvert/state	of culvert/catch	basin	H/M	S
Purchase @ the dog- leg	Purchase St	Private/public	v	Check size of cu	lvert/state	of culvert		L	0
Summer St./Patty's Path/Baltic-Electric	Summer St	Public/private	s/v	New substation plan for tree rer	should help noval by Na	o address outage ational Grid	s/4 yr.	L	0
Electric Utilities	Town-wide	Public/private	s/v	Look @ all prob Town	lems, large	or small, <u>equally</u>	work with	н/м	0
Communication system (emergency) Limited public transit/elderly&	Town-wide	Town	s/v	Purchase portal for Housing Aut Conversations v BAT/extend CO/	ole radios hority v/ Brockton A house & c	about extending	ral	M	0
vulnerable services	Town-wide		V	services group o	contract?	, ,	[L	0
Agreement w/ MFN Wastewater District	Foundry St. to Five Corners	Town	s	No action					

Clean energy	Tauna usida		C	Streetlights on renewable energy in new				N 4 /1	
Water supply &	Town-wide		5	subdivisions/100	k at microg	rias		IVI/L	
quality	Town-wide		S						
Environmental			-	I					
Amount of protected land	Town-wide	Various	s	Evaluate land for flood storage capacity/overlay G.I maps w/ matric plan critical infra				н	0
						-	use TNC		
							info to		
Strong local wetland							our		
bylaw	Town-wide		S	Evaluate			wetlands	L	0
				Implement exist	ing F.M/co	operative work b	etween		
Forest management/fire/ATV	Town-wide	Various	s/v	various owners for grants/regional/climate stress component				н/м	0
			-,-	Form and strengthen new partnerships/work with					
Agricultural land	Townwide	Variaus	c	young farmers/explore diverse farming/work with					
(active)	Town-wide	various	5	SEIVIAP & Agricu	itural Com	nission			0
(ticks, mosquitoes,				Increase educati	on/awaren	ess/web			
etc.)	Town-wide	Various	V	links/kiosk material				н	S./O
						, .			
Better environmental		Town & others	s/v	More cooperative action/responses/work w/ NRT, Water Department Farmers' Markets etc				н/м	s/0
			5,1	Seek funding for MS4 implementation/keep					5,0
Stormwater		Town &	chi	encouraging LID/look into possibilities for					0
management		otners	5/V	redevelopment					0
Groundwater									
fluctuation	Town-wide		S/V	(Refer to same feature on infrastructure sheet)				-	
Revisit what we									
consider invasive;				Check w sources of vegetation and update our lists as					
vegetation	Town-wide		S/V	succession process/movement				L/M	о
Change in definition									
of surface waters in									
federal									
protection/regulations				Follow this as it	develops				
Water quality/sources				(Refer to					
of contamination			S	infrastructure)					
Development				Evaluate zoning	for Aquifer	Protection/eval	uate		
pressure	Town-wide		V	against MVPP				Н	0
Clean energy development	Town-wide		s	(Refer to infrastructure)					
Surface water				(Refer to infrastr	ructure); ge	t cold water stre	ams		
elevation flux	Town-wide		V	certified					

Societal									
305 Turnpike/Mobile Home	305 Turnpike St	Private	V/S	(Refer to infrastructure)/Needs proper management					
R/O Elementary school/used for sheltering	Lothrop St.	Public	S/V	Need funds to enhance capabilities				н/м	s
Frothingham Hall/Health & Rec/Cooling center	15 Barrows St.	Public	s	Short-term(daytime + weekday opportunity); CERT Team expansion for weekends				L	0
Parker Terrace (Easton Housing Authority)	Baldwin	Public	V/S	Continue capital improvements/BOH & CERT outreach + services				м	0
Elise Circle (Easton Housing Authority)	Baldwin	Public	V/S	п				м	0
Main St. Nursing Home	Main/Oliver	Private	v	Need a back-up generator					
Adequate Housing/update Housing Production Plan	Town-wide		s/v	Check on status/work w/ OCPC towards update				м/н	s
Disruption of the school schedule + the impacts on society	Town-wide	Public	s/v	Building retrofits/use Green Community Status			L	0	
BERT Team + Shelters Network	Town-wide	Public	S		-				
(Revisit) Zoning	Town-wide			(Refer to Enviror	nment)				
Board of Health regulations.	Town-wide			(Refer to Enviror	nment)				
Stonehill College	Route 138	Private	S/V	Look @ MOU w/ Stonehill (re: pandemics; natural disasters; shelters)			L	0	

NORTON/MANSFIELD/EASTON REGIONAL VULNERABILITY CONCERNS

INFRASTRUCTURE

- I-1 Infrastructure along the Canoe River (all 3 towns) dams, roads, bridges, GI/forests
- I-2 Rolling Pine Package Treatment (Easton) impacts on the Canoe River
- I-3 East St. culvert (Mansfield) impact on the Canoe River; replace/repair, forestry management
- I-4 Assess all culverts and surroundings (Mansfield) impacts on the rivers
- I-5 Leonard St. culvert (Norton) impact on the river
- I-6 Assess the integrity of town roadway infrastructure and the GI surrounding it (all 3 towns)

I-7 Repeat the process in I-6 along all shared river and stream corridors, including:

- Rumford River (Hathaway Patterson area) Mansfield
- Johnson St. culvert Mansfield
- Fulton Pond Dam/West St. Mansfield
- Willow St. culvert Mansfield
- Route 140 South Main St. Mansfield
- Route 140 Norton
- Norton Reservoir Dam Norton
- Cross St. Dam Norton

I-8 Columbia Gas – Easton

I-9 Mulberry Meadow Brook area, Norton/Easton, including:

- Old Pond and New Pond dam management (Easton)
- Bay Road localized flooding (Easton)
- Fairlund Farais Bogs dam and water issues (Norton)
- Plain St. culvert (Norton)

I-10 Wading River area, Norton/Mansfield, including

- West St. culvert (Mansfield)
- Williams St. culvert (Mansfield)
- Balcom St. culvert (Mansfield)
- Otis St. culvert (Norton)
- Walker St. culverts (2) (Norton)
- Camp Edith Reed culvert (Norton)
- Barrowsville Pond dam (Norton)