TOWN OF SUTTON
COMMUNITY RESILIENCE BUILDING WORKSHOP

Summary of Findings and Recommendations, June 2019

MVP Core Project Team:

Organization	Name	Role
Town of Sutton	Doreen DeFazio	MVP Project Coordinator, Director of Sustainability, Lead Facilitator/Project Leader
Independent consultant	Ann Marie Foley	Breakout Group Facilitator / Project Assistant
Independent consultant	Eric L'esperance	Breakout Group Facilitator / Project Assistant
Town of Sutton	Paul Maynard	Emergency Management Leader
CMRPC	Matt Franz	GIS Specialist
Sutton Resident	Lee Dillard Adams	Project Assistant

Acknowledgements:

This MVP Summary of Findings was made possible by the commitment of many individuals and organizations. The core team of Sutton representatives provided key background information. These were provided during meetings and interviews with Paul Maynard (Emergency Management), Jennifer Hager (Director of Planning), Cheryl Rawinski (Public Health), Jim Smith (Town Manager), Matt Stencel (Highway Supervisor), and Matt Belsito (Fire Chief): all of whom provided additional background information and summaries of Sutton's current plans that could be incorporated into these workshops and findings.

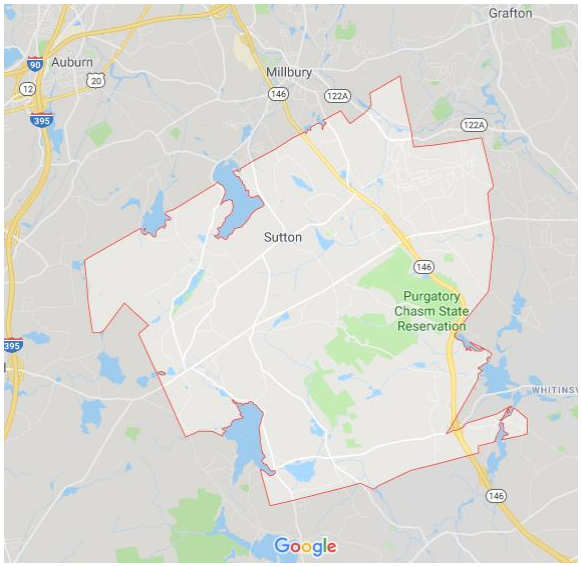
The Blackstone National Golf Club generously donated a meeting space and food for both days of the workshop. The Sutton Public Schools provided volunteer scribes to record critical workshop content. Lee Dillard Adams offered invaluable guidance throughout the planning of the workshops. Funding for the planning and implementation of the workshops as well as development of this Summary of Findings came from a grant awarded to the Town of Sutton by the Massachusetts Executive Office of Energy and Environmental Affairs.

Thank you to the Sutton Board of Selectmen and Town Manager, who continuously and proactively support projects that benefit the common good of our wonderful community.

BACKGROUND

On February 7th and 8th, 2018, the Town of Sutton held a two day Municipal Vulnerability Preparedness (MVP) workshop. The workshop's goals were to identify hazards that Sutton that have been or could be intensified by climate change. In order prioritize actions and prepare for the identified hazards, the Town applied for MVP certification, which allows certified communities access to additional state grants for projects related to climate change resiliency. Twenty four community members attended the two day workshop, including the Town Manager, staff members from planning, fire, police, IT, public health and highway. We also had committee representation from conservation and planning. Business stakeholders included Wittier Farms and Blackstone National Golf Club.

Sutton, Massachusetts was incorporated in 1714. It is located roughly 10 miles south of the city of Worcester and is considered a rural community within the Blackstone River Basin. Sutton has a total area of 33.9 square miles and a population of approximately 9,500.



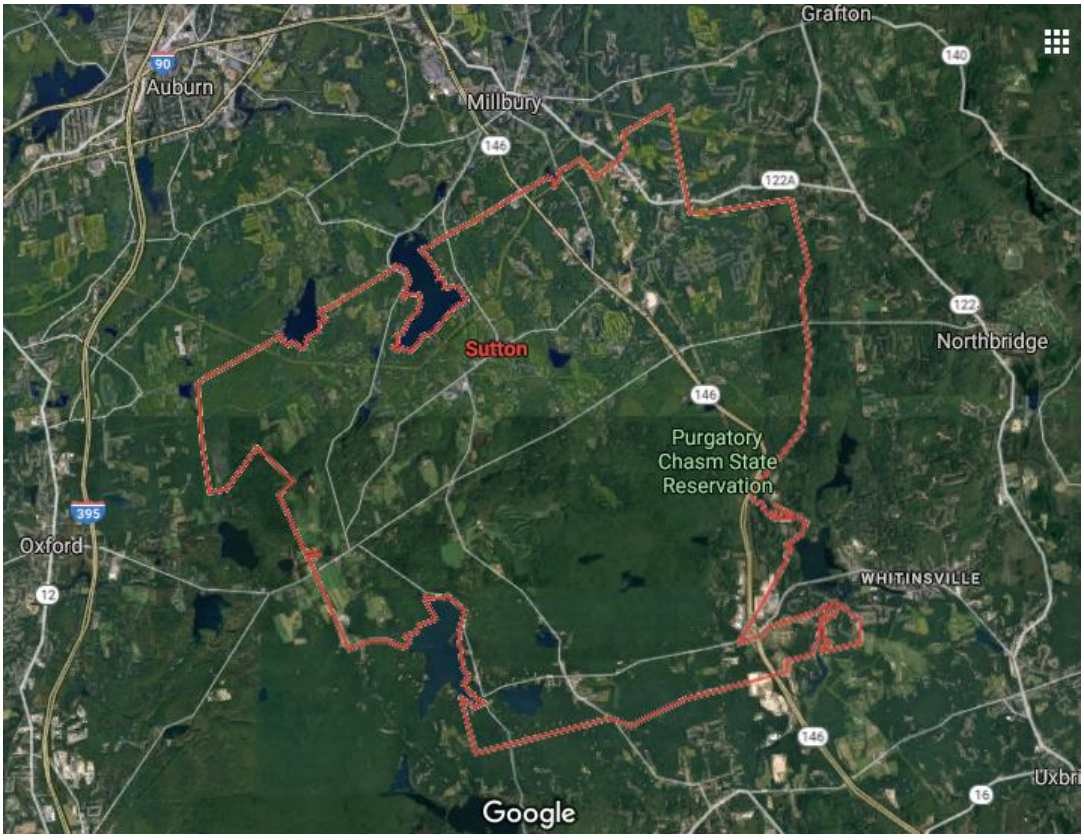
In 2016, Governor Charlie Baker signed Executive Order 569, mandating that the Commonwealth support climate resilience planning at the local level. In April 2017, the Municipal Vulnerability Preparedness (MVP) planning grant program was launched by the Executive Office of Energy and Environmental Affairs (EOEEA) to implement the order through completion of local vulnerability assessments and action-oriented resiliency plans using the Community Resilience Building (CRB) workshop framework developed by The Nature Conservancy. Completion of the CRB process would enable designation of towns as "MVP Communities" and offer preference in future state grants.

On June 8, 2017, Sutton was notified that $15,000 had been awarded by EOEEA for resiliency planning. Following training and certification of MVP providers, Sutton chose their Sustainability Director, Doreen DeFazio, as both their MVP provider and staff lead on this project.

A core team met to discuss the MVP process, gather and document regional and local natural hazard and climate information through interviews and data collection, create stakeholder invitee lists in preparation for the MVP program's workshop requirement, prepare workshop materials, and plan the workshop events. The workshops' central objectives were to:

- Define top local natural and climate-related hazards of concern;
- Identify existing and future strengths and vulnerabilities;
- Develop prioritized actions for the Municipality;
- Identify immediate opportunities to take actions to increase resilience.

The workshops were held at Blackstone National Golf Club in Sutton. An introduction to the MVP program and process was given, and a summary of climate change projections and impacts using EOEEA's information and local hazard information was characterized, based on a prior Hazard Mitigation report.



Top Hazards based on Hazard Mitigation Plan

Sutton had identified top hazards in a thorough hazard mitigation summary a few years prior, drafted on October 6, 2016. The Hazard Mitigation Plan purpose was to identify the natural hazards facing the Town of Sutton, assessing the vulnerabilities of the area's critical facilities, infrastructure, residents and businesses, and how to mitigate the negative effects of typical natural hazards. Based on this plan, a section included a summary of disasters that have or could adversely impact Sutton. The most significant identified hazards were chosen to be the top hazards for the workshops. The four breakout groups were instructed to focus mainly on these hazards, with discussion of other hazards permitted if considered especially important.

Top Hazards and Vulnerable Areas Identified from Hazard Mitigation Plan

- Flooding (all applicable types: riverine, storm water runoff, and dam failure)
- Winter storms
- Droughts and wildfires
- Wind /Hurricanes/Tornados

Flooding

According to the Hazard Mitigation Plan, Flooding was the most prevalent natural hazard identified by local officials in Sutton. This plan also identified that climate change has the potential to exacerbate these issues over time with the potential for more severe and frequent storm and rainfall events. There are several different types of flood hazards- from storm water and poor drainage infrastructure to storm surges to dam failures.

Flooding areas in Sutton are closely associated with the Blackstone River and its tributaries, including the Mumford River. According to a GIS analysis performed by the Central Massachusetts Planning Commission, there are 72 properties in Sutton that are susceptible to floods.

Storms

Severe winter storms as well as wind/hurricane and tornadoes can pose a significant risk to property and life. Storms and wind can result in flooding, storm surge, closed highways, blocked roads, down powerlines. Based on the availability of records for Worcester County, the likelihood that a severe storm will affect Sutton is ranked very high. Research on climate

change indicates that there is a great potential for stronger, more frequent storms as the global temperature increases.

Droughts and Wildfires

Potential vulnerabilities to wildfires include damage to structures and other impacts on natural resources. Smoke and air pollution from wildfires can be a health hazard.

In Sutton, approximately 62 percent of the town's total land area is forested and is therefore at risk of fire. In accordance with the Massachusetts Hazard Mitigation Plan, the Sutton Hazard Mitigation Team found it difficult to predict the likelihood of wildfires because of the number of variables involved and therefore determined it "moderate" in ranking.

However, with climate change predictions projecting summer temperatures increasing, such conditions could promote high elevation wildfires. Climate change is also predicted to bring increased wind damage from major storms, as well as new types of pests to the region, according to the research done by the Hazard Mitigation Plan team.

The lead facilitator presented data and climate change projections and impacts that could potentially affect Sutton. The presentation referenced town and county and national level climate change projections from the University of Massachusetts Amherst Northeast Climate Science Center, along with more localized studies. Presentation slides are attached to this report for reference.

A large group discussion was facilitated on how each hazard had impacted Sutton in the past and concerns for the future. Working in small groups, participants prioritized four top hazards on which to focus for the remainder of the workshop.

Participants were instructed to work in small groups to identify infrastructural, societal, and environmental features of the Town that related to these hazards. Participants used maps showing the location of community. The maps and list of community resources are attached to this report for reference.

Following the presentation, attendees broke into three groups of 8-10 to work through the program's matrix and mapping exercise. Team leads at each table reported back to the full group to discuss overall priorities. The vulnerabilities listed below were discussed in the workshop's breakout groups.

Infrastructural vulnerabilities

- Dams – Many dams in Massachusetts were built during the 19th century. Dams of this age can fail because of structural damage caused by flooding. The town of Sutton owns two dams, Manchaug and Stevens pond. Manchaug sits upstream from Steven's Pond, which abuts Manchaug Village. These dams can threaten Manchaug village, and potentially leading down all of Manchaug Road and into the Town of Douglas. Sutton has currently been investigating ways to fund a $17000 grant to outline and prioritize the replacement needs of all the dams in town. However, Stevens Pond dam has become a priority as it is currently leaking.

  A bigger issue are the dams owned by private parties, and in the case of a winter storm or flooding, the town would be impacted by the lack of maintenance done to these privately owned dams, but the owners cannot afford to maintain them. The town does not have the authority to force owners to maintain them. Since these dams have potential for liability as

Town as a whole, it becomes a vulnerability. The question came up in the discussions: How do we maintain these standing hazards?

- Culverts – The Town has vulnerable culverts due to age. Many were built in the 1940's with steel pipes that have rusted and become rotted down. There are approximately 100 culverts in the Town of Sutton and several need to be replaced. These culverts will become weaker with consistent and heavier projected rainfall. Another vulnerability that aligns with the damaged culverts is road failure during emergency. Some of the roadways that could be blocked by water during a storm are in route to emergency shelters. Sutton requires a survey to determine which are culverts are facing the most vulnerably and planning the replacement of pipe damage based on the reported plan.

- Narrow Roadways/Trees –The Town doesn't have the luxury to lift of prune the trees because the entire budget goes towards tree hazards. Some of our rural roads get narrow and pose a problem for ice storms or emergency management.

- Power Outages– Due to the tree canopies in town, power outages could be affected by down lines. Typically, National Grid is proactive with trees cut, and they will cut trees that potentially could interrupt lines. These tend to be roads, such as Barnett Road, where service issues would interrupt a lot of service.

- Transite Pipe on Blackstone Street Sewer Pipe – The Blackstone Street sewer pipe is sent through Millbury DPW from its location in Wilkinsonville village at the Blackstone street pump station. It is an old pipe that was built in 1970 and serves approximately 1,000 residents. There is no back up pipe aligned with the sewer pump into Millbury, as most sewer plans require dual pipes s in case of failure and to optimize best flow methods. If the sewer pipe is interrupted by flooding or breakage from old pipe, there is no back up. There is a potential to have all of Wilkonsonville village without sewer function.

- Insect Borne Disease - Warmer weather and more precipitation has led to increased mosquito populations. The town of Sutton is also seeing new types of diseases such as West Nile Virus and tick bourne illnesses. These diseases are a public health threat for both people and animals and there is a need for additional public education towards prevention.

Societal Vulnerabilities

The societal concerns that were discussed during breakout groups were mainly based on transporting food and water supply, but it was highlighted that due to strong first responder departments and the overall sense of community in Sutton, that there is less of a concern around societal and more in infrastructure. However, the following societal concerns were discussed:

- Separation of parents and kids in emergency situation – There is spotty cell phone service around town, and no cell service at School Complex.

- Food Supply is limited. We have one grocery store in town with inadequate supplies for a longer term emergency.

- Lack of public transportation- Sutton is a rural community that relies on cars as primary method of transportation.

- Older population with mental and/or physical limitations.

Environmental Vulnerabilities

- Open Reservoirs – Wilkinsonville Water District, which is privately owned, is responsible for the water district surface water reservoir and it has limited security.

- Drought impacts local businesses such as farms and golf courses. There is a need for these businesses to use additional water during a drought to maintain crops and golf course.

- Tree Maintenance is difficult to maintain – The Town of Sutton spends approximately $30,000 to maintain 11,000 trees. In order to prioritize within the allotted budget, the town spends the funding to remove the most hazardous trees but cannot maintain all the tree work and is only maintaining about 5 percent of the trees in town. This poses an environmental vulnerability for people, cars, electric utilities. Sutton is working on hiring a windshield service contractor to identify need removal. Due to drought, there are additional damage from gypsy moths. Sutton has a lot of old trees that are in desperate need of maintenance.

- Flooding can cause failed septic. The town is still mainly on septic systems and flooding poses a concern for potential failed systems due to storms being a public health hazard.

- Flooding negatively impacts water quality through uncontrolled storm water. If the catch basin can't handle the load of water coming in, it can become stagnant and a public health hazard.

Current Strengths and Assets:

- Highway Systems, such as Route 146 that has easy access to Worcester and Providence and can serve as evacuation routes.
- Upgraded Communication systems, Town uses Code Red as a reverse 911 emergency system.
- Recent school generator upgrade.
- Community education/leadership – confidence in Town leadership.
- Committed personnel and volunteers, Sutton has a strong sense of community service and very neighborly.
- Areas of partnership/mutual aid – Sutton both assists and is part of emergency management and public health regionalization plans and services.
- Strong elderly services which include a robust senior center program which also houses the town's food bank.
- Tree canopies in higher temperatures, although trees can pose a threat, they can also be justified as a strength since pruning healthy trees but leaving tree canopies can bring needed shade in severe heat and could reduce heat islands.
- Multiple water sources from lakes, ponds and rivers.
- Good snow removal services – the Town puts considerable effort into mitigating the effects of snow: such as by taking proactive measures so that residents and first responders get around in snowstorms.

Top Recommendations to Improve Resilience:

The workshop facilitators adhered to the protocol laid out in the Community Resilience Building Workshop Guide. The breakout groups completed their individual matrixes and reported their top 3-4 priority actions when the whole group reconvened. These actions were developed by the workshop participants to reduce natural hazards' impacts and to build resiliency. The lead facilitator then moderated a whole group activity to combine similar

actions prior to instructing each of the participants to vote for their top three actions. The votes were tallied and announced.

The Lead Facilitator sought and obtained consensus from the participants in supporting the final list of priority actions and understood that they also did not want to lose track of all the other important actions that were identified. The recommendations were tallied by vote, number one being the top priority.

Priority Number 1: Trees

- Need to inventory hazard trees or pruning
- Grants for inventory (Mass Relief Grant)
- Consider Capital funds for one time maintenance
- Develop sustainable plan moving forward in conjunction with highway department and tree warden
- Educate and streamline priceless for residents to deal with hazard trees themselves with assistance from tree warden
- Team Rubicon (Federal Program) could be employed under Highway for cost effective tree work
- Address over salting (reduce negative impact on root structures
- invasive species

Priority Number 2: Transite Pipe

- Wilkinsonville pipe has already had one break and the threat for another one is looming
- Original plan for Mass works funds to upgrade
- Funds dependent upon development project that must be completed
- Town needs to inquire on up to date cost estimate for design and engineering and construction cost estimate to prepare for grant funding
- Identify alternative funding sources

Priority Number 3: Need for Towns Generators

- Determine Towns ability to seek funding for The Senior Housing Authority (Since it is state funded)
- Fire Station 2 has a 40 plus years old with limited capacity
- Willkinsonville water towner – affects radio system and water system
- Manchaug Water Tower – affects radio system and water System
- Simonian Center
- Highway Department – affects our Town fuel center
- Perhaps invest in one or 2 mobile generator that can be towed to locations

Priority Number 4: Dam Maintenance

- Manchaug Dam and Stevens Pond Dam have existing trust fund for maintenance, and we need to appropriate for necessary work
- Tucker Pond Dam – Town has no control so there is a need to ID the owner and Can we work together to get control of the potential hazard risks
- Evaluate all culverts and dams to Quantity need and seek funding

Attachment A: Workshop Participants

Name	Role / Title
Betsy Perry	Library Director
Blackstone National Golf Club	Host / Venue
Chase Lindsey	Chase Lindsey – Sutton Public Schools
Chery Rawinski	Board of Health, RN, PHN
Dan Durgin	Technology Director, Town of Sutton\Sutton Public Schools
Dennis Towle	Chief of Police
Don Obuehowski	Sewer Department
James Smith	Town Manager
Jennifer Hager	Planning Director
John Couture	Building Commissioner
Joyce Smith	Joyce Smith – Conservation Commission
Lisa Troast	Treasurer/ Collector
Mary Jo Henry	Manchaug Pond Foundation
Matt Belsito	Matt Belsito – Fire Chief
Matt Stencel	Highway Supervisor
Paul Maynard	Sutton Emergency Management Leader
Phyllis Charpentier	Manchaug Pond Foundation
Rebecca Quitines	Mass Wildlife Aquatic Biologist
Roger Raymond	Facilities Manager\Sutton Public Schools
Samantha Staebrier	Whittier Farm
Wally Baker	Sutton Planning Board
Wayne Wittier	Whittier Farm
Doreen DeFazio	Lead Facilitator, MVP Project Leader, Sutton Sustainability Director
AnnMarie Foley	Breakout Group Facilitator / Project Assistant
Eric L'esperance	Breakout Group Facilitator / Project Assistant

Attachment B: Workshop Pictures

Attachment B: Workshop Pictures (cont.)

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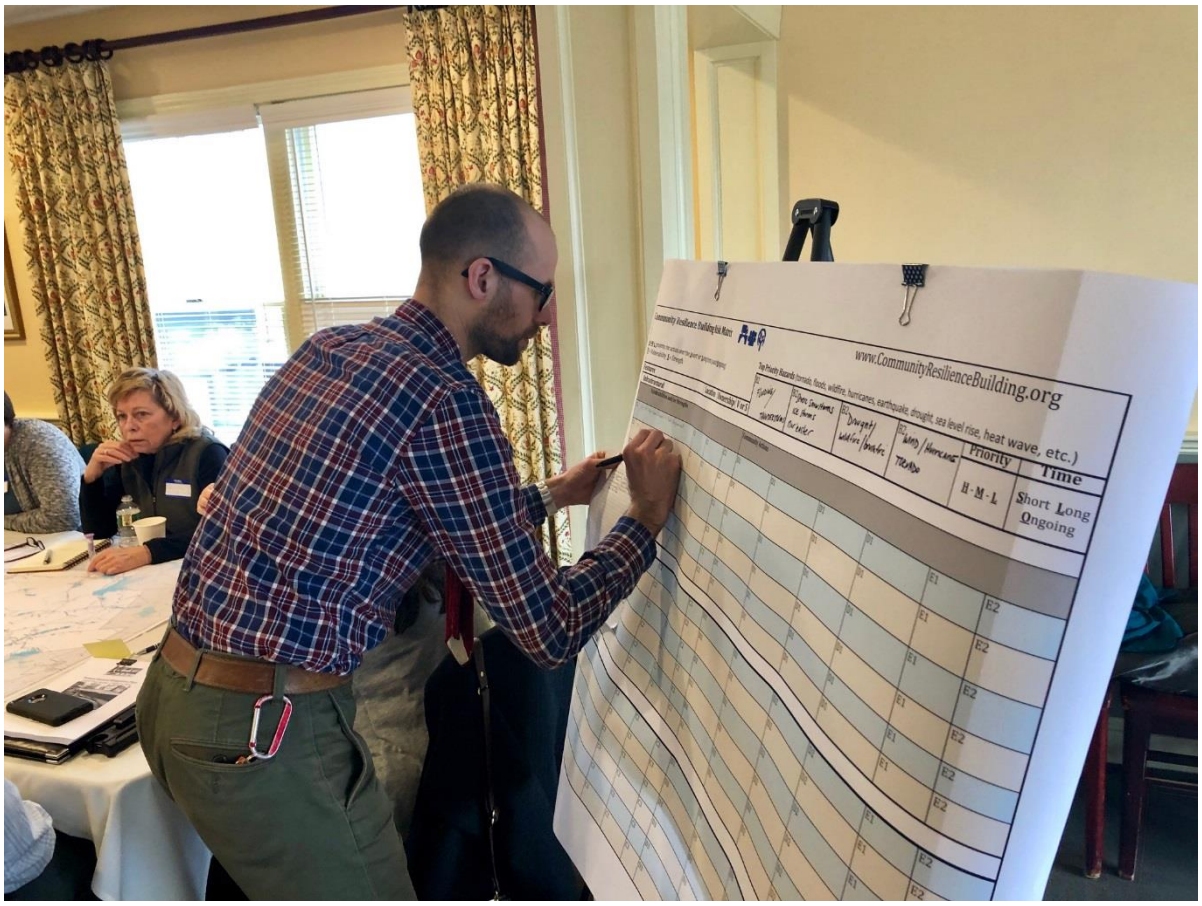

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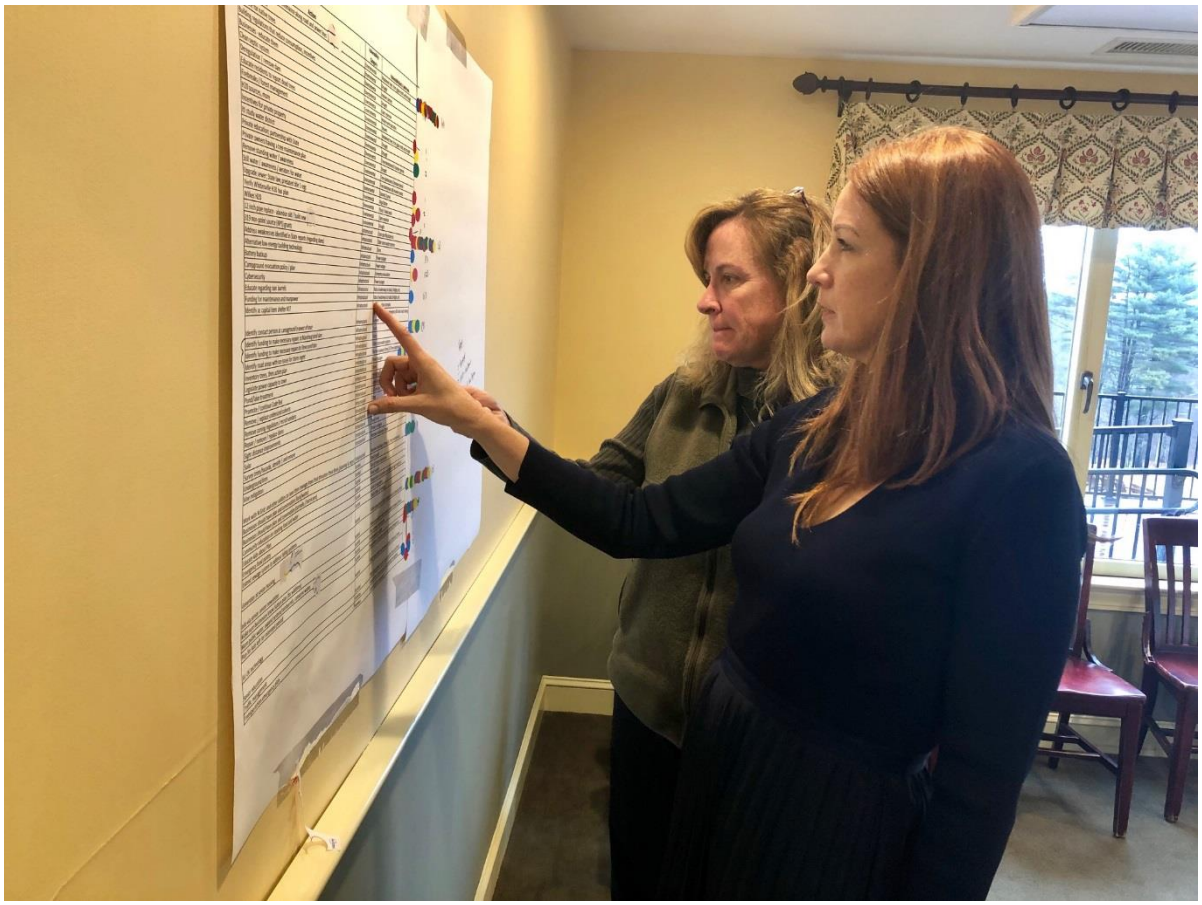
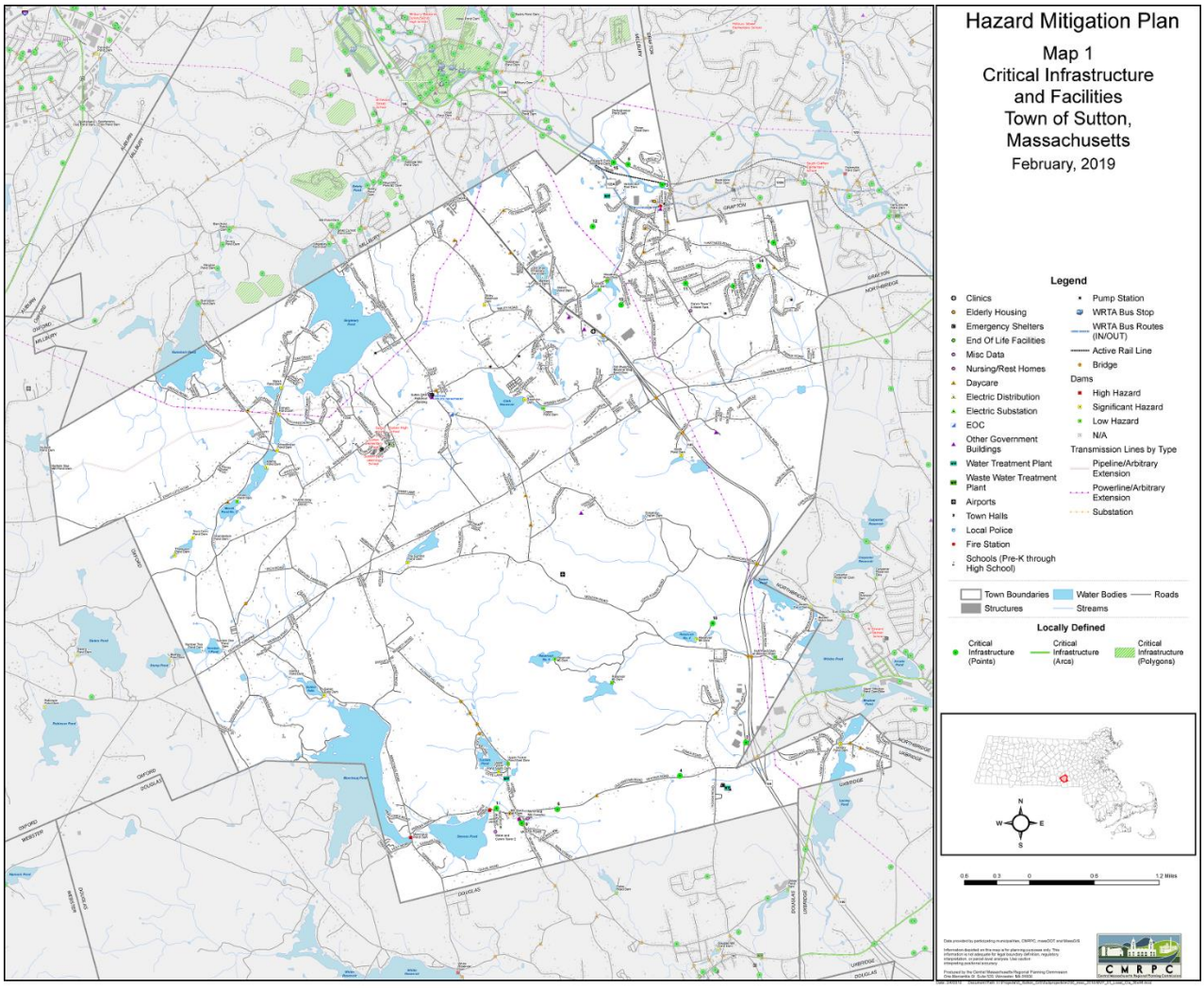
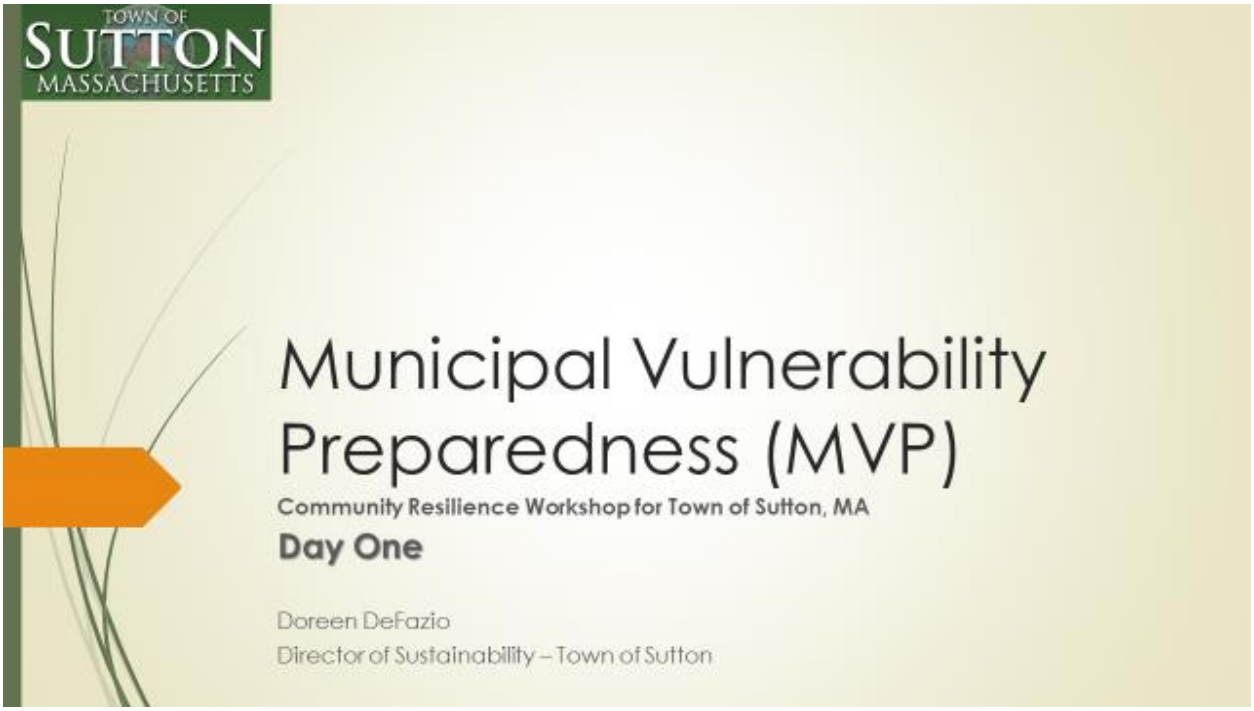


Attachment C: GIS Maps Utilized During Workshop



Attachment D: Workshop Slides



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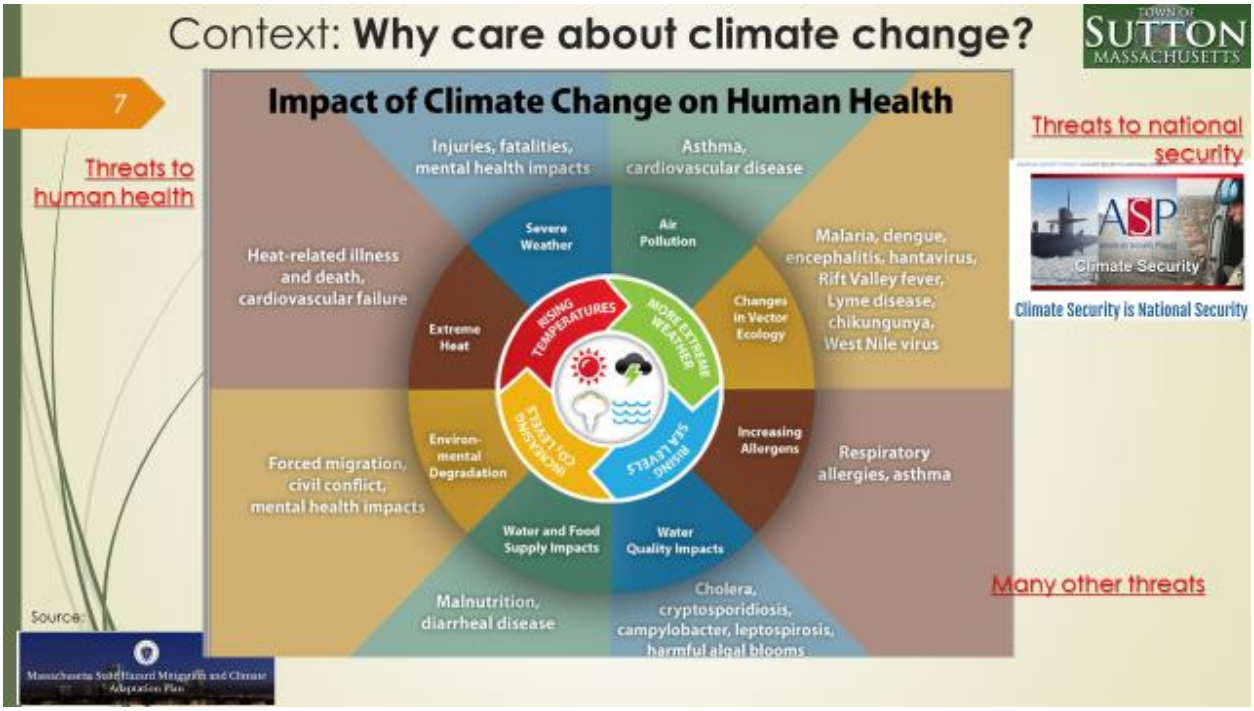

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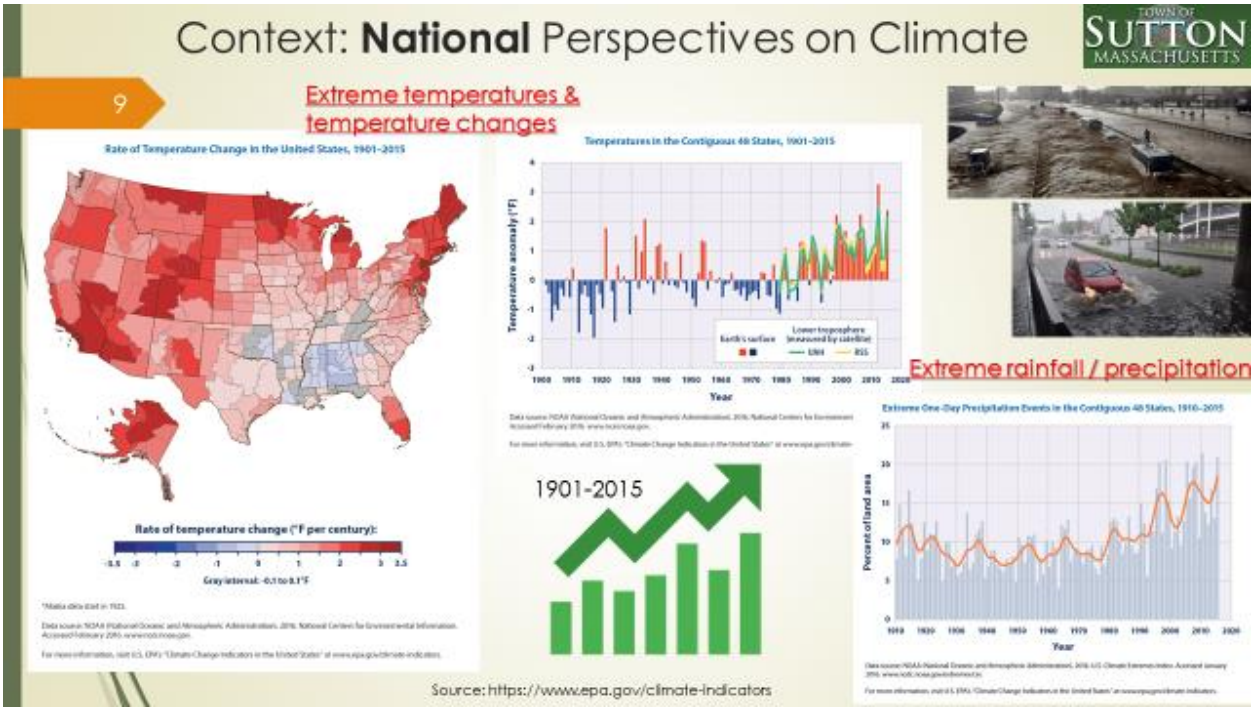

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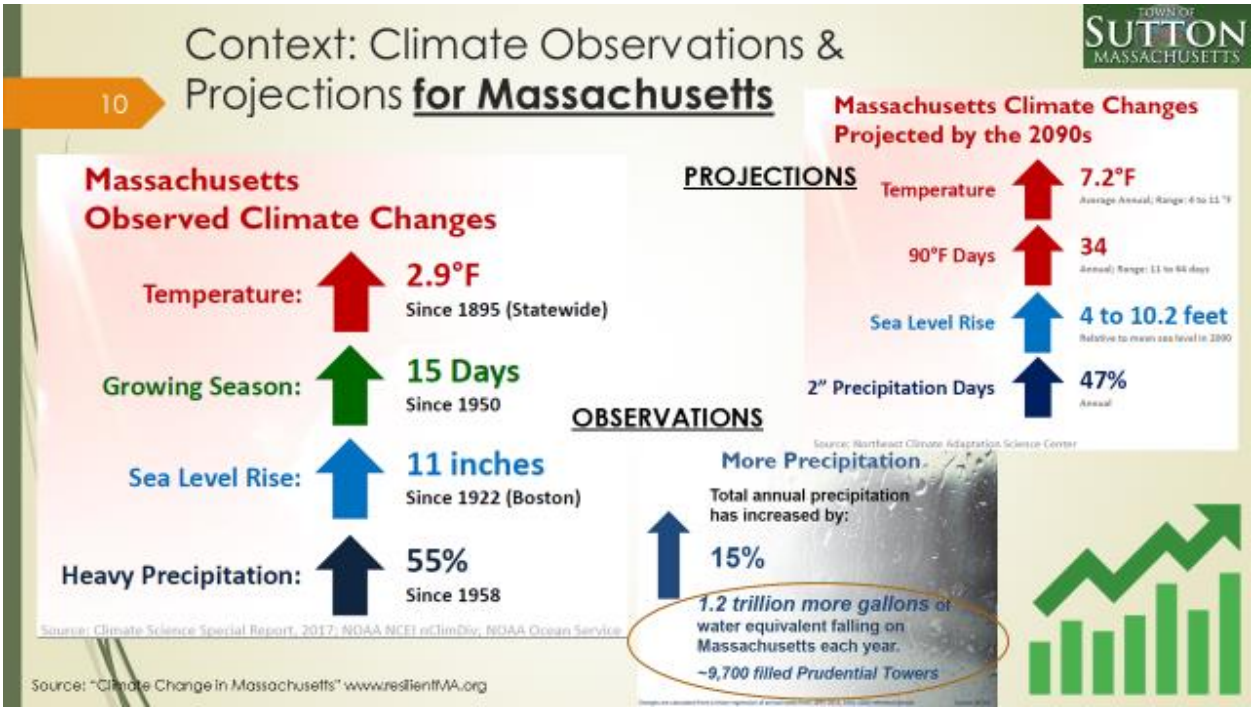

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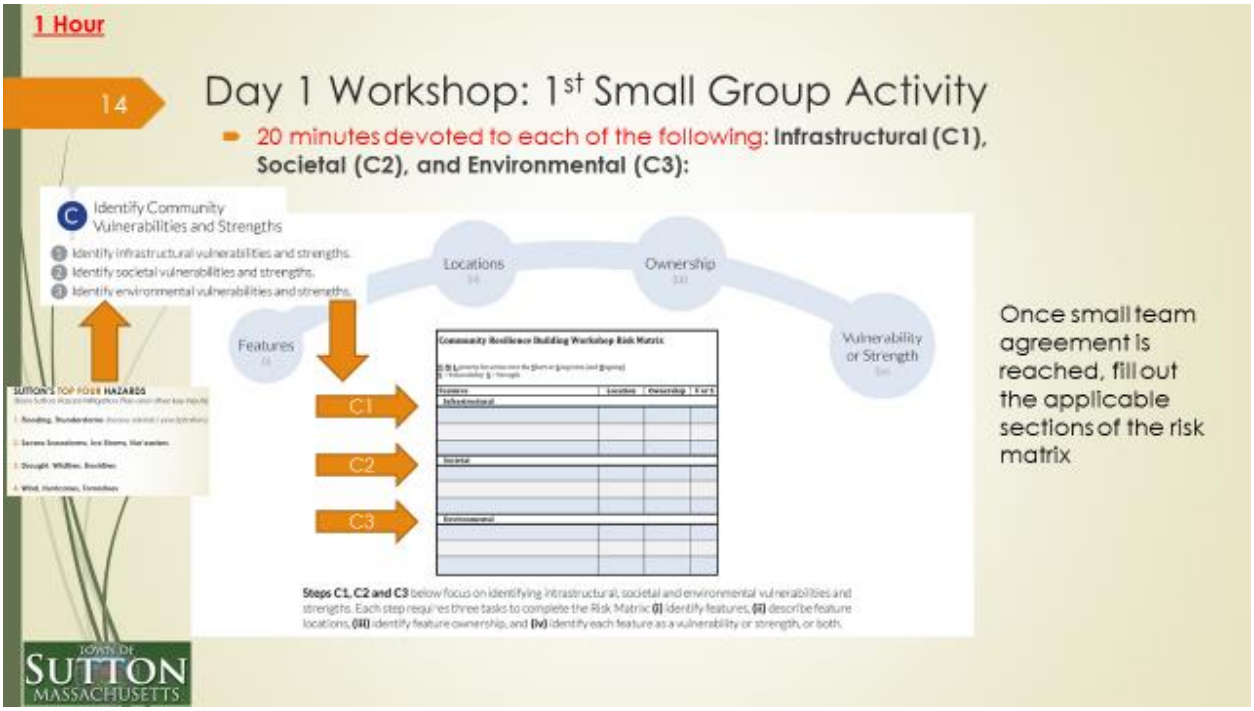

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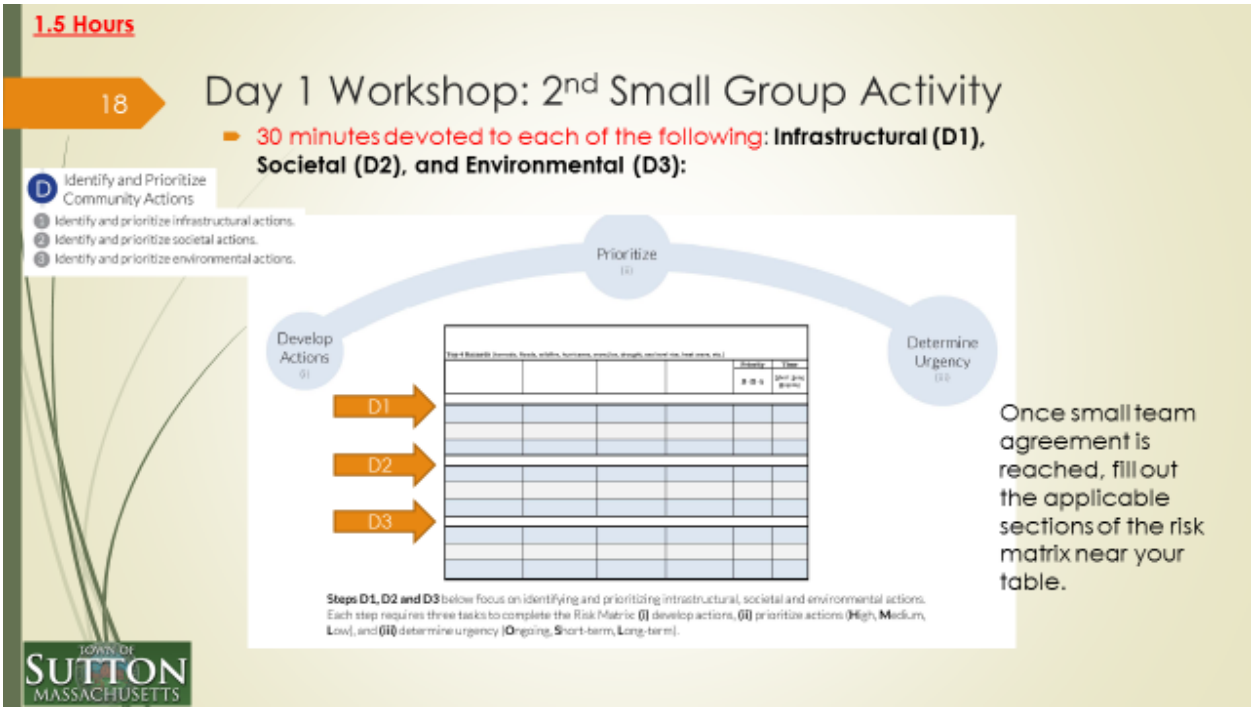

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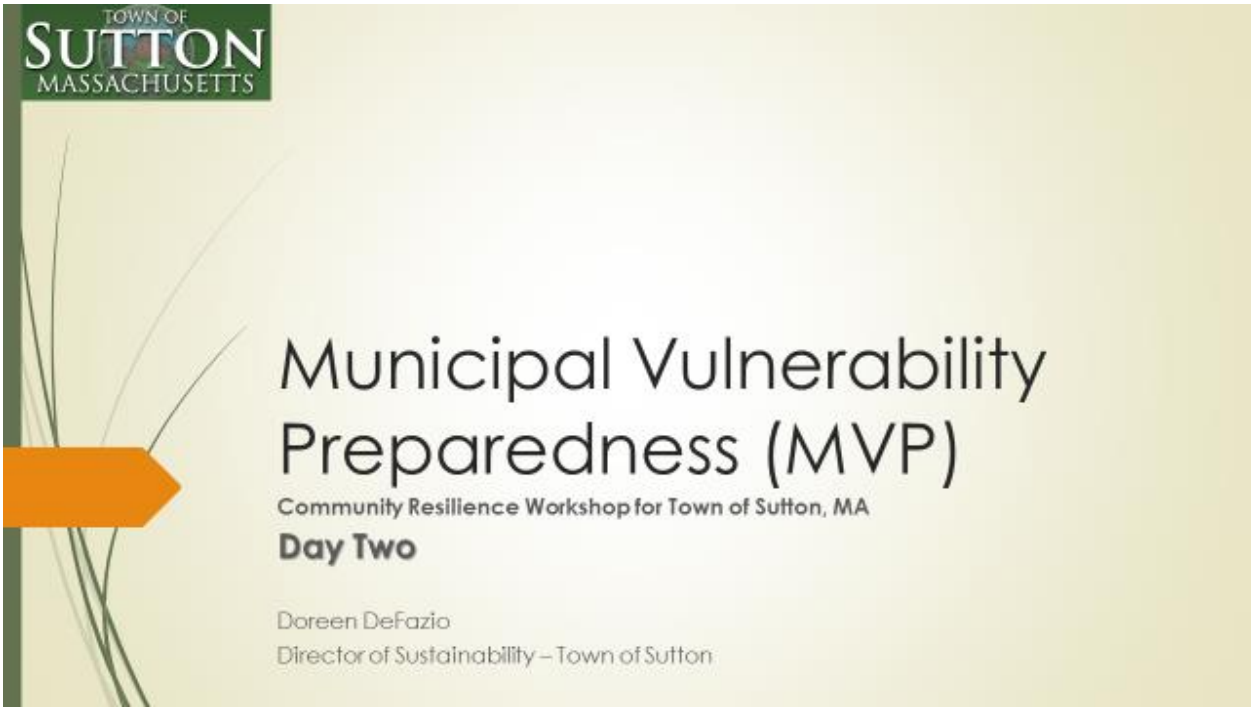

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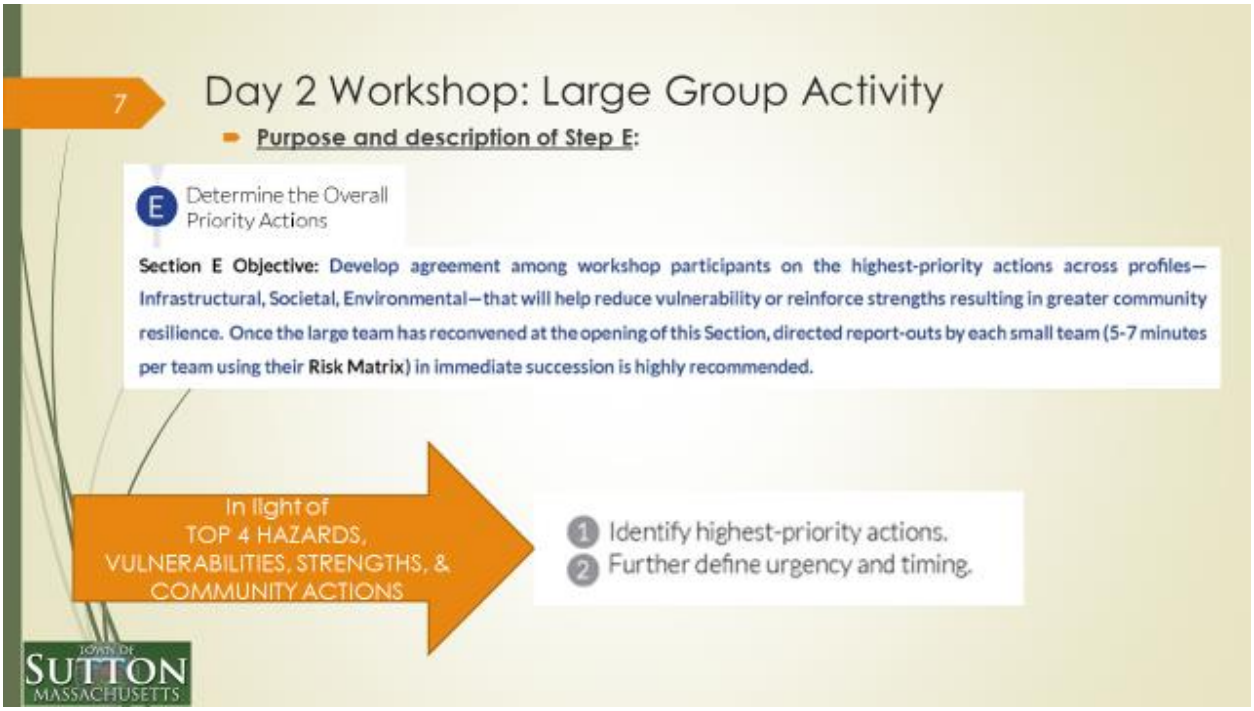

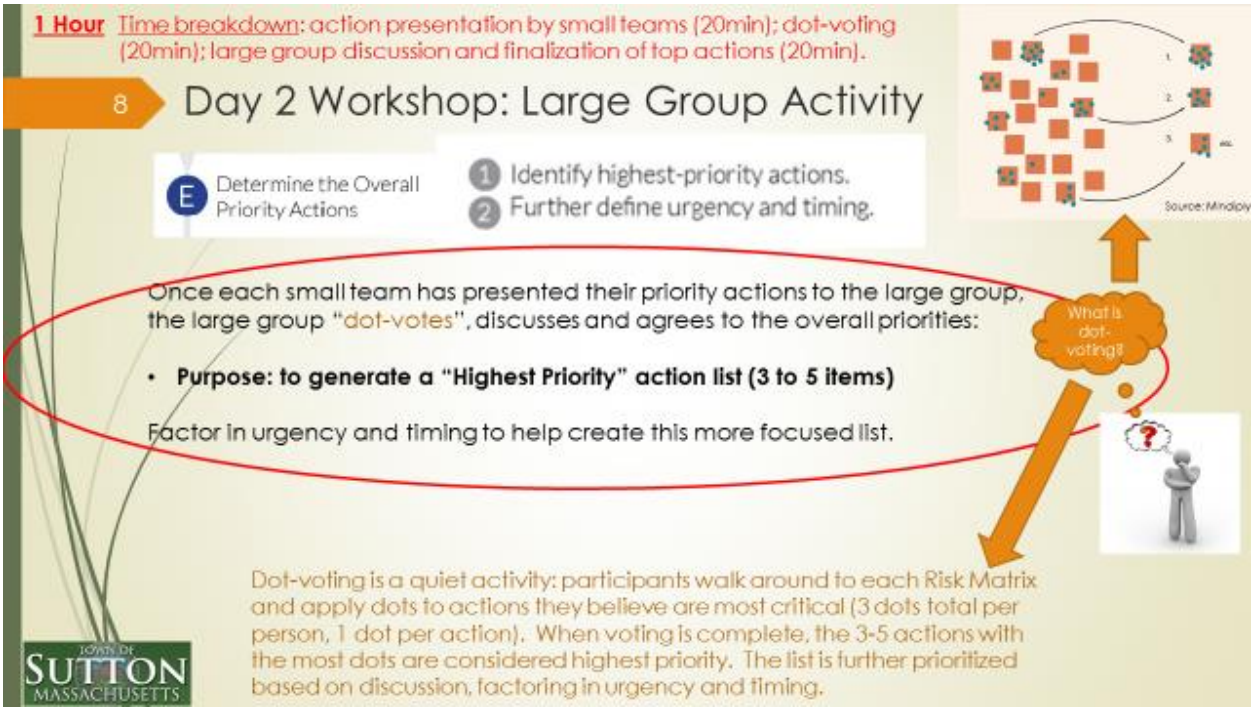

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