

Athol Helping Athol: Community Plan for Social Resilience "AHA" 2020



EXECUTIVE SUMMARY

In accordance with Executive Order 569, which seeks to build resilience and adapt to the impacts of climate change, the Town of Athol, Massachusetts is pleased to submit this “AHA” 2020: Athol Helping Athol: Community Plan for Social Resilience. In 2019 the Town of Athol applied for and received a Municipal Vulnerability Preparedness (MVP) program planning grant from the Executive Office of Energy and Environmental Affairs (EEA) to 1) complete a vulnerability assessment and action oriented resilience plan (“Findings Report”), 2) update its Hazard Mitigation Plan, and 3) conduct an education and engagement effort explicitly focused on addressing socially vulnerable populations in Athol through the lens of climate change resilience.

This resulting “AHA” 2020: Athol Helping Athol, Community Plan for Social Resilience Report is the outcome of an effort to place the considerations of socially vulnerable populations in Athol at the center of a climate change resilience planning effort. This AHA Report has been purposely developed for use in conjunction with Athol’s Municipal Vulnerability Preparedness (MVP) Findings Report or as a stand-alone planning document.



ACKNOWLEDGMENTS

This project was made possible through funding from the Massachusetts Executive Office of Energy and Environmental Affairs' Municipal Vulnerability Preparedness (MVP) Grant Program. Thank you for providing the leadership and funds to support this process. The Town of Athol values your partnership.

Thank you to the municipal and community leaders within Athol who attended the Athol Community Resilience Building Workshop. The institutional knowledge provided by workshop participants was essential to the success of this process.

Thank you to the community leaders in Athol who took the time to be interviewed for this project: Coco, Privilege Barbershop; Bette Jenks, NQ Patch Coordinator of Grandparents Group and Family Resource Center Supervisor; Jennifer Pearson, Athol Resident; Cathy Savoy, Council on Aging; Jamie Woods, Athol Resident. Your valuable insight has been integral to the success of this project.

A special thank you to Heather Bialecki-Canning of the North Quabbin Community Coalition for her dedicated efforts to ensure the considerations of socially vulnerable populations were included in this Findings Report and the "AHA" - Athol Helping Athol: Community Plan for Social Resilience.



INTRODUCTION



CLIMATE ADAPTATION:

Adjustment in natural or human systems to a new or changing environment that exploits beneficial opportunities or moderates negative effects. – US National Climate Assessment

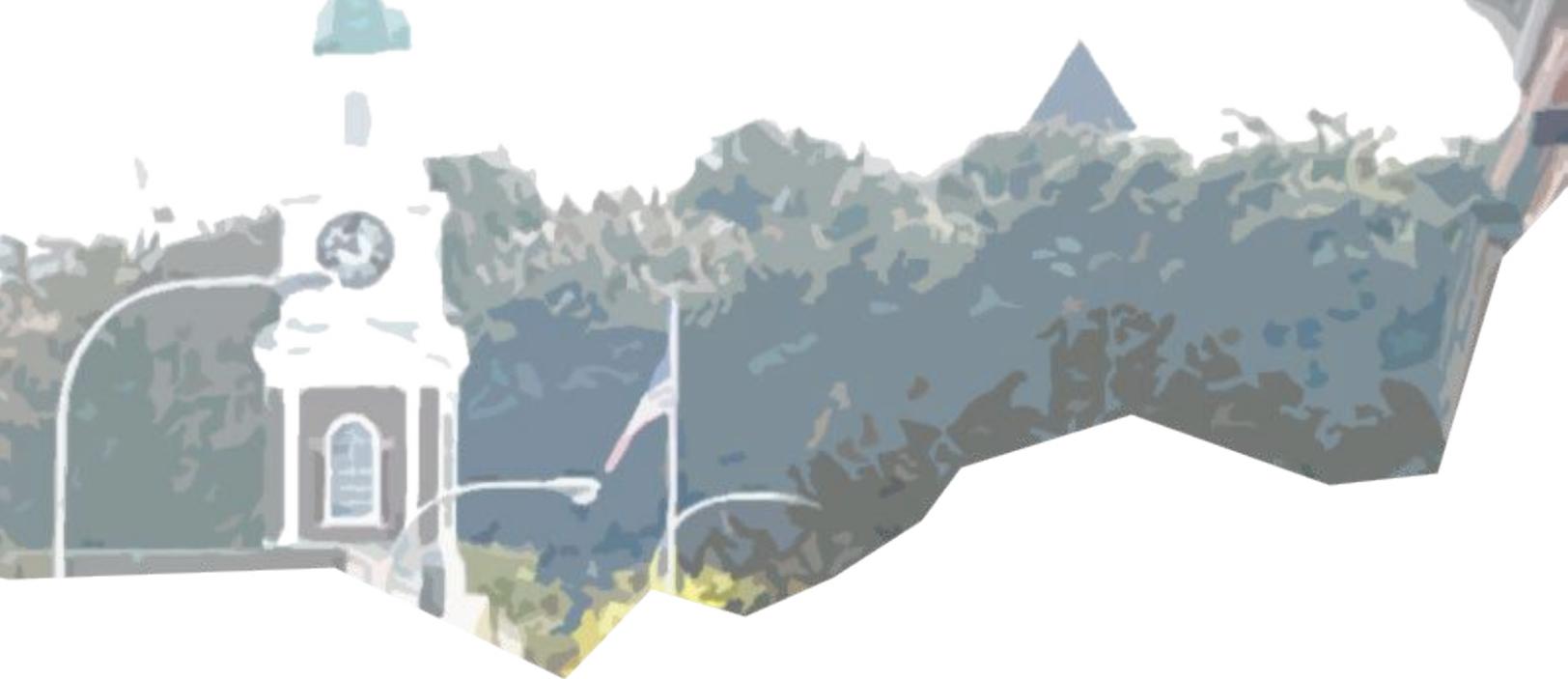
SOCIAL VULNERABILITY:

The disproportionate susceptibility of some social groups to the impacts of hazards. These impacts could include death, injury, loss, or disruption of life or livelihood. Social vulnerability also affects a population's resilience: ability to adequately recover from or avoid impacts. Vulnerability is a function of demographic characteristics of the population, as well as environmental and community conditions such as healthcare provision, social capital, access to social networks, and social isolation.



Accounting for the needs of socially vulnerable populations remains a distinct challenge in **climate adaptation** planning and implementation efforts. The interdependent nature of climate change adaptation requires technical solutions such as cost-benefit analysis, scenario planning, and vulnerability assessments. Robust community engagement is also a common feature of the adaptation process which helps to inform the planning process and educate the public about climate risks and opportunities. Rarely however, does climate adaptation planning occur in a manner that places the considerations of **socially vulnerable** groups as the central feature of the decision-making process.

Recognizing an opportunity to advance its climate adaptation goals while simultaneously improving social conditions for **environmental justice** populations, the Town of Athol applied for grant funding through the **Massachusetts Municipal Vulnerability Preparedness (MVP)** program to develop a social resilience plan in conjunction with its adaptation planning efforts. In this year-long climate adaptation planning initiative, the Town of Athol and its consultant team of landscape architects, urban planners, ecologists, and engineers, embarked on an effort to develop an adaptation plan that frames local vulnerability and solutions through the lens of social justice. Following MVP program guidelines, a core team of municipal stakeholders and local social service providers convened on multiple occasions to discuss the community's risks, hazards, and opportunities relative to the effects of climate change. A series of interviews with community leaders and a community workshop organized around the goals of social vulnerability also occurred.



ENVIRONMENTAL JUSTICE:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.



Accounting for the needs of socially vulnerable populations remains a distinct challenge in climate adaptation planning and implementation efforts. The interdependent nature of climate change adaptation requires technical solutions such as cost-benefit analysis, scenario planning, and vulnerability assessments. Robust community engagement is also a common feature of the adaptation process which helps to inform the planning process and educate the public about climate risks and opportunities. Rarely however, does climate adaptation planning occur in a manner that places the considerations of socially vulnerable groups as the central feature of the decision-making process.

MASSACHUSETTS MUNICIPAL VULNERABILITY PREPAREDNESS:

A grant program to provide support for cities and towns in Massachusetts to begin the process of planning for climate change resilience and implementing priority projects. Communities who complete the MVP program become certified as an MVP community and are eligible for MVP Action grant funding and other opportunities.



Recognizing an opportunity to advance its climate adaptation goals while simultaneously improving social conditions for **environmental justice** populations, the Town of Athol applied for grant funding through the **Massachusetts Municipal Vulnerability Preparedness (MVP)** program to develop a social resilience plan in conjunction with its adaptation planning efforts. In this year-long climate adaptation planning initiative, the Town of Athol and its consultant team of landscape architects, urban planners, ecologists, and engineers, embarked on an effort to develop an adaptation plan that frames local vulnerability and solutions through the lens of social justice. Following MVP program guidelines, a core team of municipal stakeholders and local social

CLIMATE RISK IN ATHOL

For Socially Vulnerable Groups



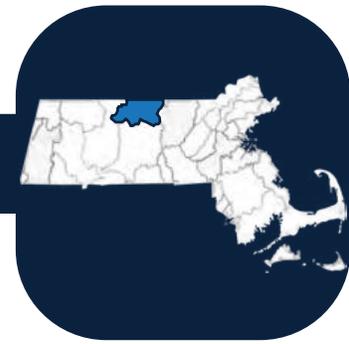
CLIMATE CHANGE:

Climate change is the change in the long-term averages and variations in weather measured over a period of several decades. This change is typically referenced as the change in the 30-years average, but can also be evaluated at different timeframes, such as centuries or millenia.

Climate change is expected to increase the occurrence and intensity of weather related events. Identifying and preparing for the hazards most prevalent in Athol is the first step to reduce social vulnerability and increase the social resilience of the community. The following hazards were identified by Athol community stakeholders during MVP planning processes and community engagement efforts:



CLIMATE CHANGE



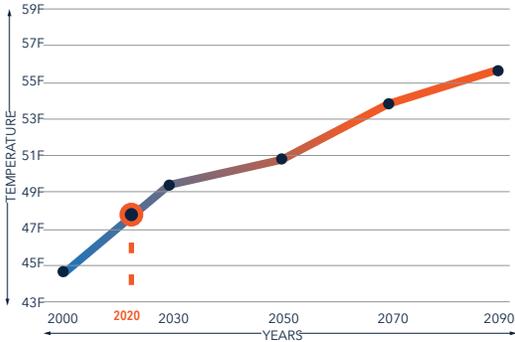
Athol, Massachusetts Millers Watershed Basin

Ashburnham, Athol, Erving, Gardner, Hubbardston, Montague, New Salem, Northfield, Orange, Petersham, Phillipston, Royalston, Templeton, Warwick, Wendell, Westminster, and Winchendon

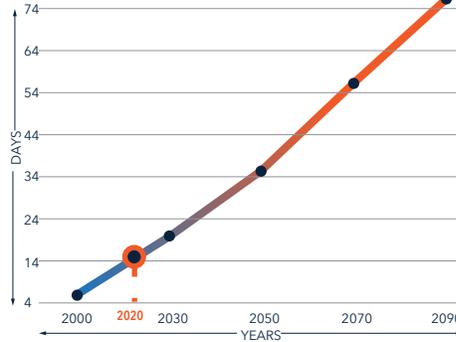
Global warming is caused by the accumulation of greenhouse gases within the atmosphere. Gases that contribute to the greenhouse effect include water vapor, carbon dioxide, methane, and nitrous oxide. On earth, human activities such as burning fossil fuels, land deforestation and wetland loss/conversion have altered the delicate balance of atmospheric conditions that regulate our climate. The effect of these changes cause global climate change that are likely to be significant and to increase over time.

EXTREME TEMPERATURES

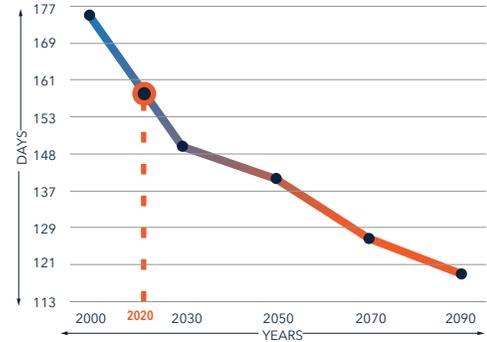
Average Temperatures



Days with Maximum Temperature over 90°F



Fewer Days Below Freezing



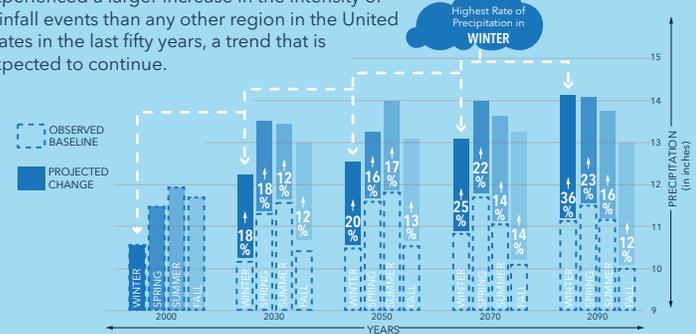
What can ATHOL expect as CLIMATE CHANGES?

Climate change has already had observable effects on the environment. Rising temperatures, changes in precipitation patterns, droughts and heat waves, sea-level rise, and extreme storm events have **altered the distribution of risk and how resources are managed.**



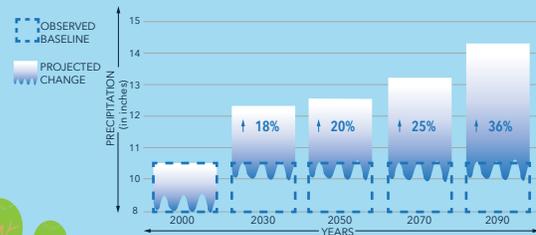
More Annual Precipitation and Inland Flooding

The Northeast United States has already experienced a larger increase in the intensity of rainfall events than any other region in the United States in the last fifty years, a trend that is expected to continue.



Extreme Snow And Ice Events

Total Annual Precipitation is expected to increase within the Millers Basin over the remainder of the century. Most of this increase is expected to occur during winter months where precipitation will fall as either rainfall or extreme snow or ice events.



Blizzards, Nor'Easters and Hurricanes

Storm events fueled by higher temperatures, increased evaporation, and atmospheric moisture leads to stormy weather of increased duration and intensity.



Wind / Microbursts

Hazardous wind conditions most commonly accompany extreme storm events. High winds and microburst conditions present unique hazards to infrastructure, public safety and important natural resources.



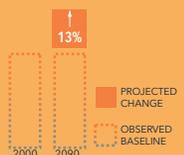
Heatwaves

Extreme heat events are expected to become more frequent and intense. Socially vulnerable populations are particularly vulnerable to the dangers related to extreme temperature conditions.



Drought Conditions

Due to the combined effects of higher temperatures, reduced groundwater recharge from extreme precipitation events, earlier snowmelt, summer and fall droughts may become more frequent.



SOCIAL VULNERABILITY - FLOODING

Athol, Massachusetts Millers Watershed Basin

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FOOD INSECURITY

School meal programs are critical to student health and well-being especially for low income socially vulnerable populations.

In a weather related emergency where schools are forced to shut down or serve as a community shelter, access to healthy meals for children and young adults are diminished.



GETTING TO SCHOOL

Getting to school can be a challenge for vulnerable populations with limited resources.

Extreme weather events can close schools which provide important resources to low income populations.



NO BUS



TRANSPORTATION

A lack of transportation for low income and elderly populations limits access to critical infrastructure and services such as school, grocery, hospitals, emergency care, community centers, and public parks.

Natural disasters such as floods or extreme heat increases the need for reliable transportation services for people in need.



SOCIAL SUPPORT

Socially vulnerable populations such as the elderly, disabled, or children are particularly susceptible to environmental risk factors such as flooding and heat.

Social support systems that help prepare communities for future climate events through climate health education and community preparedness helps the most at-risk populations in a community.



SOCIAL VULNERABILITY - EXTREME HEAT

Athol, Massachusetts Millers Watershed Basin

Ashburnham, Athol, Erving, Gardner, Hubbardston, Montague, New Salem, Northfield, Orange, Petersham, Phillipston, Royalston, Templeton, Warwick, Wendell, Westminster, and Winchendon



SCHOOL AND MEAL PLAN

Schools that lack air conditioning or backup power storage are a source of vulnerability for a community during heat waves.

In a weather related emergency where schools are forced to shut down or serve as a community shelter, access to healthy meals for children and young adults are diminished.



POWER OUTAGE

Dangerous heat waves can cause large scale power outages leaving people without air conditioning or ways to communicate with others.

People who lack mobility or may be sick such as elderly or disabled populations are at risk during heat waves when they remain isolated in their homes rather than finding a cooling center or public shelter.



TRANSPORTATION

Transportation is an important community resource for socially vulnerable populations to provide access to critical infrastructure and services such as school, grocery, hospitals, emergency care, community centers, and public parks.

Flexible, coordinated transportation systems must account for the diverse needs of vulnerable populations. Access to medical appointments or social events are different for elderly and transitional youth populations.

EXTREME HEAT WARNING

TOP TEN 10 WAYS TO BEAT THE HEAT

WEAR HAT

HYDRATE



EDUCATION & SOCIAL SUPPORT

Socially vulnerable populations such as the elderly, disabled, or children are particularly susceptible to environmental risk factors such as flooding and heat.

Shared spaces such as public parks, shelters, or cooling centers provide important social support systems during climate related emergencies.



EQUITABLE ADAPTATION WORKING GROUP

The Town of Athol and its consultants, BSC Group, Inc. established an Equitable Adaptation Working Group (EAW) to establish the principles for this planning initiative, identify key community leaders, and engage concurrently with the town’s MVP Planning efforts. This process involved the following steps:

1.

Equitable Adaptation Working Group Meetings:

EAW meetings involved setting project objectives, identifying key municipal stakeholders, and identifying sources of vulnerability in the community that may differ from publicly available data sources. Drawing upon the institutional knowledge of key community stakeholders was an important first step in the planning process.

EQUITABLE ADAPTATION WORKING GROUP	AFFILIATION
Eric R. Smith,	Athol - Planning Department
Deb Vondal, Board of Health	Athol - Health Department
David Small	Athol - Planning and Community Development
Heather Bialecki-Canning	North Quabbin Community Coalition
Heidi Strickland	Athol - Resident
Jeffrey T. Malloy	BSC Group, Inc.

EQUITABLE ADAPTATION WORKING GROUP AND COMMUNITY RESILIENCE BUILDING MEETING DATES	TOPICS
October 2, 2019	MVP Kickoff Meeting
November 6, 2019	Community Resilience Building Hazard Mitigation Planning Equitable Adaptation Working Group
December 4, 2019	Community Resilience Building Hazard Mitigation Planning Equitable Adaptation Working Group
February 4, 2020	Community Resilience Building Workshop
March 4, 2020	Public Listening Session #1 - Integrated MVP/HMP Planning
April 22, 2020 (Online)	Public Listening Session #2

2.

Peer-led interviews with community leaders:

Drawing upon the “lessons-learned” in the EAW planning process, the winter of 2020 was used to conduct interviews with community leaders to better understand the sources of vulnerability in Athol and identify solutions that can address these community specific vulnerabilities. This planning-step is important to ensure the considerations of socially vulnerable groups remain central to decision-making processes.

What is the biggest challenge/need you and/or your family face daily?

What do you consider to be your biggest source of vulnerability?

Are there particular resources (e.g. transportation, economic support, jobs, food security) that you feel may address your current needs?

Are there particular weather-related risks that worry you/ impact your life the most (e.g. flooding, heat, snowstorms, windstorms)?

Are you familiar with the risks associated with climate change?



3.

Develop Community-Driven Actions:

The third and final step in this planning process involved ensuring that the actions identified by socially vulnerable groups remain explicit in climate adaptation planning meetings and the Community Resilience Building (CRB) Workshop. A common challenge to increase participation at community workshops is typically related to financial and time constraints. To overcome these limitations and ensure the considerations of socially vulnerable groups in Athol remain included in this process, the EAW organized the CRB workshop around the following three principles:

- Integrate actions derived from EAW planning meetings into the framework structure of the CRB Workshop. A CRB Workshop presentation given by the North Quabbin Community Coalition helped achieve this objective.
- Explicitly integrate information from gatekeeper interviews into the CRB process. Feedback from gatekeeper interviews are reflected in the CRB Matrix provided in the Town of Athol’s MVP Finding Report and provides the key source of Implementation Actions identified in this Report.
- Increase the representation of socially vulnerable individuals or groups at the CRB workshop through increased participation by social service organizations in Athol.



AHA FRAMEWORK

The following framework was developed by the EAW. The purpose of this framework was developed to ensure the interests of socially vulnerable groups in Athol remain a central feature of the MVP Planning Process.

Recognition:

Achieving equitable adaptation outcomes requires inclusive processes that address sources of vulnerability such as income inequality, housing security, food insecurity, racial and gender equality, education and employment opportunity, and inequitable access to public resources. Acknowledging the sources of vulnerability within a community allows for decision-making and implementation processes to occur in a manner that avoids reinforcing systemic causes of injustice.



Empower:

A socially just and equitable community is a fundamental component for building resilience to the effects of climate change. The failure to address considerations of equity within climate adaptation and resiliency planning can lead to adverse impacts for the most marginalized members of a community risking the legitimacy and success of climate planning efforts. Moving from procedural inclusion to procedural justice requires that socially vulnerable groups have a role defined by more than just a “seat-at-the-table.” Procedural justice requires that socially vulnerable groups have a voice in the decisions that affect them.

Implementation:

Equitable adaptation requires that prioritized actions are based on the needs and concerns of socially vulnerable groups in Athol. The priorities listed within this report’s Implementation Plan are derived from institutional knowledge from EAW stakeholders, the MVP Community Resilience Building workshop, and community-based interviews. Actions identified through the MVP planning process revealed the following four key themes relative to socially just climate adaptation:



COLLABORATIVE
GOVERNANCE



FOOD AND
HOUSING



TRANSPORTATION



ECONOMIC
OPPORTUNITY



AHA ACTION PLAN

This plan is organized into four sections: Collaborative Governance, Food and Housing, Transportation, and Economic Opportunity. Each of these sections contains a statement of recognition, a directive for empowerment, and implementation actions that have been explicitly identified by socially vulnerable groups in Athol. Applying community-driven actions to sources of vulnerability is the first step in achieving socially just climate adaptation processes.



COLLABORATIVE
GOVERNANCE



FOOD AND
HOUSING



TRANSPORTATION



ECONOMIC
OPPORTUNITY

AHA ACTION PLAN



Collaborative Governance



SOCIAL COHESION:

Defined as the degree to which communities support the overall well-being of all members, creates a sense of belonging, and promotes trust - is an important indicator of how well a community will respond to the stressors associated with climate change.

Recognize:

Ensure socially vulnerable groups who are disproportionately impacted by the effects of climate change are central to future decision-making and implementation processes.

Empower:

Local governments can build social cohesion in communities to enhance resilience. Local governments that draw upon local resources and knowledge such as community-based organizations (e.g. non-profit organizations, faith groups, cultural institutions) better establish a sense of **social cohesion** among the community and find that members of the community are willing to take a more active role in resilience planning initiatives. Similarly, socially resilient and cohesive communities are better prepared to self-determine the actions that best prepare them to respond to extreme weather events.

Implementation Actions:

- **Expand upon this AHA Report and MVP Findings Report** to develop a long-term climate resilience and adaptation plan. The organization of this planning framework is intended to serve as a living document that can be amended and improved as climate resilience goals are achieved or new social resilience actions are identified. Also consider the development of a Town of Athol Climate Action Plan.
- **Identify and/or establish dedicated funding streams to support implementation of this plan or future updates to this plan.** This plan is only a first step in establishing a socially just climate resilient Athol. Funding for actions identified throughout this planning effort must occur through various sources that may include state funded grants or public-private partnerships. Municipal departments should seek to identify solutions that provide co-benefits to the community.
- **Draw upon the vast network of social support services and municipal support services that exist in Athol.** Identify regional and state level social services or resources that will support Athol's efforts to establish a socially just and climate resilient community. Where possible, expand Athol's social support services through existing and/or new partnership opportunities. Identify funding sources to facilitate this effort.

NATURE-BASED SOLUTIONS

Use natural systems, mimic natural processes, or work in tandem with traditional approaches to address natural hazards like flooding, erosion, drought, and heat islands.



GREEN INFRASTRUCTURE

A grant program to provide support for cities and towns in Massachusetts to begin the process of planning for climate change resilience and implementing priority projects. Communities who complete the MVP program become certified as an MVP community and are eligible for MVP Action grant funding and other opportunities.



- **Establish community support networks between the Athol public school system, local social service, and non-profit organizations.** Community support networks are important to address overlapping sources of social vulnerability such as food, housing, or financial insecurity. Social isolation and limited social organizations such as afterschool programs, recreational events, or employment contributes to social vulnerability. Draw upon the established capacity of these institutions and organizations to increase the social resilience of the community.
- **Create a collaborative governance structure organized around the social value of natural resources in the community.** Athol's natural resources such as Silver Lake and Lake Ellis represent an important cultural, social, and ecological feature in the community. These important resources can be used as mechanisms to educate the public about the importance of natural resources, **nature-based solutions**, and **green infrastructure**. Community outreach should address the health benefits and mitigative effects of utilizing natural resources and green spaces to address urban heat island effect or flood mitigation. These areas should also be encouraged for use as important social gathering spaces to promote social resilience in the community.

AHA ACTION PLAN



Food and Housing



Recognize:

Eliminate food insecurity for Athol residents. Ensure dignified housing and access to affordable, energy efficient, and healthy housing conditions for Athol residents.

Empower:

Food and housing insecurity are two key sources of social vulnerability for Athol residents. Elderly, sick people, and children that suffer from economic insecurity are at an increased risk during extreme weather events when they remain isolated in their homes rather than seeking a community shelter that can provide heating or cooling resources. Inadequate housing conditions, particularly during extreme weather events can exacerbate chronic health issues, increase risk of injury, exacerbate mental health conditions such as depression or anxiety, and expose occupants to environmental toxins. Extreme weather events may also cause schools to close which may limit access to healthy meals for children, teens, and transition age youth. While overlapping challenges related to food and housing insecurity exist for these groups, many solutions with co-benefits have been identified.

Implementation Actions:

- **Explore options to relocate Morton Meadows out of the floodplain.** Morton Meadows provides affordable housing to elderly and disabled members of the community. These socially vulnerable groups are placed at additional risk being located within the floodplain to the Millers River. In January 2018 due to ice jam, the residents were forced to be evacuated.
- **Explore mechanisms to promote energy efficient buildings for residents.** Continue efforts to improve building energy efficiency through renewable energy or energy efficient technology (lighting, weatherization, heat pumps, solar power, backup battery storage). Renewable energy and energy efficient homes promote cost savings for the user and reduce energy loads on the electrical grid during extreme heat events.

- **Explore back-up battery storage and microgrids for communities and critical municipal facilities.** Replace diesel-burning generators with on-site solar plus battery storage options. Renewable energy promotes cost savings for the user and provides a safe and clean source of energy for the community.
- **Develop a Green Housing Initiative to implement at vacant residential or commercial buildings:** Athol should consider retrofits to vacant residential and commercial buildings that may be restored for residential or commercial use. Residential and commercial buildings in Athol that are vacant or in disrepair should be prioritized for retrofits, open space planning, or flood mitigation efforts. Building retrofits should align with a Healthy Homes initiative that involves community outreach and education efforts to promote renewable energy, weatherization, and climate resilient emergency preparedness actions. Building retrofits in Athol should be weatherized and implement renewable sources of energy where possible.
- **Consider the establishment of public-private partnerships** with the community and local businesses (e.g. supermarkets, Salvation Army) to address food insecurity. This may also include local businesses/restaurants that can provide social support services to the community in a weather related extreme event.
- **Develop a nutritional services plan within the community.** In the event schools or local support services are closed due to a climate emergency, socially vulnerable groups may face food insecurity. Social support services in the community should partner with the Athol Board of Health and the Athol Public School system to identify mechanisms to promote healthy food alternatives for food insecure residents during a weather-related emergency.

AHA ACTION PLAN



Transportation



Recognize:

Ensure that Athol residents have access to safe and reliable transportation and infrastructure that supports the needs of socially vulnerable groups.

Empower:

Transportation is an important community resource for socially vulnerable groups. Low-income or elderly residents may not have access to a vehicle that provides transportation to critical infrastructure and services such as jobs, school, grocery, hospitals, emergency care, community centers and public parks. Athol residents expressed a need for flexible and reliable coordinated transportation systems that account for the diverse needs of vulnerable groups.

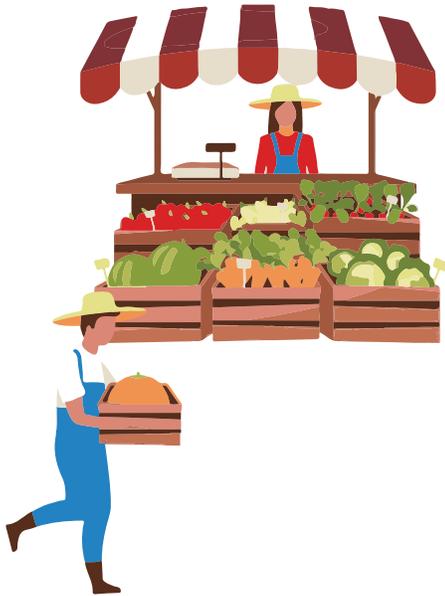
Implementation Actions:

- **Establish transportation systems that are reliable and coordinated across the community.** Reliable and coordinated transportation services must provide access to medical appointments to places other than Athol such as Boston or Worcester where specialty medical services are provided.
- **Expand upon public transportation services** to include more destination options to places such as the supermarket, local businesses, employment centers, schools, or community gathering centers. Consider the establishment of a regional transportation system that can expand the reach of Athol residents to local and regional resources. Currently transportation options to emergency services or shelters are available through social media postings. Athol should identify and develop technological solutions to improve access to transportation services such as cellular phone apps, Reverse911 services or alternative digital resources.
- **Identify a funding mechanism** that can support the construction of additional sidewalks for people to walk or bicycle to local amenities. This initiative should be developed in accordance with downtown Athol redevelopment activities that builds upon existing efforts in the community such as the Massachusetts Department of Transportation (MassDOT) Complete Streets Program.

AHA ACTION PLAN



Economic Opportunity



Recognize:

Build a climate resilient community in Athol with a focus on supporting local business, job training, and a safe downtown center that is welcoming to residents and visitors.

Empower:

A lack of economic opportunity in Athol was identified as a key source of vulnerability for residents of Athol. Socially vulnerable groups such as children, elderly, teens and transition age youth, and communities of color expressed a stigma they face relative to issues surrounding financial insecurity, limited access to basic needs, goods, and services, and unsustainable business opportunity. Athol residents emphasized the importance of developing conditions that improve the physical and emotional security of socially vulnerable groups reliant on others to meet basic needs. A revitalized downtown Athol was identified as an opportunity to establish social and economic resilience in the community.

Implementation Actions:

- **Develop recreational opportunities and/or social networking opportunities in Athol.** These efforts should be prioritized in conjunction with downtown Athol revitalization efforts. Efforts to establish more green space to make downtown Athol more inviting should be prioritized. Improvements to Lord Pond Plaza and access to Millers River provides the opportunity to establish community space to promote social resilience and educational opportunities relative to nature-based solutions, green infrastructure and ecological resources.
- **Develop a fuel assistance, food access, and cooling assistance programs.** These programs should be established in conjunction with other community-based social service programs with existing capacity such as financial or partnership resources.



- **Develop a Green Jobs training program within the community.** New and existing partnerships should be established between local businesses, social support groups, municipal departments/ regional workforce training board to support local youth job training programs. Green Job training programs should focus on construction-related skills such as building weatherization, renewable energy technology, and the integration of nature-based solutions into urban environments. Green Jobs training programs should focus on retaining people to promote job development in the community.
- **Redesign Lord Pond Plaza and other areas within downtown Athol to mitigate for flood effects or urban heat island effect.** Options include adding green infrastructure and nature-based solutions and the development of public amenities such as splash pads, parks, and open space. Efforts to revitalize downtown Athol should include efforts to promote access to Millers River. Collectively, these efforts should prioritize job development, create open space to promote social resilience, and mitigate the potential harmful effects from climate change from incidents such as urban heat island effect or inland flooding.



LaunchSpace is a 501(c)(3) non-profit member based makerspace located in the Orange Innovation Center. LaunchSpace provides tools, equipment, education, and support to makers who don't have the space, money, or time to create their own workshop. LaunchSpace plans additional resources in Athol at the former Pleasant Street Elementary School.



