North Haven Community Priorities
Climate Working Group

Resilience Recommendations and Next Steps

Final report exploring opportunities and actions the Community and Town can to take to strengthen North Haven in the face of climate change.

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Generated by the North Haven Climate Working Group based on input from the North Haven Community. Scan the QR code for more information.

Town of North Haven P.O.Box 400 16 Town Office Square North Haven, ME 04853 www.northhavenmaine.org

Building Coastal, Climate, and Community Resilience on North Haven

Community prioritized resilience actions and process based on Maine's Community Resilience Partnership List of Community Actions

Overview

During the North Haven Community Vision Process (2021-2022), Environmental Sustainability and Climate Change Impacts were identified as top priorities for the Town and Community to address (along with Access to Housing and Workforce Development and Economic Diversification).[1]

Beginning in October 2022, a nine-member town-facilitated Climate Working Group began assessing the current status of progress toward climate action and environmental sustainability on the island and began to identify, prioritize, and implement actions the Town and Community can take to increase overall resilience[2]. *(See Appendix A: Climate Working Group Fact Sheet for more information about the Group.)* Much of the Group's work revolves around actions required to enroll in the Community Resilience Partnership. These include completing a community assessment, adopting a municipal resolution, identifying priority actions the community will take, and holding one or more workshops with community members to discuss these actions and others identified by community members. Enrollment in the Community Resilience Partnership makes North Haven eligible to apply for state Community Action Grants for up to $50,000, as well as receiving no-cost assistance to apply for other state and federal grants.

The Climate Working Group accomplished the following:

- Learned about climate science, climate adaptation (adjusting and preparing for climate change impacts), and climate mitigation (reducing and eliminating greenhouse gas emissions)[3]

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[1] Visit the North Haven Vision Hub to learn more about the Community Vision Process and subsequent work to address identified focus priorities: Access to Housing, Workforce Development and Economic Diversification, and Environmental Sustainability and Climate Change Impacts. https://north-haven-community-vision-hub-knoxme.hub.arcgis.com/

[2] The Working Group uses the following *Resilience* definitions:

- Coastal resilience refers specifically to disasters and events arising from coastal hazards such as sea level rise, increased flooding, more frequent and intense storm surges, and shoreline erosion. It can be achieved by minimizing vulnerabilities through adaptation and mitigation planning.
- Climate resilience is the ability to anticipate, prepare for, and respond to hazardous events, trends, or disturbances related to climate. Creating climate resilience consists of mitigation (i.e. greenhouse gas emissions reductions) and adaptation to climate change impacts.
- Community resilience is the capacity of a community to absorb, withstand, recover from and adapt to changing conditions and disturbances while sustaining key functions, structures, and performance. It involves all dimensions of a system, including social, built, and natural environments within a community.

[3] The Climate Working Group used the following resources to learn about climate science, adaptation, and mitigation:

- Maine Climate Science Dashboard http://climatecouncil.maine.gov/maine-climate-sciencedashboard
- Maine Climate Council Four-Year Climate Action Plan http://climatecouncil.maine.gov/
- North Haven Maine Sea Level Rise and Storm Surge Interactive Map Viewer (generated by Knox County EMA) https://knoxme.maps.arcgis.com/apps/webappviewer/index.html?id=ab753237bb1b4d70ae35eccb0be486f8
- Maine Geological Survey (MGS) Coastal Hazards Data https://www.maine.gov/dacf/mgs/hazards/coastal/index.s html
- US Climate Resilience Toolkit https://toolkit.climate.gov/
- Northeast Climate Resilience Toolkit https://toolkit.climate.gov/regions/northeast
- Building Stronger Communities Online Learning Series: Sea Level Rise – from understanding to action https://youtu.be/C4RdqD5V7qY
- Building Stronger Communities Online Learning Series: Climate Change – from understanding to action https://youtu.be/CAZZOWvP3hs

- Conducted a qualitative assessment of the impact of climate hazards[4] on community assets
- Identified opportunities and co benefits that could be realized through climate adaptation and mitigation actions (efficiencies, cost savings, strengthening community infrastructure and systems)[5]
- Participated in a sea level rise planning workshop led by Gulf of Maine Research Institute together with North Haven high school students, Vinalhaven high school students, and members of the Vinalhaven Sea Level Rise Committee[6]
- Held numerous one-on-one and group conversations[7] with year-round and seasonal North Haven residents, asking:
    - *Are you experiencing impacts of climate change (or extreme weather events?) on North Haven?*
    - *What concerns you the most about what you are experiencing?*
    - *Where do you see opportunities (e.g., rebuilding the working waterfront to be more resilient to sea level rise, restoring native plants, growing aquaculture, building soils, energy efficiencies, strengthening community support systems, etc.)?*
    - *What would you like to see the community (and the Town) focus on regarding Environmental Sustainability and Climate Change Impacts?*
- Completed a Self Evaluation with Town staff *(See Appendix B: Enrollment Documents)*
- Identified suggested Priority Actions focus areas, which include the following and also categorized by focus area and listed in the tables beginning on page 4:

Building Community Resilience	Energy Sustainability	Sustainable Waste Management
Community Education	Hazard Mitigation	Transportation
Emissions Reduction	Land Conservation	Water Source Protection
Energy Efficiency	Nature-based Solutions[8]	Workforce and Economic Diversification Recommendations

- Drafted a Municipal Resolution for the Select Board to use as a template for the Municipal Resolution they adopted *(See Appendix B: Enrollment Documents)*

[4] Hazards include: Sea Level Rise, Extreme Storms, Hurricanes, Flooding, Extreme Temperature, Drought, Warming Waters, Pest/Disease Increases, Changes in Forest Species/Aggregations, Invasive Species, and Forest Fires

[5] View a list of identified community assets categorized as Built, Natural, and Social Environment along with opportunities and co benefits: https://docs.google.com/spreadsheets/d/1pCEg4SJUDXkRkrHcauh_Sqz-Gp7H0KkMIdABcqzODcI/edit?usp=sharing

[6] "Maine Islands Plan for Climate Change" https://gmri.org/stories/maine-islands-plan-for-climate-change/

[7] See the notes from the Climate Working Group's one-on-one and group informal community conversations https://docs.google.com/document/d/1glJ4-hedZtw5JTPBji7CUzl2onPOj7w8/edit?usp=sharing&ouid=112243463210375955431&rtpof=true&sd=true

[8] Nature-based Solutions are defined as as the utilization of natural habitats such as coastal marshes and wetlands, coastal forests, rivers, lakes, and streams, dune and beach systems, and oyster and coral reefs – maintained at a significant size for the habitat type and natural hazard being addressed – to provide communities with enhanced protection and buffering from the growing impacts of natural coastal hazards, including rising sea- and lake- levels, changing flood patterns, increased frequency and intensity of storms, and other environmental stressors.

- Developed several community resilience workshops to collect feedback and ideas based the information shared here, particularly the suggested Priority Actions – these workshops took place March 27, 29, and 30, 2023 at various venues on the island and also online

The Climate Working Group enrolled North Haven in the Community Resilience Partnership on June 1, 2023*(See Appendix B: Enrollment Documents).* In July 2023, North Haven applied for a Community Action Grant in cooperation with Vinalhaven and Fox Islands Electric Cooperative. The scope of the grant included funding for an LED Streetlight Conversion and Community Outreach and Engagement.

In the fall of 2023, the Town intends to organize a new climate or sustainability working group or committee to move the community's identified priority climate actions forward.

Priority Action Recommendations made by the Climate Working Group based on Maine's Community Resilience Partnership List of Community Actions

Transportation / Reducing Vehicle Miles Traveled				
Priority/Focus Area	***Strategies/Action(s)***	***Foundation Project/Plan***	***Lead, Partner(s)***	***Funding***
Transportation, Emissions Reduction	EV School bus Options for municipal EVs	GHG inventory and emissions reductions goals (TBD)	Planner, Climate WG, Community	CAG, Clean School Bus Program
Transportation, Emissions Reduction	Explore bike/ped options	Comprehensive Plan (TBD)	Planner, MCOG, NHCP, Community	Bicycle and Pedestrian Program
Transportation, Emissions Reduction	Installing EV charger		Town, NHCP	ACTT, EM, RESP
Transportation, Emissions Reduction, Community Education	Anti-idling education	GHG inventory and emissions reductions goals (TBD)	Planner, Climate WG, Community	
Workforce and Economic Diversification Recommendations, Emissions Reduction	Explore options for meeting additional Broadband needs to ensure remote work options	Comprehensive Plan (TBD)	Planner, Climate WG, Community	Funding Options
Workforce and Economic Diversification Recommendations, Emissions Reduction	EV Ferry/boat alternatives Waterfront electrification EV carshare	Waterfront Master Plan (TBD)	Town, Fellow, Planner, Community	BRIC, MDOT Transportation Pilot, Shore and Harbor Planning Grant

Energy Efficient Buildings				
Priority/Focus Area	***Strategies/Action(s)***	***Foundation Project/Plan***	***Lead, Partner(s)***	***Funding***
Energy Efficiency	Use energy efficiency and building envelope weatherization improvements for municipal buildings. Collaborate with the school for school building improvements.	Capital Improvement Plan (TBD)	Town	EM, REDA, CAG, EM Schools
Energy Efficiency	Upgrade to energy efficient interior lighting and appliances in municipal buildings	Capital Improvement Plan (TBD)	Town	EM, CAG
Energy Efficiency	Install heat pump systems or VRF systems for heating/cooling and heat pump water heating in municipal buildings.	Capital Improvement Plan (TBD)	Town	EM, CAG
Energy Efficiency	Upgrade streetlights and exterior lighting for municipal facilities with LED lighting (and minimize light pollution with downlighting where possible)	Proposed 2023 Community Action Grant Project	Town	EM, CAG
Energy Efficiency	Explore building code options for ordinances and policies that incentivize the installation of renewable energy systems and energy efficiency measures for new construction	International Energy Conservation Code 2021 Efficiency Maine: Energy Loan Comparison Chart (PDF)	Town, Planning Board	
Energy Efficiency	Support regular professional development for code enforcement officer, especially Efficiency Maine's code trainings.	Efficiency Maine trainings	Town, Planning Board, CEO	
Reduce Emissions through Clean Energy Innovation				
Priority/Focus Area	***Strategies/Action(s)***	***Foundation Project/Plan***	***Lead, Partner(s)***	***Funding***

Energy Efficiency, Emissions Reduction	Municipal Buildings Energy Audit and efficiency strategies	GHG inventory and emissions reductions goals (TBD)	Planner, Climate WG	EM, REDA
Energy Efficiency, Emissions Reduction	Island-wide GHG inventory and emissions reductions strategies	GHG inventory and emissions reductions goals (TBD)	Planner, Climate WG	CAG
Energy Sustainability, Emissions Reduction	Working w/ FIEC to understand and develop options for battery storage, solar, renewables	Comprehensive Plan (TBD)	Towns, Climate WG, FIEC	ETIPP, ERA, GRIP, REDA
Energy Sustainability, Emissions Reduction	Install solar arrays on town properties – buildings, landfill	GHG inventory and emissions reductions goals (TBD), Capital Improvement Plan (TBD)	Town, Climate WG	ERA
Energy Sustainability, Emissions Reduction	Connecting residents to Efficiency Maine rebate programming and resources to introduce households to beneficial electrification	Proposed 2023 Community Action Grant Project	Climate WG, Community Partners	CAG
Sustainable Waste Management, Emissions Reduction	Burn pile GHG Burn pile alternatives Municipal composting	Sustainable Waste Management Plan (TBD)	Planner, Climate WG	DEP Waste Diversion Grant
Grow Jobs and Protect Natural Resource Industries				
Priority/Focus Area	***Strategies/Action(s)***	***Foundation Project/Plan***	***Lead, Partner(s)***	***Funding***
Building Community Resilience	Support Local Food Systems: Explore and promote current use tax incentives and other incentives that support putting agricultural lands into production (leasing land to farmers); Explore Food Sovereignty	Comprehensive Plan (TBD)	Planner, Climate WG, Community	Farmland Current Use Taxation, Maine Farmland Trust Programs
Land Conservation, Sustainable Waste Management	Explore Brownfields and other contamination sites and learn about cleanup and reuse options	Comprehensive Plan (TBD)	Town, Planner, Community	Brownfields

Workforce and Economic Diversification Recommendations	Explore options for clean energy jobs	2022 Economic Diversification and Workforce Development Study	Town, Planner, Community	Electric Boat Course Spark Grants Business Resilience Grants
Protect the Environment & Promote Natural Climate Solutions				
Priority/Focus Area	***Strategies/Action(s)***	***Foundation Project/Plan***	***Lead, Partner(s)***	***Funding***
Land Conservation, Building Community Resilience, Emissions Reduction, Water Source Protection, Nature-based Solutions *(for climate adaptation and mitigation)*	Explore conserving 30% of land in the community by 2030; Explore permanent protection of public lands (Mullens Head)	Comprehensive Plan (TBD) Watershed Plan (TBD)	Town, Planner, NHCP, Community, Climate WG / Conservation Commission	Land for Maine's Future
Water Source Protection, Nature-based Solutions *(for climate adaptation and mitigation)*	Build off of existing Water Study to develop a comprehensive Watershed Plan: Include: Habitat/Natural Resources Inventory Conserve, revegetate and reconnect floodplains and buffers in riparian areas. Preserve climate-threatened natural areas such as wetlands, riparian areas, and headwater streams through zoning or other regulations. Implement a source water protection program. Adopt policies that prioritize natural, nature-based or ecologically enhanced shoreline protection for coastlines, rivers, and lakes. Identify and protect sites for living shorelines and saltmarsh migration areas. Identify and protect open space in the floodplain to increase flood buffers and community resilience.	Watershed Plan (TBD)	Town, Planner, NHCP, Community, NH School Students, Climate WG / Conservation Commission	Coastal Communities Grant, National Coastal Resilience Fund, Funding Database
Community Education/Nature-based solutions	Minimizing mowing to support pollinators (wait as late as possible in the season to mow and not when flowers are blooming) – No Mow May or No Mow Summer campaign for public engagement	Proposed 2023 Community Action Grant Project	Climate WG, Community Partners	CAG

Nature-based solutions	Simple Actions – Germinating acorns and planting trees!, Planting trees (oaks) for carbon sequestration, Planting native plants	Proposed 2023 Community Action Grant Project	Wild Seed Project WEBB Community Partners	
Nature-based solutions	Capturing carbon through eelgrass and sugar kelp planting	Watershed Plan (TBD)	Environmental planner and engineer, NOAA	Coastal Communities Grant, National Coastal Resilience Fund, Funding Database
Nature-based solutions	Restoring tidal health – co-benefits of water filtration and healthy habitat for diverse species	Watershed Plan (TBD)	Environmental planner and engineer, NOAA	Coastal Communities Grant, National Coastal Resilience Fund, Funding Database
Build Healthy & Resilient Communities				
Priority/Focus Area	***Strategies/Action(s)***	***Foundation Project/Plan***	***Lead, Partner(s)***	***Funding***
Hazard Mitigation	Update North Haven's needs in the next revision of the County Hazard Mitigation Plan; Include sea level rise projection maps	Hazard Mitigation Plan (New update starting fall 2023)	Town, Knox EMA	
Building Community Resilience, Water Source Protection	Adopt a low-impact design (LID) standard for stormwater management	Comprehensive Plan (TBD) Land Use Ordinance (TBD) Capital Improvement Program (TBD) Watershed Management Plan (TBD)	Planner, Planning Board, Town, Climate WG, Community, MCOG	CAG, Coastal Communities Grant
Building Community Resilience	Conduct a Social Vulnerability Assessment	Comprehensive Plan (TBD)	Town, Planner, Community	CAG, Coastal Communities Grant, Maine Sea Grant Social Resilience Project
Building Community Resilience	Complete the Maine Flood Resilience Checklist		Planner, Town, Climate WG, Community	Island Institute Shore Up Grant
Building Community	Require consideration of	Comprehensive	Planner, Planning	CAG, Coastal

Resilience	sea level rise projections and impacts in planning and permitting coastal development; Model Coastal Ordinances	Plan (TBD) Land Use Ordinance (TBD)	Board, Town, Climate WG, Community, MCOG	Communities Grant
Building Community Resilience	Community Education, Outreach, and Engagement (North Haven Specific storytelling – making climate impacts more relatable; Fishermen as allies – *what are the changes you are seeing?*)		Island Institute, Wells Reserve PhotoVoice project, North Haven School	
Building Community Resilience	Environmental Programming		Waterman's Community Center, North Haven Public Library, Farmer's Market, North Haven School	
Building Community Resilience	Develop a regenerative closed loop economy through prioritization of shopping at local businesses, relying on Farmer's Market, etc.		Farmer's Market	
Invest in Climate-Ready Infrastructure				
Priority/Focus Area	***Strategies/Action(s)***	***Foundation Project/Plan***	***Lead, Partner(s)***	***Funding***
Building Community Resilience	Conduct an Infrastructure Vulnerability Assessment *(could be a more in depth version of Flood Resilience Checklist findings)*		Planner, Town, Climate WG, Community, Engineering Firm	Island Institute Shore Up Grant, CAG, Coastal Communities Grant,
Building Community Resilience	Develop a Capital Improvement Plan/Program that identifies vulnerable municipal facilities and assets and prioritizes resilience in improvements and/or new construction		Planner, Town, Climate WG, Community, Engineering Firm	Island Institute Shore Up Grant, CAG, Coastal Communities Grant,

Water Source Protection, Building Community Resilience	Wastewater Climate Adaptation Plan (CAP)		Town, Climate WG, Engineering Firm	CWSRF Funding *(up to $25k no match grants for Climate Adaptation Plans)*
Water Source Protection, Building Community Resilience	Continue Drinking Water vulnerability assessment	Fresh Water Study; Watershed Management Plan (TBD)	Town, Ransom Engineering, Fellow, WG	DWSRF Funding
Water Source Protection, Building Community Resilience	Adopt a policy that prioritizes green infrastructure to manage stormwater in developed areas	Watershed Management Plan (TBD)	Town, Climate WG, Planning Board	
Water Source Protection, Building Community Resilience	Adopt DEP's Stream Smart Crossing Guidelines as standard practice for culvert and bridge improvements. Identify vulnerable crossings and apply for DEP improvement funds	Watershed Management Plan (TBD) Capital Improvement Plan (TBD)	Town, Climate WG, Engineering Firm	DEP Stream Crossing Grant *(municipal roads)* AOP Grant MDOT MPI Grant *(state-aid roads)*
Energy Sustainability, Sustainable Waste Management	Assess Wastewater Treatment Plant for clean energy potential (solar, anaerobic digester, etc.).	Wastewater Climate Adaptation Plan (CAP) (TBD)	Town, Climate WG, Engineering Firm	EM, ERA, NREL Waste-to-Energy Technical Assistance
Engage Maine People				
Priority/Focus Area	***Strategies/Action(s)***	***Foundation Project/Plan***	***Lead, Partner(s)***	***Funding***
Building Community Resilience, Community Education	Establish a Town Climate, Sustainability, Energy, Conservation Committee/Commission	2023 Community Action Grant Project	Town, Climate WG, Planner, Community	Island Institute Shore Up Grant, CAG
Building Community Resilience, Community Education	Engage youth in resilience building	2023 Community Action Grant Project	School, Town, Climate WG, Planner, Community	Island Institute Shore Up Grant, CAG, MEEA Grant, NRCM Seed Grant, Pulpit Harbor Foundation
Building Community Resilience, Community Education	Engage populations that are vulnerable to climate impacts in resilience, clean energy, and GHG	2023 Community Action Grant Project	School, Climate WG, NHSH, Planner, Community,	Island Institute Shore Up Grant, CAG, NRCM Seed Grant,

	emissions reduction.			
Community Education, Energy Efficiency, Emissions Reduction	Provide information to businesses about sustainable construction and operations. Create a place-based education opportunity for students.	2023 Community Action Grant Project	School, Climate WG, Planner, Community	EM, CAG, NRCM Seed Grant
Community Education, Energy Efficiency, Emissions Reduction	Create bulk purchasing and installation opportunities for HVAC systems, weatherization, solar, etc.	2023 Community Action Grant Project	Climate WG, NHSH, Planner, Community	EM
Community Education	Individual climate action – connect residents with resources and materials for individual action (to snowball into collective effort) (ex: Starting trees for people to plant, Student clubs Workshops – *what's your thing?*/climate action venn diagram)	2023 Community Action Grant Project		EM

Appendix A: Climate Working Group Fact Sheet

North Haven Community Priorities
Climate Working Group

Objective

The purpose of the Climate Working Group is to assess the current status of progress toward climate action and environmental sustainability on the island and identify, prioritize, and implement actions the Town and Community can take to increase overall resilience through adaptation and mitigation strategies that reduce the impacts of sea level rise and climate change.

Structure

9 member Working Group

Timeline

October 2022 – April 2023

Goals

The Climate Working Group (WG) will work collaboratively with the community to achieve the following goals:

1. Complete a Community Resilience Self-Evaluation and review a List of Community Actions to assess the Town's existing climate action progress.
2. Using a predetermined List of Community Actions, prioritize actions that the Town wants to pursue.
3. Working with Rick and the Select Board, choose one or more Community Actions to implement. (Examples of potential actions: conducting an energy audit of Town properties; installing energy efficient lighting and heating; assessing risk to community infrastructure from sea-level rise and climate change.)
4. Hold a public meeting or workshop(s) during which the identified Action(s) will be discussed.
5. Facilitate the Select Board's adoption of a Climate Resolution.
6. Ensure implementation of chosen priority or priorities: Apply for a Community Action Grant to implement the chosen priority or priorities (up to $50k) in March 2023. If a grant is not awarded, determine other ways to fund implementation.
7. Because the Community Resilience Partnership is ongoing, determine next steps, including ongoing role of the Working Group and how to address the next priority or set of priorities identified from the List of Community Actions.

Roles & Responsibilities

Climate Working Group – Community liaisons and representatives; responsible for participating in meetings and workshops: doing pre-work, providing insights, experience, and input regarding data and solutions; helping to solicit community input and bring diverse voices to the conversation; and to present findings and recommendations to the community and Select Board.

Gabe McPhail – Process facilitator and service provider; responsible for enrolling North Haven in the Community Resilience Partnership, writing a Community Action Grant, and North Haven vision and values alignment

Mia Colloredo-Mansfeld – Will provide perspective regarding alignment with other priorities (Housing, Workforce and Economic Diversification) and North Haven's vision and values; will provide assistance with community outreach

Rick Lattimer – Select Board Liaison; will participate in conversations and decision-making; will provide perspective regarding alignment with other Town priorities

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IMPORTANT LINKS

Monthly Meeting Link
https://us02web.zoom.us/j/84550560424
Meeting ID: **845 5056 0424**
Phone: **1 646 558 8656**

Meeting Agenda & Notes
https://docs.google.com/document/d/1O8cWl6qCE9ezrb4_RDhuGrP39PDY6SY1gXLIz-MexfE/edit?usp=sharing

Google Drive Folder
https://docs.google.com/document/d/1O8cWl6qCE9ezrb4_RDhuGrP39PDY6SY1gXLIz-MexfE/edit?usp=sharing

Climate Working Group Plan of Work & Timeline

Unless otherwise determined, meetings are held via Zoom

2022

SPRING

Meeting 1: Introduction
Thursday, May 26, 5-6pm
Overview of Community Resilience Partnership (CRP) and proposed working group process

FALL
Dates TBD
Community Learning Opportunities:
SLR 101 and Adaptation Strategies
Climate Science and Mitigation: GHG Emissions Reduction Strategies
Planning for Coastal Resilience: Model Coastal Ordinances and other Municipal Tools

Meeting 2: Identifying Hazards and Assets
Monday, October 17, 4-5pm
Review work plan; Identify climate hazards and community assets
Pre-work: Review 72 Priorities List, identify areas of interest, compile questions; Self-evaluation part 1 (self-evaluation team only)

Meeting 3: Identify Impacts
Monday, November 7, 4-5pm
Identify impacts of hazards to assets; Present 72 Priority questions
Pre-work: Review 72 Priorities List, identify areas of interest, compile questions; Self-evaluation part 2 (self-evaluation team only)

Meeting 4: Assess Vulnerabilities
Monday, December 5, 4-5pm
Assess vulnerability and risk; Respond to 72 Priority Questions; Discuss Municipal Resolution
Pre-work: Prepare for community workshop; Self-evaluation part 3 (self-evaluation team only)

2023

Meeting 5: Prioritizing Actions
Monday, January 9, 4-5pm
Choose draft priority actions; Review self-evaluation; Discuss Municipal Resolution
Pre-work: Prepare for community workshop

Date TBD
Climate Priorities Community Workshop

Meeting 6: Refine Prioritized Actions; Define Community Action Grant
Monday, February 13, 4-5pm
Finalize priority actions and determine Community Action Grant Proposal; Review and finalize Municipal Resolution
Pre-work: Review Draft Community Action Grant Proposal

Date TBD
Select Board Adopts Municipal Resolution, Approves Community Action Grant Proposal

Meeting 7: Community Action Grant
Monday, March 13, 4-5pm
Review Final Draft of Community Action Grant; Discuss next steps: work plan and sustainable path forward

March 20
Enroll in the Community Resilience Partnership
Submit Community Action Grant

Meeting 8: Next Steps
Monday, April 5, 4-5pm
Define a sustainable path forward

Meeting 9: TBD
Monday, May 8, 4-5pm

Tools and Resources

Maine Climate Science Dashboard
http://climatecouncil.maine.gov/maine-climate-science-dashboard

Maine Climate Council Four-Year Climate Action Plan
http://climatecouncil.maine.gov/

NOAA Sea Level Rise Viewer
https://coast.noaa.gov/slr/

MGS Coastal Hazards Data
https://www.maine.gov/dacf/mgs/hazards/coastal/index.shtml

US Climate Resilience Toolkit
https://toolkit.climate.gov/

Northeast Climate Resilience Toolkit
https://toolkit.climate.gov/regions/northeast

Town of North Haven
Community Resilience Partnership Municipal Resolution

WHEREAS, the Town of North Haven has completed the Community Resilience Partnership's Community Resilience Self-Assessment and List of Community Actions, and held community workshop(s) on March 27, 29, and 30, 2023 which prioritized the following action areas:

- *Community Education* – Work in collaboration with community partners to share information, resources, and other opportunities to build community resilience by mitigating and adapting to climate change impacts.
- *Freshwater Protection and Management* – Continue to study and implement actions that preserve and enhance the community's freshwater resources from multiple perspectives – drinking water, human recreation, and ecological preservation.
- *Hazard Mitigation* – Continue to study and implement adaptation actions to mitigate vulnerabilities caused by extreme weather, sea level rise, and aging infrastructure.
- *Energy Sustainability* – Work in collaboration with community partners, primarily Fox Islands Electric Cooperative, to help build energy sustainability for North Haven and Vinalhaven that enables cost effective and ecologically sound electrification, allows for localized use of renewable energy generation such as solar and wind power, and promotes energy efficiency and conservation.
- *Nature Based Solutions* – Use nature-based solutions and ecological restoration and protection as a key strategy for achieving priority actions.

WHEREAS, the Town of North Haven experiences coastal flooding, intense rainstorms, drought, and other natural hazards and seeks to better prepare for future conditions;

WHEREAS, planning for community and infrastructure resilience will protect people, preserve businesses and the local economy, and reduce the impact and costs of natural disasters;

WHEREAS, investing in energy efficiency and weatherization improvements is proven to lower municipal electricity expenses and make buildings more comfortable for employees and visitors;

WHEREAS, the Town of North Haven is prepared to demonstrate leadership in reducing energy use and greenhouse gas emissions, and increasing the resilience of people, infrastructure, and businesses;

WHEREAS, addressing climate change will present economic opportunities for the Town of North Haven as well as opportunities to invest in the public good and cost-saving practices;

WHEREAS, the Town of North Haven recognizes that educating members of the community, including public school students, about environmental challenges and the island's finite ecological resources is one of the best ways to sustain our way of life;

BE IT RESOLVED, the Town of North Haven commits to participating in the Community Resilience Partnership, which supports community leadership in reducing greenhouse gas emissions and increasing resiliency to extreme weather and climate change impacts;

BE IT FURTHER RESOLVED, the Town of North Haven designates the Town Administrator to coordinate planning, implementation, and monitoring of energy and resilience projects and to be the primary point of contact to the Community Resilience Partnership.

Adopted this 5th day of April, 2023 by the North Haven Select Board:

Jeremiah MacDonald, Chair

R. Scot Baribeau, Member

Amilia Campbell, Member

Jacqueline Curtis, Member

Bruce Gilman, Member

Community Resilience Partnership

Program Contact: Brian Ambrette
brian.ambrette@maine.gov

Community Resilience Self-Evaluation

Instructions: This tool is intended to help organize your community's approach to increasing resilience to natural hazards and climate change impacts. Answer the questions to the best of your knowledge and seek information from your colleagues in municipal and county government and organizations in your community. Provide any relevant information in the explanation field. If it is difficult to give a clear yes or no response to a question, use the explanation field to explain why. **There are no wrong answers and the responses here will not affect your community's eligibility to receive grants.** Where the response to a question is no, that may indicate an area of opportunity to address through a Community Action Grant.

Community name:	Town of North Haven
Self-Evaluation responses provided by: Please include contact info	Town of North Haven Climate Working Group Town Staff Town Administrator Rick Lattimer
Date:	June 1, 2023
Was this evaluation discussed during a community workshop? Include the date of the workshop.	Yes. Workshop Dates: March 27, 29, 30

Once the questions on the following pages are complete, use these prompts to identify potential next steps for your community:

What are two things your community is doing well?	Planning holistically and building community collaborations Consistently communicating and engaging residents
What are two areas that could be improved in the short-term?	Hearing more from all sectors of the community Using non-tech communication and engagement strategies
What is important for your community to address in the long-term?	Community Education (Outreach, and Engagement) Fresh Water Protection and Management Hazard Mitigation Energy Sustainability Using Nature-based Solutions
What specific 3 to 5 actions are priorities for your community?	Establish a climate (or other similar) committee or working group to move priorities forward Provide consistent access to information and resources to the community (i.e about energy efficiencies, tick disease

	prevention, best forest management practices, climate mitigation strategies, etc.) Collaborate/cooperate with our electric cooperative to become more energy resilient and promote energy efficiencies Protect our freshwater resource (i.e. develop a watershed management plan) Adapt infrastructure to the impacts of sea level rise and storm surge

Minimizing Risk and Exposure to Hazards	
1) Has your community assessed the likelihood of various types of hazards or disruptive events?	**☒ Yes ☒ No**
Your local or county hazard mitigation plan is a good starting place to find this information. Hazards can include storms, floods, wind, fire, extreme temperatures, drought, etc. Likelihood could be indicated either numerically or qualitatively as low, medium, or high.	Explanation: We are part of the Knox County Hazard Mitigation Plan. A new plan is currently being developed and will include identified infrastructure vulnerabilities. Additional hazard/vulnerability assessment actions include: ● BRIC scoping grant to assess and develop designs for a resilient downtown waterfront ● Wood Engineering study to assess impacts of SLR and storm surge to the waterfront ● Water study with Ransom Engineering to assess freshwater vulnerabilities and capacity ● Assessing vulnerabilities at the Wastewater Treatment Plant ● Inventorying culverts that need to be upsized Work to be done: ● Managing stormwater runoff from extreme precipitation events ● Assess impacts to critical infrastructure – energy grid, fuel storage, transfer station, etc.
2) Has your community assessed how the likelihood of each hazard has changed over time and may change in the future?	**☐ Yes ☒ No**
If your community has not tracked trends historically, you might infer past trends by determining if current priorities have shifted compared to past hazard mitigation plans. For example, drought or wildfire might be an emerging concern.	Explanation: Not officially, only anecdotally and through studies and plans which could be reviewed and trends ascertained. Plans being conducted now or ones that will be conducted in the future may create mechanisms for tracking hazards/hard impacts over time. (Examples include: County Hazard Mitigation Plan Water Study, BRIC Downtown Waterfront Study, Wastewater Treatment Plant assessment, etc.)

3) Has your community assessed the impacts or consequences of each type of hazard for the community?	☐ **Yes** ☒ **No**
For example, flooding on Main Street impedes emergency services or affects local businesses.	Explanation: See number 2). Also, the process for enrolling in the CRP included a qualitative vulnerability assessment that investigated impacts for various hazards. An island-wide vulnerability assessment for built, natural, and social infrastructure is recommended. This could be as simple as conducting a Flood Resilience Checklist Workshop or more sophisticated – hiring a consultant to conduct a community vulnerability assessment.
4) Is your community taking steps to reduce exposure to multiple risk types?	☒ **Yes** ☐ **No**
Your local or county hazard mitigation plan probably contains this information.	Explanation: See number 1).
6) Is your community preparing for low-probability-but-high-consequence events?	☒ **Yes** ☐ **No**
These events could be, for example, a 1-in-100 year flood, or a prolonged electricity outage or heating fuel shortage. What events might the community need to consider?	Explanation: See number 1). Also, we are just beginning this work so we have a long way to go.
7) Has your community assessed the consequences of multiple events or different types of hazards occurring in geographic or temporal proximity?	☐ **Yes** ☒ **No**
Examples could include back-to-back flooding events or a power outage during a heat wave.	Explanation: See number 3).
8) Is your community assessing emerging risks (e.g. drought, wildfire) and identifying blind spots?	☒ **Yes** ☐ **No**
In addition to natural hazards, consider public health threats that might be worsened by climate change, such as contamination of drinking water sources and vector-borne diseases from ticks and mosquitos.	Explanation: See numbers 1 and 3). Also various community groups such as WEBB and NHCP, are exploring impacts of tick-borne diseases, brown tail moth, insect damage to forests.

Understanding Sensitivity and Building Resilience	
9) Is your community tracking underlying societal characteristics and trends that increase vulnerability?	☒ **Yes** ☒ **No**

This information might be found in your community's comprehensive plan or economic development plan. Examples of characteristics and trends might include older or low-income populations, low housing availability, reliance on a single economic driver, aging infrastructure, environmental degradation, etc.	Explanation: See numbers 1 and 3). Additional data collection (snapshots in time vs. tracking): ● North Haven Historical Society ● North Haven Conservation Partners ● 2022 Housing Study and Recommendations ● 2022 Workforce Development and Economic Diversification Study and Recommendations ● 1996 Comprehensive Plan
10) Is your community proactively addressing vulnerabilities associated with these underlying characteristics?	**☒ Yes ☐ No**
Look in your community's comprehensive plan or economic development plan for strategies that might address these trends.	Explanation: Conducted 2021 Community Vision Process to develop a community strategic plan. Conducting a comprehensive planning process in 2024.
10) Does your community have financial resources in reserve to cope with or absorb shocks?	**☒ Yes ☐ No**
For example, a rainy-day fund.	Explanation: Budget has several reserve accounts: ● Infrastructure Reserve ● Water and Sewer Reserve Accounts ● New "Vision Reserve" (developed to provide funds for federal match and resilience-based capacity building) $2.1M balance in reserve accounts – option to have special town meeting to transfer additional funds
12) Is your community building flexible human capacity that can be drawn on in emergencies?	**☒ Yes ☒ No**
For example, community emergency response teams (CERT) or mutual aid agreements with neighboring communities.	Explanation: Somewhat but will continue to improve expanding capacity by working toward additional EMA mutual aid with Vinalhaven. We currently have fire mutual aid with Vinalhaven, Knox County EMA, and the Coast Guard. We participate in joint EMS trainings with Vinalhaven. If needed, we have the option to secure additional EMT capacity from Vinalhaven and the mainland.

Improving Long-term Adaptive Capacity

13) Does your community have plans or policies that anticipate future climate risks and community sensitivity trends?	☒ **Yes** ☒ **No**
Examples might include a comprehensive plan chapter that describes how the community is planning for climate change impacts, or a capital improvement plan that requires construction projects to consider future conditions like sea level rise, extreme rain, or drought.	Explanation: There is work underway now that will inform how resilience will be incorporated into the new Comp Plan: ● Visioning process Housing and Economic Diversification Recommendations ● Climate Working Group activities around climate change adaptation and mitigation ● Ransom Freshwater Study ● BRIC Downtown Waterfront Master Plan ● Wastewater Treatment Plant CIP and CAP ● Water Treatment Facility CIP Additional suggested plans ● Climate Action Plan ● Watershed Management Plan
14) Are there resources to sustain new capacity when needed?	☐ **Yes** ☒ **No**
This is different from Question 10 in that these resources would need to sustain a new long-term commitment rather than a one-time, short-term response. For example, if flooding emerges as an issue, a revenue source such as a stormwater utility fee could sustain a new community stormwater management program.	Explanation: We don't have anything in place currently but are open to exploring options, which might include: ● Fees that are allocated toward climate adaptation and resilience building ● Adjusting sewer fees ● Short term rental ordinance to include fee ● Mooring ordinance to include fee ● Increasing building permit fee ● Environmental restoration fee ● Camping and user fees (for replanting and restoration at Mullens Head)
15) Does the community have policies in place to build back smarter or recover with resilience after a disruptive event?	☐ **Yes** ☒ **No**
Examples might include a flood ordinance that requires compliance with the current building codes after substantial damage, or a communitywide post-disaster recovery plan.	Explanation: Other than emergency management plans/protocols, we do not currently have response plans for building back better after disruptive events, but are interested in exploring options, which might include: ● Resilience building incorporated into Capital Improvement Program ● Resilience-based Comp Plan ● Model coastal ordinances ● Town infrastructure policies that require meeting specific flood and storm resilience requirements in repairs, renovations, and new construction (buildings, roads, culverts, etc.) ● Building codes

	● Energy efficiency incentives for private development ● Other incentives: Alternative energy use, waste reduction, water conservation, etc.
16) Does the community stress test to ensure plausible risks are manageable?	☐ **Yes** ☒ **No**
This might be a table-top exercise with emergency management and community stakeholders, or a financial health analysis.	Explanation: We have conducted table-top exercises with Knox EMA for hazard planning and mass casualties. We are currently discussing fuel and propane hazard mitigation. We have EOPs for emergency situations but not for climate based hazards and emergencies. Areas we should explore include ecosystem impacts of petroleum spills and oil leaks and water supply contamination.
17) Does the community have a policy or process for managing uncertainty?	☐ **Yes** ☒ **No**
Does the community have a way of making important decisions when information is incomplete or unavailable?	Explanation: Not currently. We are planning and doing more to address resilience building, but we are dealing with current challenges and climate change impacts as opposed to scenario planning for uncertainty.

Date
Version 4/5/23

Community Resilience Partnership Actions Checklist

List of Community Actions

Revised December 1, 2021

Done	Priority To-do	To-do		Strategy Areas & Actions	Additional Resources ($=funding source)	Notes
Strategy Area A: Embrace the Future of Transportation						
Accelerate the Transition to Electric Vehicles (EVs)						
☐	☐	☑	A1	Purchase or lease electric vehicles for municipal or tribal government-owned vehicle fleets. (Grants capped at $2,000 per light duty EV.)	Efficiency Maine: Municipal EV rebates ($)	Look into options for replacing school and municipal vehicles with EVs at next capital improvement cycle.
☑	☐	☑	A2	Install EV chargers in public parking areas.	Efficiency Maine: EV supply equipment initiative ($)	Town is installing a charger w/ NHCP's support. Include charging infrastructure for electric boats in Downtown Waterfront Master Plan.
☐	☐	☐	A3	Adopt ordinances to encourage EV charging infrastructure, including at multifamily dwellings, businesses, and public parking areas.	Municipal Electric Vehicle Readiness Toolkit (Southern Maine Planning and Development Commission)	
☐	☐	☑	A4	Adopt an anti-idling ordinance.	Example: Bar Harbor Municipal Code	If an emissions outreach/education program is developed, include a no idling program that works with the community to calculate costs of idling in both dollars and emissions.
Improve Mobility and Reduce Vehicle Miles Traveled (VMT)						
☐	☐	☑	A5	Implement strategies that increase public transit ridership and alternative transportion modes, including bike and walking infrastructure.		Explore bike path options (Extension of road behind town office? Connect to another roadway? Town to school to store?) Explore having a wider shoulder in some areas? NHCP has vision of trail system – foot paths to connect parts of the island. Explore restoring old paths?
☐	☐	☐	A6	Implement strategies that encourage municipal/tribal employees to commute via carpools, public transit, bike/walk, or other alternatives to single-occupancy vehicles.		
☐	☐	☐	A7	Adopt a telework policy for municipal/tribal government staff positions that can work remotely some days per week.		
☑	☐	☐	A8	Adopt land use and development policies in plans and codes that reduce the need for driving (e.g. locating schools, workplaces, and shopping near where people live; encouraging density of development near housing and transportation).		Currently undertaken with new land use ordinace – reduction of lot size in town.
☐	☐	☐	A9	Adopt a Complete Streets policy which addresses safety, bike/pedestrian uses, and transit.	Maine DOT Complete Streets	
☑	☐	☑	A10	Adopt a broadband plan that reduces the need to drive by increasing access to high speed internet for underserved residents to support telecommuting, access to remote education and telehealth.	Connect Maine planning and infrastructure grants ($)	New cell tower to allow multiple service providers and for people to use data plans. Learn more about what the cell tower will do for broadband access. Is more needed to ensure island-wide broadband coverage?

Strategy Area B: Modernize Maine's Buildings						
Transition to Cleaner Heating and Cooling, and Efficient Appliances in Municipal/Tribal Buildings						
☑	☑	☐	B1	Adopt and execute a plan for energy efficiency and building envelope weatherization improvements for municipal/tribal buildings. Collaborate with local school district for school building improvements.	Efficiency Maine: Public Sector ($)	Currently underway.
☑	☑	☐	B2	Upgrade to energy efficient interior lighting in municipal/tribal buildings.	Efficiency Maine: Public Sector ($)	Currently underway. LEDs have been installed in the Town Office, Community Building and will be installed in the new Public Safety Building (PSB), Sewer Treatment Plant, and Town house
☑	☑	☐	B3	Upgrade to energy efficient appliances in municipal/tribal buildings.	Efficiency Maine: Public Sector ($)	Currently underway. Will be installed in the town house and other town facilities as old appliances need replacing.
☑	☑	☐	B4	Install a heat pump system or VRF system for heating/cooling and heat pump water heating in municipal/tribal buildings.	Efficiency Maine: Public Sector ($)	Heat pumps have been installed in the PSB, Town house, and sewage treatment plant, and will be installed in the town office this year.
☑	☑	☐	B5	Upgrade streetlights and exterior lighting for municipally/tribally-owned facilities with energy efficient LED lighting (and minimize light pollution with downlighting where possible).	Efficiency Maine: Public Sector ($)	In the process of doing this incoordination with Fox Islands Electric Cooperative.
☐	☐	☐	B6	Adjust procurement policies to prioritize climate-friendly Maine forest products (e.g. mass timber, wood-fiber insulation) in construction projects.		
Advance the Design and Construction of New Buildings						
☐	☐	☑	B7	Adopt the energy efficiency stretch building code (currently IECC 2021).	International Energy Conservation Code 2021	Will learn more about what this entails.
☐	☐	☐	B8	Require EV charging readiness and solar energy readiness for all new construction.	Municipal Electric Vehicle Readiness Toolkit (Southern Maine Planning and Development Commission)	This is not part of an ordinance or policy, but we are looking at options for solar for all town-owned new construction.
☐	☐	☑	B9	Support regular professional development for code enforcement officers, especially Efficiency Maine's code trainings.	Efficiency Maine trainings	Part of a training plan for 2024.
☐	☐	☑	B10	Adopt C-PACE ordinance for commercial property owners to install renewable energy systems, energy efficiency measures, and EV charging infrastructure (pending state program launch).	Efficiency Maine: Energy Loan Comparison Chart (PDF)	We adopted a PACE ordinace in 2010, but will consider this recommendation after the state launches their program.
Strategy Area C: Reduce Emissions through Clean Energy Innovation						
Reduce Greenhouse Gas (GHG) Emissions						
☐	☑	☐	C1	Conduct a baseline for energy useage by municipal/tribal government including electricity, heating and transportation fuels, and other energy sources.		Conducted energy audit of community building. Would like to do energy audits of other municipal buildings: Water Department, Public Safety, Town Office, etc.

☐	☑	☐	C2	Identify and track a simplfied set of emissions indicators for community emissions reduction (e.g. number of EVs registered in the community, number of homes with solar panels, number of heat pump rebates from Efficiency Maine).		Conduct island-wide GhG Inventory (municipal and community). Also include wood heat emisions and the Transfer Station burn pile. Develop indicators.
☐	☑	☐	C3	Adopt a resolution setting targets and a plan for reducing emissions and advancing clean energy from municipal/tribal operations that align with the state's targets.		
Advance Clean Energy Adoption						
☐	☐	☐	C4	Adopt a renewable energy ordinance(s) that allows, enables, or encourages community-appropriate renewable energy and energy storage installations.	US DOE SolSmart program and technical assistance	
☐	☐	☐	C5	Adopt a streamlined permitting process for small-scale renewable energy installations.	US Department of Energy: SolarApp	
Transition to Clean Energy						
☐	☐	☐	C6	Enter into a long-term service contract or power purchase agreement (PPA) or adopt a clean power purchase policy to ensure increasing local government energy supplies come from renewable energy.	USDA Rural Development: Rural Energy for America ($)	
☐	☑	☐	C7	Install a renewable energy project (solar, wind, geothermal, anaerobic digestion, etc.) on municipal/tribal property (e.g. school rooftop, wellhead protection area, landfill, brownfield site, etc.).	USDA Rural Development: Rural Energy for America ($)	Work in collaboration with FIEC to build a more sustainable/renewable power supply. Determine how to encourage alternative energy sources (public and private) in ways that benefit FIEC members. Investigate landfill solar, arrays for town-owned buildings/properties, etc.
Strategy Area D: Grow Jobs and Protect Natural Resource Industries						
Support Maine's Natural Resource Economy						
☐	☑	☐	D1	Adopt policies that enable, support, or incentivize local food production and consumption, including community gardens.		Investigate land use tax incentives for proeprty owners to lease farmland. Investigate developing a food soverignty ordinance. Investigate ordinances and policies that support aquaculture and fisheries.
☐	☐	☐	D2	Adjust procurement policies to prioritize climate-friendly Maine forest products (e.g. mass timber, wood-fiber insulation) in construction projects.		
Support Clean Energy Jobs and Businesses						
☐	☑	☐	D3	Assess the suitability of privately-owned brownfield and disturbed/contaminated sites for clean energy projects and encourage project development.	US EPA RePowering America's Land program	What sustainable waste management practices could provide co-benefits? Suggest doing a waste audit and develoing a Sustainable Waste Management Plan that can be employed in the future.
☐	☐	☐	D4	Establish incentives for clean energy industry or businesses to locate in community.		
☑	☐	☑	D5	Encourage and support clean energy industries in economic development plans.		The recent Worksforce Development and Economic Diversification Report includes this strategy.
Strategy Area E: Protect the Environment & Promote Natural Climate Solutions						

Protect Natural and Working Lands and Waters						
☑	☐	☑	E1	Set targets for increasing green space and tree planting to increase shade and water access in public spaces and carbon sequestration.	DACF Project Canopy ($)	See E2. NHCP is planting and promoting good forestry practices leading to carbon sequestration. NHCP does not currently have targets/goals but has criteria for acquistions (and is open to suggested crieteria.)
☐	☑	☐	E2	Incorporate a goal into conservation plans of conserving 30% of land in the community by 2030 (including undeveloped town property), with a priority on addressing conservation gaps related to high biodiversity areas, undeveloped blocks, and land and water connectivity.	IWF: Beginning with Habitat	NHCP proposed criteria is in alignment with this action. Mullens Head is not under protection (other than Burnt Island); we should address this. Consider protecting Town-owned public lands.
☐	☑	☐	E3	Create or update a watershed plan to identify flooding and water quality priorities and adaptation options.	EPA Source Protection and Planning	Build off of the existing Water Study. Hire an environmental firm to work with the community to develop a holistic Plan.
☐	☑	☐	E4	Develop a natural resource and habitat inventory that includes climate stressors and impacts.	ME Natural Areas Program: Maps, Data, and Technical Assistance	Include in a Watershed Plan. Engage the community (including students) to collect data.
☐	☑	☐	E5	Conserve, revegetate and reconnect floodplains and buffers in riparian areas.		Include in a Watershed Plan.
☐	☑	☐	E6	Preserve climate-threatened natural areas such as wetlands, riparian areas, and headwater streams through zoning or other regulations.		Include in a Watershed Plan.
☐	☑	☐	E7	Implement a source water protection program.		Include in a Watershed Plan.
☐	☑	☐	E8	Adopt policies that prioritize natural, nature-based or ecologically enhanced shoreline protection for coastlines, rivers, and lakes.	Coastwise Program	Develop ways to incentivize private landowners to genrete nature-based buffers.
☐	☑	☐	E9	Identify and protect sites for living shorelines and saltmarsh migration areas.	ME Natural Areas Program: Maps, Data, and Technical Assistance	Include in a Watershed Plan.
☐	☑	☐	E10	Identify and protect open space in the floodplain to increase flood buffers and community resilience.	ME Natural Areas Program: Maps, Data, and Technical Assistance	Include in a Watershed Plan.
Strategy Area F: Build Healthy & Resilient Communities						
Plan for Community Resilience						
☐	☑	☐	F1	Conduct a community vulnerability assessment that identifies climate risks and vulnerable populations and includes a review of existing plans and policies. Adopt a climate resilience plan that describes high priority strategies for reducing risk and vulnerabilities (may be a standalone plan or included in a comprehensive plan).		Incorporate into the Comprehensive Plan.
☐	☑	☐	F2	Update the local or county EMA hazard mitigation plan to address changing/future conditions and identify specific strategies to reduce vulnerability and increase resilience to climate change impacts.		
☐	☐	☐	F3	Develop or enhance early warning systems and community evacuation plans.		
☐	☐	☐	F4	Develop a storm debris management plan.		

Reduce Flood Risk						
☐	☑	☐	F5	Complete the Maine Flood Resilience Checklist.	Maine Flood Resilience Checklist	Suggested as a way to conduct a community-based vulnerability assessment.
☐	☐	☐	F6	Participate in the National Flood Insurance Program (NFIP).	FEMA's Community Rating System	
☐	☐	☐	F7	Enroll in the NFIP's Community Rating System (CRS) at Class 9 or better, reducing flood insurance premiums for community residents.	FEMA's Community Rating System	
☐	☐	☐	F8	Achieve CRS Class 6 or better, maximizing flood insurance savings for community residents.	FEMA's Community Rating System	
☐	☐	☑	F9	Map sea level rise projections in the local or county EMA hazard mitigation plan.		
☐	☑	☐	F10	Require consideration of sea level rise projections and impacts in planning and permitting coastal development.		
☐	☐	☐	F11	Adopt freeboard requirements in the special flood hazard area and higher freeboard critical infrastructure and long-lifespan assets.		
☐	☑	☐	F12	Adopt a low-impact design (LID) standard for stormwater management.	Low Impact Design Manual for Maine Communities (PDF)	Refer to G4 and G5 below.
Strengthen Public Health						
☐	☐	☐	F13	Identify and plan to reduce public health threats in the community that are exacerbated by climate change.	US CDC Health Harm Cards and Climate & Health Planning Worksheet	
☐	☐	☐	F14	Develop and implement an extreme temperatures emergency plan, including strategies that increase use of cooling centers by residents.	US CDC Heat & Health Tracker Resources: Heat Response Plans and Use of Cooling Centers	
☐	☐	☐	F15	Establish a peer-to-peer program for checking in on vulnerable community members during extreme heat or cold events.		
☐	☐	☐	F16	Increase community-level resilience to mosquito-borne diseases by implementing vector controls to decrease mosquito habitat.	Maine CDC Mosquito-Borne Illness Prevention & Response Guidance for Maine Towns and Communities (PDF)	
☐	☐	☐	F17	Implement school-based programs to educate students about prevention of mosquito- and tick-borne diseases.	https://www.maine.gov/dhhs/mecdc/infectious-disease/epi/school-curriculum/index.shtml	
Strategy Area G: Invest in Climate-Ready Infrastructure						

Assess climate vulnerability of infrastructure						
☐	☑	☐	G1	Conduct a vulnerability assessment for criticial community infrastructure that includes: 1) the climate hazards to which infrastructure assets are expose and how the intensity and likelihood will change over time; 2) the susceptibility to damage or failure given location, design, age, condition, and state of repair; and 3) the consequences that impairment or failure of the infrastructure will have on the community.		Consider conducting an island-wide assessment using the Maine Flood Resilience Checklist or other community process to identify areas and/or use an engineering firm to generate detailed assessments.
☐	☑	☐	G2	Develop a Capital Investment Plan that a) identifies vulnerable municipal/tribal facilities and assets, and b) prioritizes resilience in improvements and/or new construction.		Underway.
Utilize climate-ready standards, designs, and practices to improve infrastructure						
☑	☑	☐	G3	Improve and protect drinking water and wastewater treatment facilities to reduce physical damage and sustain function during extreme weather events.		Water and wastewater facilities are currently being studied. Take advantage of state funding to conduct a Climate Adaptation and Fiscal Sustainability Plan for the waterwater treatment facility. Assess facility vulnerabilities and strategies to address them.
☐	☑	☐	G4	Adopt a policy that prioritizes green infrastructure to manage stormwater in developed areas.		Focus on co-benefits of green instrastructure and nature-based solutions. Consider a policy (for town-owned infrastructure and areas) or ordinance (for privately owned areas) that create incentives (for landowners) to implement green infrastructure strategies and techniques.
☐	☑	☐	G5	Adopt DEP's Stream Smart Crossing Guidelines as standard practice for culvert and bridge improvements. Identify vulnerable crossings and apply for DEP improvement funds.	DEP Stream Smart Crossings Grants and Pocket Guide ($)	NOAA Fisheries West Coast Region Guidance to Improve the Resilience of Fish Passage Facilities to Climate Change - 2022
					NOAA Fisheries West Coast Region Guidance to Improve the Resilience of Fish Passage Facilities to Climate Change - 2022	Refer to Stream/culvert/watershed suggestions in Section E. Conduct holistic watershed planning. Speak with road commissioner about new strategies to integrate fish-friendly road improvements and culvert enhancement (or removal). Also think about training for ecologically beneficial road management.
☐	☑	☐	G6	Assess wastewater treatment facilities for clean energy potential (solar, anaerobic digester, etc.).		
Strategy Area H: Engage Maine People						
☐	☑	☐	H1	Establish or recognize an official committee of community stakeholders.		Establish a committee or commission (energy, sustainability, conservation). Focus on environmemntal concerns (particularly in the shoreland zone) and sustainability concerns. Town standing committee or commision? Or broader community collaborative with Town representation?

Increase public awareness of climate change impacts and opportunities to take action						
☐	☑	☐	H2	Create a climate change education, outreach, and engagement program, focusing on mitigation and adaptation for residents and businesses.	US CDC Climate & Community Health (PDF)	Engage with existing organizations to collaborate climate-related projects. Suggestions: students, NHCP, WEBB, Housing Group, Church, Pulpit Harbor Foundation, NHSH. Program/project suggestions: Window Dressers type weatherzation, ACTT Climate Ambassadors Program, trainings for audit and weatherizations. etc; use arts as a tool for engagement, generate collaborations and awareness for both seasonal and year-round communities.
☑	☐	☐	H3	Amplify public health advisories for climate-related health and weather events, such as air quality advisories, extreme heat or cold events, extreme storms, power outages, waterborne disease outbreaks, harmful algal blooms, vectorborne disease trends, etc.		Community uses Facebook.
☑	☐	☑	H4	Engage youth in resilience, clean energy, and energy use reduction.		There are many teachers working on these issues with their students. Suggestions: Offshore year students take ownership of this work and engage younger students. Create a resource bank of offerings for island youth. Work collaboratively with the Projects Building.
☐	☑	☐	H5	Engage populations that are vulnerable to climate impacts in resilience, clean energy, and GHG emissions reduction.		Part of an overall eduaction/outreach program: Ensure populations are receiving services being offered. Engage organizations and individuals working with vulnerable populations.
Engage the business community and recognize climate leadership						
☐	☐	☑	H6	Create and support an energy reduction campaign or challenge among businesses.		Part of an overall eduaction/outreach program: Provide information about sustainable construction and operations. Create a place-based education opportunity for students.
☐	☑	☐	H7	Initiate a community bulk purchasing program with a vendor, or vendors, to provide low cost equipment such as heat pumps and solar for interested residents and businesses.	Portland's "Electrify Everything!" Initiative	Part of an overall eduaction/outreach program: HVAC opportunities; coordinating movement of goods on and off the island; bulk purchasing.

North Haven CRP Enrollment Workshop Documentation

In addition to hosting small group and one-on-one community conversations throughout the months of January, February, and March 2023, the North Haven Climate Working Group developed several community resilience workshops to collect feedback and ideas based on CRP Priority Actions. These workshops took place at various venues on North Haven (island) and also online. In an effort to ensure broad community participation, particularly from residents most vulnerable to the impacts of climate change, the Climate Working Group identified people in the community to personally invite. Those invited included fishermen, elders, and youth. A paper and online questionnaire were also made available to those unable or unwilling to participate in a large group workshop. Dinner and childcare were provided at both in-person workshops to help limit barriers to participation.

Meeting Dates
March 27, 29, and 30, 2023

Agenda

Overview
- Resilience Planning and Actions (define)
- Addressing the whole community system
- Focus priorities identified in the Vision Process
- Work done to date

Developing a climate resilience plan based on adaptation and mitigation (define each)
Integrating climate resilience into all community resilience work…
- Housing
- Workforce and Economic Diversification
- Town projects

Climate WG process to assess, discuss, identify priorities

- Share information/resources (community system, work being done, visuals, resources, work proposed)
- Discuss community system and identified priorities / actions / work proposed
- Review priority action areas and actions: Water, Energy, Adaptation, Sustainable Waste Management
- Discuss these areas and gather ideas/feedback, and request feedback for additional priority areas. Questions:
  - What are two things NH is doing well?
  - What are two areas that could be improved in the short-term?
  - What is important for NH to address in the long-term?
  - What specific 3 to 5 actions are priorities for your community?
- Recap, Wrap up, and Next Steps

Participant Lists
March 27 – Online

Submitted June 1, 2023

Rick Lattimer, Gabe McPhail, Mia Colloredo-Mansfeld, Juliet Lamont, Kim Rosenbaum, Candice Richards (Knox EMA), Chuck Curtis, Chris Cabot, Josephine Bush, Kelly Davis, Leticia vanVuuren (Knox EMA), Margot Woodworth, Mary White, Pamela MacBrayne, Sally Robbins

March 29 – North Haven Historical Society
Rick Lattimer, Gabe McPhail, Mia Colloredo-Mansfeld, Becky Bartovicks, Jacqueline Curtis, Bruce Gilman, Sandy Gilman, Nathaniel Liddle

March 30 – Waterman's Community Center
Rick Lattimer, Gabe McPhail, Kim Rosenbaum, Kayl Brandon, Christie Hallowell, Barney Hallowell, Maddie Hallowell, Amilia Campbell, Zeb Campbell, Charlie PIngree, Hannah Pingree, Jason Mann, Elsie Mann (student), Oscar Mann (student), Hannah White (student), Sophie Hansen (student), Abby Lattimer (student), Remy LaBelle (student), Milo Bernard (student), Amanda LaBelle, Michele Kirchner, Pat Curtis, Kate Kirby, Pam MacBrayne, Peter Morgan

Priority Actions List

- *Community Education* – Work in collaboration with community partners to share information, resources, and other opportunities to build community resilience by mitigating and adapting to climate change impacts.

- *Freshwater Protection and Management* – Continue to study and implement actions that preserve and enhance the community's freshwater resources from multiple perspectives – drinking water, human recreation, and ecological preservation.

- *Hazard Mitigation* – Continue to study and implement adaptation actions to mitigate vulnerabilities caused by extreme weather, sea level rise, and aging infrastructure.

- *Energy Sustainability* – Work in collaboration with community partners, primarily Fox Islands Electric Cooperative, to help build energy sustainability for North Haven and Vinalhaven that enables cost effective and ecologically sound electrification, allows for localized use of renewable energy generation such as solar and wind power, and promotes energy efficiency and conservation.

- *Nature Based Solutions* – Use nature-based solutions and ecological restoration and protection as a key strategy for achieving priority actions.

Submitted June 1, 2023