## MARTHA'S VINEYARD COMMISSION

# CLIMATE ACTION TASK FORCE

## **Annual Report 2020**



#### **CATF in 2020**

The MVC formed the Climate Action Task Force (CATF) in 2019 to help Martha's Vineyard prepare for and mitigate the effects of climate change, which include rising temperatires, sea-level rise, ocean acidification, extreme storm events, and changes in precipitation. Over the last two years, the CATF has provided a regional perspective on climate change issues as part of a consortium that includes the Vineyard Sustainable Energy Committee (VSEC), the <u>Island Climate Action Network (ICAN)</u>, <u>Vineyard Power</u>, and other local groups.

In 2020, the CATF continued working toward long-term adaptation and mitigation master plans for the Island, with a focus on outreach to the public and town boards, and building long-term relationships with organizations on and off the Island.

The CATF is made up of MVC staff and Commissioners, along with a broad range of leaders and professionals from each Island town and the Wampanoag Tribe of Gay Head (Aquinnah). It includes the Climate Resilience Committee, which is working to develop an Islandwide Climate Resilience Plan to adapt to climate change; and the Energy Working Group, which is working on a plan to eliminate fossil fuel use on the Island by 2040.

The CATF meets on the first and third Fridays of the month at 9:30 a.m.

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#### **MVP Funding and Adaptation Booklets**

All six Island towns are now part of the Massachusetts Municipal Vulnerability Preparedness (MVP) program, which allows them to pursue MVP grants for adaptation projects and planning. In order to qualify, each town must complete a Community Resilience Building workshop to identify key climate change hazards and adaptation strategies.

With MVP funding this year, the MVC completed Phase 1 of a Climate Resilience Planning process. The MVC worked with intern Tony Lima to compile an inventory of existing adaptation planning resources for the Island, and with Meghan Gombos of Sea Change Consulting to develop a series of adaptation booklets for each town, with presentations to the boards of selectmen.

Each booklet contains the latest climate change data and projections for the Island, along with a list of local and regional efforts underway, summaries of the MVP workshops, and a directory of resources to support local adaptation planning. The booklets are available at each town hall and the MVC building, or as PDFs on the MVC website.

The MVC also applied to fund Phase 2 of the planning process, which includes public workshops, updated vulnerability assessments, strategy development, and the completion of a final plan. Unfortunately, the proposal was not funded, but the MVC plans to reapply in 2021.

#### **Storm Tide Pathways Project**

With funding through the MA Office of <u>Coastal Zone Management</u> (CZM), the Center for Coastal Studies in Provincetown will work with MVC staff, the CATF, and emergency managers to develop a real-time flooding application that allows responders to remotely assess flooding conditions during storms. The study will identify the flow of stormwater more precisely than the existing floodplain maps, and include recommendations on how to mitigate flooding from storm surge.

## Collaboration with Woodwell Climate Research Center

The CATF began working with <u>Woodwell Climate Research</u> <u>Center</u> (formerly Woods Hole Climate Research Center) to develop a baseline for the carbon sequestration value of land types on the Vineyard, and to assess land uses that could increase carbon sequestration over time.

Carbon sequestration (the ability of plants, soil, and water to remove carbon dioxide from the atmosphere) relates to open space preservation as well as Island character and economic viability. The project will contribute to our understanding of Island ecology, and provide further context for land-use planning in the coming decades. Woodwell plans to begin developing a scope of work and explore funding options for the project, while CATF members also work to identify potential funding sources.

Woodwell has also proposed a pilot study for Dukes County that will provide detailed modeling projections for climate change on a decadal scale. The results will help advance local and regional resilience planning, including adaptation strategies for the Climate Resilience Plan.

#### **LOOKING FORWARD**



CLIMATE CHANGE ADAPTATION CONTEXT

AQUINNAH



#### Adaptation Context Booklets:

Aquinnah
Chilmark
Edgartown
Oak Bluffs
Tisbury
West Tisbury

#### **Adaptation Listening Sessions**

The Climate Resilience Committee hosted 14 listening sessions with stakeholder groups to introduce regional climate change planning efforts underway and dedicate meaningful time to hearing their concerns. Listening sessions with other stakeholder groups will continue in 2021.

- Conservation commission agents and commissioners
- Harbormasters
- Planning board administrators and members (part 1)
- Building inspectors
- Planning board administrators and members (part 2)
- Realtors
- All-Island Planning Board
- Town climate committees
- Emergency managers
- Town administrators
- Martha's Vineyard Farm Bureau
- · Healthy Aging Martha's Vineyard
- National Flood Insurance Program State Coordinator
- Felix Neck Wildlife Sanctuary

Minutes are available on the MVC website.

#### **Energy Working Papers and Presentations**

The CATF Energy Working Group, including members of the Vineyard Sustainable Energy Committee (VSEC), developed a series of working papers that establish a baseline for energy demand and supply across three key sectors, and set the stage for an Energy Transformation Plan for the Island.

The papers cover transportation, the built environment, and energy efficiency, with an additional summary paper describing a potential future if the goals are met, and outlining some initial strategies. The overall goal is to provide a comprehensive roadmap to reduce greenhouse gas emission on the Island 50% by 2030, and 100% by 2040, in line with the Climate Crisis Resolution that the MVC adopted in 2019, and the proposed 100% Renewable warrant article for town meetings.

The Energy Working Group includes Rob Hannemann (chair), Richard Andre, Marc Rosenbaum, Tom Soldini, and Alan Strahler. Next steps include updating the energy baseline data over time, further refining the energy model that the group developed in order to understand the impacts of various mitigation actions, and developing the Energy Transformation Plan.

#### Energy Working Papers:

Electricity (summary paper)
Transportation
Buildings and HVAC
Energy Efficiency



The Vineyard Transit Authority plans to transition its entire fleet to electric buses by 2027.

#### Vineyard Power Internships and Energy Modeling

Two interns at Vineyard Power this summer helped evaluate and improve the CATF energy baseline model that was used for the Energy Working Papers (see above). Working with the CATF Energy Working Group, the interns helped fine-tune the model so that it can be used to more effectively project the results of various fossil fuel reduction strategies over time. The energy group is now working to develop those strategies and produce a master plan for eliminating greenhouse gas emissions on the Island.

#### **DRI Energy Policy**

CATF members drafted a new Energy Policy for Developments of Regional Impact (DRIs), which will replace the current Energy and Environmental Building Policy from 2008. The draft policy provides guidance on how applicants can meet three primary goals related to energy:

- Reduce or eliminating the consumption of fossil fuels associated with DRIs
- 2. Maximize the energy efficiency of DRI projects
- 3. Improve energy resilience on the Island

Aligned with the aggressive transition to renewable energy promoted by the MVC and VSEC, the policy encourages applicants to demonstrate a substantial commitment to renewable energy and incorporate all-electric design. It will apply to commercial and residential construction and renovations, as well as parking areas, that come before the MVC for review. The policy indicates energy standards, power sources, and other guidelines for applicants, and will further guide the Commission in weighing the benefits and detriments of DRI projects.

Members of the DRI Energy Policy Committee are Rob Doyle, Rob Hannemann, Joan Malkin, Ben Robinson, Marc Rosenbaum, and Richard Toole. The committee met 20 times this year, including with commercial building commissioner Steven Turner, members of the Martha's VIneyard Builders Association, and other experts to refine the policy. At year's end, the committee was in the process of gathering feedback from town boards.

<u>Draft Energy Policy Narrative (Dec. 2020)</u> <u>Draft Energy Policy Table (Dec. 2020)</u> <u>DRI Energy Policy FAQs</u>

#### **Engagement with Eversource Energy**

Eversource distributes energy from the grid to about 21,000 locations around the Island. The CATF initiated an ongoing dialogue with senior Eversource planners and engineers in early 2020 to discuss existing assumptions and expectations, and opportunities to collaborate on decarbonizing the Island energy sector. The current focus is on shifting to all-electric transportation, heating, and cooling, which could benefit both the Island and Eversource. Eversource's ability to advance those goals is limited mostly to infrastructure, since the power itself is obtained from wholesale markets.

Vineyard Power, VSEC, and ICAN have been instrumental in coordinating this work, much of which they had already begun or helped to advocate in recent years. Among other things, the CATF is encouraging Eversource to:

- 1. Help facilitate solar energy development on the Vineyard and in southeastern Massachusetts
- 2. Provide guidance and consultation in regard to energy resilience, in particular the questions of how and where microgrids would be most effective
- 3. Use the Vineyard as a model for modern electric infrastructure that is resilient to the impacts of climate change

Efforts to further involve <u>Cape Light Compact</u>, <u>Cape and Vineyard Electric Cooperative</u>, and the <u>MA Department of Public</u> Utilities in the discussion will continue in 2021.

#### Other Outreach and Advocacy

#### **Regional Collaboration**

CATF members partnered with the town of Nantucket to submit a joint MVP Action Grant proposal to examine the effects of climate change on supply chain issues that are relevant to both islands. The project was not funded in this round, but a revised proposal will likely be submitted in 2021.

The CATF has also discussed opportunities to partner with Nantucket on issues including streamlined permitting for adaptation projects, and long-term planning related to the Steamship Authority.

Looking ahead, the MVC Joint Transportation Committee, which includes representatives from the Vineyard Transit Authority, MVY Airport, Steamship Authority, town leaders, MVC staff and others, is expected to formally adopt CATF-recommended language in January for a new Resiliency/Climate scoring category for projects that are eligible for Transportation Improvement Program funding.

#### **Island Partnerships**

The CATF has established open channels of communication with the Vineyard Sustainable Energy Committee (VSEC), the <u>Island Climate Action Network</u> (ICAN), <u>Healthy Aging Martha's Vineyard</u>, the <u>Dukes County Health Council</u>, town boards, and other stakeholders. Several CATF members also serve on VSEC or are members of ICAN.

#### **Outreach to State Legislators**

Following the 2020 presidential election, the CATF <u>drafted a letter</u> that the MVC sent to Congressman Bill Keating, and Senators Elizabeth Warren and Edward Markey, to ensure engagement with these key offices in the lead-up to an Infrastructure and Transportation bill expected in the near future.

The CATF also met with Cape and Islands Rep. Dylan Fernandes earlier in the year to discuss local and state initiatives, including streamlined permitting for adaptation projects, building code advancement, various state legislation in the works, and issues surrounding the Steamship Authority, including calls for electric and/or hybrid ferries.

#### **Letters of Support**

The CATF <u>wrote to Attorney General Maura Healey</u> in support of a proposed bylaw amendment in Brookline to prohibit natural gas infrastructure in new construction and renovations (Healey denied the amendment on the grounds that it interfered with statewide uniform regulations such as the Gas Code and Building Code, but supported the intent).

The MVC also <u>wrote to the Bureau of Ocean Energy Management</u>, in support of a Supplemental Environmental Impact Statement for offshore wind projects including Vineyard Wind. CATF members provided testimony at an online public hearing for the impact statement in June.

#### **MVC Climate Change Planner**

The CATF welcomes former Oak Bluffs Conservation Agent Liz Durkee, who joined the MVC staff as full-time Climate Change Planner in December. Liz also chairs the Climate Resilience Committee, and is a longtime advocate of climate action on the Vineyard. A committee of MVC staff and Commissioners reviewed more than 140 applications for the job this year, before receiving Liz's application in the fall. We are thrilled to have Liz onboard, and look forward to her continued dedication in the years ahead.

#### Climate Action Task Force Membership

Richard Andre
Cheryl Doble
Robert Doyle
Liz Durkee
Rob Hannemann
Tristan Israel
Bob Johnston
Joan Malkin
Kathy Newman
Erik Peckar
Ben Robinson (chair)
Marc Rosenbaum
Beckie Scotten-Finn

Tom Soldini
Alan Strahler
Bill Straw
Noli Taylor
Richard Toole
Durwood Vanderhoop
Kate Warner
Norman Willard
Dan Doyle (staff)
Alex Elvin (staff)
Adam Turner (staff)

#### Climate Resilience Committee

Bill Cleary

Cheryl Doble Liz Durkee (chair) Meghan Gombos Tristan Israel Lucy Morrison Peter Neilley Kathy Newman Ben Robinson Beckie Scotten-Finn Richard Toole **Durwood Vanderhoop** Kate Warner Dan Doyle (staff) Alex Elvin (staff) Christine Flynn (staff) Adam Turner (staff)

#### Energy Working Group

Richard Andre Rob Hannemann (chair) Marc Rosenbaum Tom Soldini Alan Strahler

## Energy Policy Committee

Robert Doyle
Rob Hannemann
Joan Malkin
Ben Robinson (chair)
Marc Rosenbaum
Richard Toole
Alex Elvin (staff)

Visit the MVC Climate Change webpage for more info.

Questions and comments may be sent to MVC Climate Change
Planner Liz Durkee at durkee@mvcommission.org.

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