

Climate Action Plan



STAKEHOLDER WORKING GROUP
NATURAL RESOURCES AND WORKING LANDS - 11/17/2020

MEETING AGENDA

Objectives

- Recap Meeting 1 and progress to date
- Review and confirm criteria for use in selecting potential strategies and actions
- Evaluate potential strategies and actions to include in the Cape Climate Action Plan

- 1:00** Welcome and Introductions
- 1:10** Recap and Reflect on the Process to Date
- 1:20** Review and Confirm Criteria
- 1:40** Review and Discuss Climate Action Plan Strategies and Actions for the Natural Resources and Working Lands Sector
Small Group
- 2:30** Break
Small Groups
- 3:50** Public Comment & Next Steps

MEETING GROUND RULES

- Attend all meetings and participate actively in discussions.
- Come prepared having read any draft materials in advance of our meetings and having responded to any facilitator's requests (e.g. surveys providing input on materials in advance of meetings).
- Engage in respectful and constructive dialogue with other participants and seek creative solutions that respond to the interests of your own, as well as others', viewpoints.
- Represent and articulate the diverse range of interests and concerns of the constituencies you represent.
- Seek input from constituents, friends and neighbors, and keep them informed about the discussions and proceedings of the meetings.

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Cape Cod Climate Action Plan



Recap and Reflect on the
Process to Date



Cape Cod Climate Action Plan

PURPOSE STATEMENT

- To identify, study and monitor the causes and consequences of climate change on Cape Cod as a basis to guide and develop science-based policies, strategies and actions that governments, businesses, organizations, and individuals can pursue to:
 - improve the region's resilience to climate hazards; and
 - mitigate climate change on Cape Cod through reducing net regional greenhouse gas emissions in support of the framework and targets established by the Commonwealth.





Cape Cod Climate Action Plan



FALL

Subregional
Municipal
Working
Groups



Stakeholder
Working
Group
#1



Focus Group
#1



Stakeholder
Working
Groups
#2 and #3

Focus Group
#2

WINTER



Cape Cod Climate Action Plan

FOCUS GROUPS

Association to Preserve Cape Cod

Barnstable Clean Water Coalition

Cape Cod Chamber of Commerce

Cape Cod Climate Change Collaborative

Cape Cod & Islands Association of Realtors

Community Development Partnership

Compact of Conservation Trusts

Housing Assistance Corporation

MEETING 1 OBJECTIVES

- Introduce the Climate Action Plan process
- Provide an overview of a range of possible climate strategies, drawn from previous reflections, recent stakeholder meetings and the broader literature review completed
- Identify organizational or network priority issues and actions in the realms of climate adaptation and mitigation
- Reflect on existing organizational and network capacities to act on these priorities and possible support or needs for enhancing action



Working Group Meeting Series

MEETING 1

OCTOBER

Understanding
Problems



MEETING 2

NOVEMBER

Identifying
Solutions

MEETING 3

DECEMBER

Taking
Action

STAKEHOLDER WORKING GROUP

Meeting 1 Recap

Discuss what is known today about sector contributions to greenhouse gases and vulnerabilities to future climate impacts

Develop criteria for use in selecting among potential strategies and actions

ADAPTATION

- Intersections with the economy (ex. fishing and shellfishing)
- Communities working to restore oyster reefs has multiple benefits
- Maintaining and restoring saltmarsh contributes to economy, which is so heavily reliant on the environment, and to carbon sequestration

MITIGATION

- Nature-based solutions and green infrastructure have multiple benefits, including carbon sequestration and helping to lower cost of water quality infrastructure; these solutions have state support and need to be better integrated into local regulations
- There is a need for state and federal funding sources
- Organizations need help to force state to allow credits for nitrogen in nature-based solutions

QUESTIONS



DISCUSSION

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Cape Cod Climate Action Plan



Review and Confirm Criteria

CRITERIA FOR PRIORITIZING ACTIONS

*Compiled from the
feedback of all four
Stakeholder Groups*

Feasibility

- Science-based and data-driven actions
- Responsive to context
- Clarity/ease of implementation pathway

Impact

- Efficiency/effectiveness of action
- Achievement of multiple public benefits
- Planning for future conditions
- Ability to adapt to changing conditions
- Measurability

Cost

- Affordability
- Funding source

Equity

- Meeting the needs of all citizens
- Providing for vulnerable populations
- Who pays?

QUESTIONS



DISCUSSION

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Cape Cod Climate Action Plan

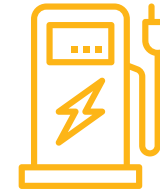


Review and Discuss Climate
Action Plan Strategies and
Actions



ADAPTATION

Adjustments in human and natural systems that moderate harm or take advantage of beneficial opportunities



MITIGATION

Limiting or preventing greenhouse gas emissions and enhancing activities that remove these gases from the atmosphere

5
FOCUS
AREAS

14
GOALS

44
STRATEGIES

131
ACTIONS

Literature
Review





Cape Cod Climate Change
Collaborative





Stakeholder
Input

Sector: Natural Resources and Working Lands

 Support and promote protection, preservation, and restoration of natural ecosystems

 Support and promote protection, preservation, and restoration of wetland and riparian areas

 Protect, restore, and enhance freshwater wetlands, including ponds and lakes

 Protect/restore vegetation around ponds





Natural Resources and Working Lands

3

GOALS

12

STRATEGIES

41

ACTIONS

NATURAL RESOURCES AND WORKING LANDS

Goals

Strategies

GOAL: Support and promote protection, preservation, and restoration of natural ecosystems

Strategies:

- Reduce emissions by increasing protected open space, parks, and tree canopy (and assuring local food security)
- Avoid new conversion of land uses
- Maintain ecosystem diversity, including landscape scale preservation of pine barrens mosaic
- Support and promote protection, preservation, and restoration of wetlands and riparian areas
- Support and promote protection, preservation, and restoration of habitat connectivity
- Protect water quality and quantity

GOAL: Increase carbon sequestration in the natural environment

Strategies:

- Increase carbon storage and sequestration in soils
- Enhance carbon storage/sequestration in forests
- Increase carbon storage in blue carbon ecosystems

GOAL: Protect the ability of working lands and waters to provide essential social and economic services while protecting the environment

Strategies:

- Support sustainable and resilient working lands
- Support the fishing industry through transitions created by climate change
- Promote local and regional recognition of the importance of natural resources and working lands to mitigate the impacts of climate change

COMMUNITY

Goals

Strategies

GOAL: Improve broad public knowledge and understanding of climate change impacts and programs

Strategies:

- Increase education and communications about climate change mitigation options
- Increase education and communications about climate change adaptation options

GOAL: Accelerate adoption of emissions reduction strategies and actions across regional and local governments

Strategies:

- Where suitable, identify and adopt regional goals and policies that help advance mitigation strategies and actions
- Create mandates for municipal mitigation actions
- Increase capacity within municipal staffs; provide outside technical assistance

GOAL: Increase data collection and access

Strategies:

- Identify more granular, town-specific data of GHG emissions

GOAL: Ensure the health, safety, and equitability of mitigation and adaptation solutions

Strategies:

- Assess opportunities for green economy to create jobs with livable wages

GOAL: Establish strategic partnerships to advance shared goals

Strategies:

- Foster collaborations between levels of government
- foster collaborations between the public and private sectors

3 SMALL GROUPS

Breakout 1: Coastal resilience – blue

Breakout 2: Open space – green

Breakout 3: Land management – orange

HIGHLIGHTED ACTIONS

Coastal Resilience

Open Space

Land Management

GOAL

Support and promote protection, preservation, and restoration of natural ecosystems

STRATEGY

Support and promote protection, preservation, and restoration of wetlands and riparian areas

ACTIONS

- Protect, restore, and enhance riparian areas (river and associated wetland buffers)
- Protect, restore, and enhance freshwater wetlands, including ponds and lakes
- **Protect, restore, and enhance salt marshes** (8)
- Support continued operation of active cranberry bogs while also preparing for retirement of bogs

GOAL

Increase carbon sequestration in the natural environment

STRATEGY

Increase carbon storage in blue carbon ecosystems

ACTIONS

- **Protect/restore wetlands (in particular salt marshes)*** (6)
- **Make room for salt marsh migration (landward)** (6)
- Consider seaweed aquaculture as a decarbonization method

BREAK

Please Return at 2:45 p.m.

HIGHLIGHTED ACTIONS

Coastal Resilience

Open Space

Land Management

GOAL

Support and promote protection, preservation, and restoration of natural ecosystems

STRATEGY

Reduce emissions by increasing protected open space, parks, and tree canopy (and assuring local food security)*

ACTIONS

- **Maintain and increase parks and open spaces** (6)
- Urban reforestation. Plant trees or increase urban tree canopy
- Reforestation of disturbed areas

STRATEGY

Support and promote protection, preservation, and restoration of habitat connectivity

ACTIONS

- Construct, retrofit, or replace crossing structures for wildlife passage
- **Reduce landscape fragmentation and maintain/create habitat corridors** (6)

GOAL

Support and promote protection, preservation, and restoration of natural ecosystems

STRATEGY

Avoid new conversion of land uses*

ACTIONS

- **Avoid forest conversion to non-forest land uses by preventing development sprawl** (9)

HIGHLIGHTED ACTIONS

Coastal Resilience

Open Space

Land Management

GOAL

Support and promote protection, preservation, and restoration of natural ecosystems

STRATEGY

Maintain ecosystem diversity, including landscape scale preservation of pine barrens mosaic

ACTIONS

- Limit ecosystem stressors by reducing threats such as habitat conversion and fragmentation (i.e. development), invasive species, and airborne and waterborne pollutants
- Protect ecosystems of sufficient size
- Protect ecosystems across a range of environmental settings
- Protect multiple example ecosystems to capture redundancy
- Maintain large-scale ecosystem processes and prevent habitat isolation
- **Embrace adaptive management** (6)
- **Use nature-based adaptation solutions** (5)
- **Develop a unified vision or regional plan for collaborative conservation of natural resources** (5)
- Remove/reduce environmental review/permitting barriers to restoration projects

GOAL

Support and promote protection, preservation, and restoration of natural ecosystems (cont.)

STRATEGY

Protect water quality and quantity

ACTIONS

- Restore natural hydrology
- **Incorporate natural or low impact development into designs** (6)
- **Protect drinking water supply** (5)
- Plan for and design "shovel-ready" projects that achieve restoration and water quality goals

GOAL

Increase carbon sequestration in the natural environment

STRATEGY

Increase carbon storage and sequestration in soils

ACTIONS

- **Improve soil management techniques** (10)

QUESTIONS



DISCUSSION

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Public Comment

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Next Steps



Cape Cod Climate Action Plan



FALL

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WINTER



Cape Cod Climate Action Plan

Student Climate Ambassador Program



The Cape Cod region is working hard to prepare for climate change and student voices matter. Student Climate Ambassador Program seeks students in grades 9-12 who want to develop a better understanding of climate change, learn what actions can be taken individually and collectively, and prepare to be a community leader.

6

Meetings

DEC - MARCH

Topics include global climate issues, greenhouse gas reduction strategies, adaptation and resiliency planning, equity and climate change, communication...

1

Small Project

Showing how school communities can take action and impact climate

Student Climate Ambassador Program



The Cape Cod region is working hard to prepare for climate change and student voices matter. Student Climate Ambassador Program seeks students in grades 9-12 who want to develop a better understanding of climate change, learn what actions can be taken individually and collectively, and prepare to be a community leader.

Applications and Selection

- One-page letter of interest and teacher's reference
- Applications Due by December 1st
- Program is intended for a small group of students from grades 9-12.
- Selection will be based on regional geographical distribution, grade level distribution, quality of letter of interest, and teacher reference

ARE YOU CURIOUS ABOUT WHAT'S HAPPENING IN YOUR COMMUNITY TO ADDRESS CLIMATE ISSUES?

ARE YOU CONCERNED ABOUT CLIMATE CHANGE OR WOULD YOU LIKE TO LEARN MORE ABOUT IT?

DO YOU WANT TO LEARN HOW TO EFFECTIVELY CREATE CHANGE AND MAKE A DIFFERENCE?

Become A Climate Ambassador

The Cape Cod region is working hard to prepare for climate change and student voices matter! The Cape Cod Commission is seeking students in grades 9-12 who want to develop a better understanding of climate change, learn what actions can be taken individually and collectively, and prepare to be a community leader.

LEARN MORE >>

THE CAPE COD COMMISSION IS SEEKING STUDENT VOICES FOR THE CLIMATE AMBASSADOR PROGRAM

What to Expect

- ≈ Six virtual meetings from December 2020 to March 2021
- ≈ Meetings will run between 2 and 2 ½ hours
- ≈ Discuss and learn about global climate issues, carbon reduction strategies, resiliency planning, equity and climate change, and more
- ≈ Get creative by developing a small project on how school communities can impact climate
- ≈ Meet new friends, make a difference and raise awareness of climate issues!

How to Apply (Applications due by December 1st)

Please submit a one-page letter to frontdesk@capedcodcommission.org and let us know why you're interested in climate change and what you hope to learn or accomplish by being part of the Climate Ambassador Program. Submissions must also include a teacher reference.

ABOUT: The Climate Ambassador program is intended for a small group of students from grades 9-12. Selection will be based on regional geographical distribution, grade level distribution, quality of letter of interest, and teacher reference.

CLIMATE HAZARDS
put vulnerable populations at risk, can cause loss of life, damage important infrastructure, and impact a community's economic, social, and environmental well-being

A 4°C TEMPERATURE RISE
can lead to disrupting precipitation patterns and increased frequency and intensity of some extreme weather events

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