

# Climate Action Committee

## 11/6/24 Meeting Notes

**In Attendance:** Lili Flanders, Mark Gebhardt, Rebecca Bruyn, Georgia Neill, Courtney Warren, Alex Limpaecher

**Visitors:** Laura Kelley, Richard Roberts, Jack Riemer

### Public Comment

None

### Note Taker Assigned

Alex Limpaecher

### Minutes Approval

- Revisions have been sent to Mark
- An Asterix will be used to add information to previous agendas.

### Laura Kelley Attending to Discuss Pesticide and Fertilizer Reduction

- Laura has been working on an initiative to ban pesticides and fertilizers.
- Because a town is not allowed to ban these, it would need to be a “home rolled petition” that goes to the state house. It would first go on the Town Warrant, be voted in, and then go to the State Senate.
- Laura has brought this to several towns, though thus far just the pesticides.
- Laura recommended we read [this Orleans petition](#) that she worked on
- If this is pursued, a decision would need to be made if this should target just pesticide, or both pesticide and fertilizer.
- Next Steps:
  - Reach out to other boards to see if there is interest in getting this in front of the select board and putting it on the warrant.

### Climate Action Coordinator

Alex gave an update regarding the climate action coordinator based on the interviews last week.

### Planning Board

- Jack and Rich join regarding low-lying roads.
- Two sites were looked at, both on Shore Road, to focus on. However, these are not the only low-lying roads in Truro.

- They are recommending that we take the [Model Floodplain Overlay District Zoning Bylaw - Optional Higher Standards](#) to the select board as an idea for a warrant.
  - Adapting the document for the needs of Truro
- Next Steps:
  - CAC should review the Model Floodplain Bylaws

## Climate Action Summit

- CAC agreed to wait on any climate action summit until the climate action coordinator is hired.

## Media Awareness

- There was a discussion on how to more consistently submit to the Truro Newsletter.

## Climate Action Plan

- Now that it has been confirmed that the climate action plan was not approved by the select board, it was decided to review the CAP to decide how to best move forward.
- Next Steps:
  - Add CAP to next week's agenda
  - Invite the Energy Committee to a future CAC meeting

## Updates

- Educational Calendar
  - A number of ideas were presented for future presentations including:
    - Mass energy/how to have an audit, heat pumps and solar, wild care, meet climate coordinator, pesticides and fertilizer, Low lying roads/Road bylaws, Climate action plan, Energy Committee and Green Communities
- Alex has been exploring the GHG Inventory work that was done in 2021
- Waste No Water is taking place on 11/7/2024 at the Library
- Nov 21st is the next CAC Library Series about Divestment

These meeting notes are respectfully submitted by Alex Limpaecher.

# **TRURO CLIMATE ACTION PLAN**

## **PHASE 1: ASSESS VULNERABILITIES**

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Prepared by the Truro Climate Action Committee  
July 2023

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## Phase 1: Assess Vulnerabilities

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### INTRODUCTION

In Truro, climate change means poorer air and water quality, warmer air and water temperatures, sea level rise, loss of natural habitat and animals, drought, flooding, wildfire risk, and impacts on health and the local economy.

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### Effects on Truro

- Risk to human health and safety
  - Risk to health of local flora and fauna
  - Loss of native fish and shellfish
  - Damage to infrastructure: roads, power lines, communications, etc.
  - Damage to farms and crops
  
  - Property damage/loss of property
  - Loss of beaches and beach parking
  - Increased risk of fires
  - Risk to fresh water supply
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## Phase 1: Assess Vulnerabilities

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### Assess the Impact of Climate Change

An assessment of Truro's vulnerabilities must be conducted and prioritized in order to create a Climate Action Plan for Truro.

#### *Goals for Assessing*

- Assess where Truro is most vulnerable (at risk) due to climate change
  - Prioritize the vulnerabilities for action
  - Develop plans that address those vulnerabilities
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#### *Adaptation & Mitigation*

In general, there are two ways to address vulnerabilities: adaptation and mitigation. **Adaptation** means adjusting to the impacts of climate change: for example, moving a shorefront home back from beaches and dunes that are eroding. **Mitigation** means reducing the impact of climate change, such as eliminating the use of fossil fuels.

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#### *Who Does the Assessment?*

◀ Addressing the effects of climate change in Truro requires a collaborative effort between subject matter experts: Truro's municipal staff, elected officials, and boards and committees.

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#### *Goals Alignment*

Effective climate leadership requires the integration of climate change mitigation and adaptation into daily operations, decision-making, and planning for our municipality. This means the Select Board must be committed to taking the lead on implementation of this approach and the integration of climate change mitigation and adaptation throughout all Town Departments, boards, and committees. This aligns with the Select Board's Values, Goals, and Objective #10.

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## Phase 1: Assess Vulnerabilities

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### *Goals Alignment, continued*

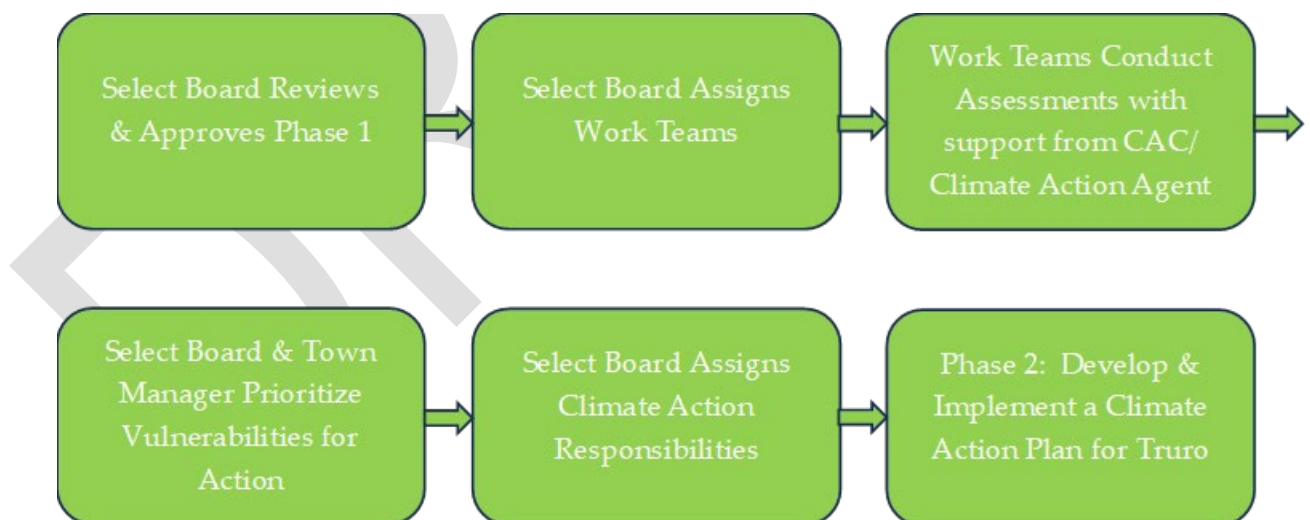
**Values:** Openness and Transparency, Collaboration, Sustainability

**Goals:** Use long term and strategic planning to guarantee the future health and well-being of our community.

**Objective #10:** The Select Board will provide support to and collaborate with the Climate Action Committee and the Energy Committee on the goals of creating a Climate Action Plan for the Town of Truro, and researching the hiring of a Climate Action Agent, as well as to work with the Climate Action Committee to develop a policy memorandum that facilitates and guides progress in all relevant areas toward a “Net Zero Truro” by 2050 and will ask for updates at least twice per year.

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### *Work Process*



Note that some/much of the information required to make vulnerability assessments may already be available.

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## Phase 1: Assess Vulnerabilities

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### *Output*

The final output of each work team is a recommendation for action and the plan captured in the form below. Teams will create their own methodologies to collect data and assess vulnerabilities. In some cases, the data may already be available.



### **Vulnerability Assessment/ Recommended**

**Goal/Task:** Goal #4: Assess Resilience of Infrastructure/Cable Service

**Assigned to:** DPW & Cable & Internet Advisory Committee

**Methodology (how to achieve the goal):**

1. Identify municipal departments, critical town services, and businesses dependent upon cable access
2. Identify the impact on these groups if cable service is unavailable for five business days. For example, lost revenue, loss of wages for employees, loss of services (ATM, credit card payments, public safety announcements, etc.).

**Resources Required to Complete the Task (people, data, expense):**

Survey municipal departments, critical town services, and businesses.

**Cost of Doing Nothing (what does Truro lose?):**

- Town Hall unable to conduct financial tasks
- Police, fire, and rescue services delayed
- Businesses cannot process credit cards, reservations, on-line ordering, and ATMs not available
- Disruption of public safety announcements

**Recommended Action:**

Work with cable provider to develop redundancy plans.

## Phase 1: Assess Vulnerabilities

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### Goal #1\*: Assess Municipal Building Emissions

Based on the Climate Action Committee's (CAC) 2021 greenhouse gas emissions assessment for Truro, building emissions are largely generated from the use of fossil fuels. Gasoline, propane, and oil are used to heat buildings, heat water, and cook. Migrating to electric heating and cooking, as well as reducing heat and cooling loss from buildings, will help reduce emissions.

Recommended Tasks:	Assigned to:
1. Conduct energy assessments for all municipal buildings	EC/DPW
2. Estimate costs to upgrade	EC/DPW

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### Goal #2: Assess Transportation Emissions

In Truro, most transportation emissions come from cars, trucks, and buses.

Recommended Tasks:	Assigned to:
1. Improve broadband access to reduce travel	Cable & Internet
2. Assess feasibility of carpooling and ride sharing	CAC
3. Assess expanding bicycle and pedestrian paths	Bikes & Walkways
4. Assess EV charging stations	CAC
5. Assess long-term plan to electrify municipal vehicles	DPW

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*\*Note that numbers are for reference only and do not indicate priority.*

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## Phase 1: Assess Vulnerabilities

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### Goal #3: Assess Waste Emissions

The EPA estimates food waste is the single most common material in landfills and incinerated in the U.S. Food contributes to 24% of landfill waste and 22% of combusted municipal solid waste. Solid waste contributes to greenhouse gases through the emission of nitrous oxide from solid waste combustion facilities.

Recommended Tasks:	Assigned to:
1. Research feasibility of reducing waste disposal	DPW
2. Research feasibility of building materials reuse/recycle	DPW

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### Goal #4: Assess Resilience of Mechanical Infrastructure

Sea level rise, flooding, and increasing temperatures and severe weather threaten the stability of homes, commercial buildings, municipal buildings, roads, electric service, and cable services.

Recommended Tasks:	Assigned to:
1. Assess vulnerabilities in utility infrastructure	DPW
2. Conduct vulnerability assessments of municipal facilities	DPW
3. Assess vulnerabilities to low-lying roads	DPW
4. Assess vulnerability of septic systems	Health

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## Phase 1: Assess Vulnerabilities

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### Goal #5: Assess Ecosystems Vulnerability

Protecting watersheds keeps the aquifer safe. Preserving the natural ecosystem whenever feasible will help reduce greenhouse gases by sequestering carbon, protect habitat for wildlife, shellfish, and fin fish, and provide a healthier environment for Truro's residents and visitors.

Recommended Tasks:	Assigned to:
<ol style="list-style-type: none"><li>1. Identify shade-starved areas and assess strategic planting of trees to provide building shading and cooling</li><li>2. Research potential reforestation of disturbed areas</li><li>3. Research protecting the aquifer</li><li>4. Research protecting salt marshes</li></ol>	CAC  Conservation Health

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### Goal #6: Assess Production of Clean, Local Energy

Producing green energy locally will reduce the production of greenhouse gases and may protect Truro from sustained power outages.

Recommended Tasks:	Assigned to:
<ol style="list-style-type: none"><li>1. Assess future energy needs for Truro</li><li>2. Identify affordable renewable energy sources, including mini grids and battery storage, and assess feasibility</li></ol>	EC/DPW EC/CAC

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### Goal #7: Assess Human Health & Safety

Hotter summers are a risk to elderly, infants, those with health issues, low-income families, outdoor workers, and indoor workers without air cooling. Deaths result from heat stroke and related conditions, but also from

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## Phase 1: Assess Vulnerabilities

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### *Goal #7: Assess Human Health & Safety, continued*

cardiovascular disease, respiratory disease, and cerebrovascular disease. Heat waves are also associated with increased hospital admissions for cardiovascular, kidney, and respiratory disorders.

More violent storms, such as northeasters and hurricanes, put human health and safety at risk via loss of heat/cooling, access to potable water, access to health care, and damage to homes. Mental and emotional health is also at risk due to existential threats to physical health and safety. These risks increase with prolonged power outages.

<b>Recommended Tasks:</b>	<b>Assigned to:</b>
<ol style="list-style-type: none"><li>1. Assess viability of heating and cooling shelters in the event of an extended power loss</li><li>2. Assess viability of cooling centers during extended hot temperatures</li><li>3. Assess availability of potable water</li><li>4. Identify existing resources for physical, mental, and emotional health needs</li></ol>	Fire/Rescue/Police Health Dept.

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### **Goal #8: Assess Economic Viability of Truro**

Assess the potential loss of income to the municipality and to businesses due to climate change. This may include, but is not limited to:

- Loss of tax revenue: property & businesses
  - Loss of beach parking
  - Loss of tourist revenue
  - Loss of successful farming
  - Loss of aquaculture/fishing/shellfishing
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## Phase 1: Assess Vulnerabilities

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### *Goal #8: Assess Economic Viability of Truro, continued*

<b>Recommended Tasks:</b>	<b>Assigned to:</b>
<ol style="list-style-type: none"><li>1. Assess potential loss of tax revenues due to residential and commercial property loss (flood plain map)</li><li>2. Assess potential loss of revenues due to loss of beaches and beach parking</li><li>3. Assess potential loss of revenues due to loss of shell and fin fishing (licenses, launch and mooring fees)</li><li>4. Assess the potential impact of climate change on local businesses and tourism</li></ol>	<p>Finance Committee</p> <p>Beach &amp; Rec Dept</p> <p>Pamet Harbor Commission</p> <p>Shellfish Committee</p> <p>Finance Committee</p>

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### Next Steps

After the eight assessment goals have been completed, the next steps are:

1. Select Board reviews data.
  2. Select Board with CAC, town manager, town department heads, and/or appropriate committee/board chairs determine the priority for addressing vulnerabilities.
  3. Select Board assigns the top vulnerabilities to the appropriate town departments and/or committees.
  4. Departments and committees, with the help of the CAC, develop specific plans to address priority vulnerabilities.
  5. Select Board reviews and approves plans. These plans become Phase 2 of Truro's Climate Action Plan.
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### APPENDIX B: Vulnerability Assessment Form



#### **Vulnerability Assessment/ Recommended Action**

**Goal/Task:**

**Assigned to:**

**Methodology (how to achieve the goal):**

**Resources Required (people, data, expense):**

**Benefits to Truro:**

**Cost of Doing Nothing (what does Truro lose?):**

**Recommended Action:**

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## Phase 1: Assess Vulnerabilities


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### APPENDIX B: What Has Truro Already Done?

#### *Municipal Actions*

- 2004 Truro forms the Energy Committee
- 2009-2020 Energy consumption for municipal buildings/vehicles reduced by 28%
- 2010 6.8 kw Solar PV array installed on Central Elementary School
- 2011 Truro is awarded *Green Community* designation and adopts MA *Stretch Energy Code*
- 2013 Municipal buildings excluding Truro Central School converted to LED lighting
  
- 2015 Truro institutes ban on use of plastic bags in town stores
- 2017 Truro invests in a solar farm in Canton that supplies 100% of municipal electricity
- 2018 Truro adopts a zoning bylaw limiting house size
- 2018 Truro Central School converts to LED lighting
- 2019 Composting becomes available to residents at the Transfer Station
  
- 2019 Truro forms the Climate Action Committee
- 2021 A town-wide greenhouse gas inventory is completed
- 2021 EV Charging station is installed at Town Hall
- 2021 Proposed Climate Change Agent for Truro
- 2023 Truro adopts Specialized Energy Code at the Annual Town Meeting

#### *Residential & Business Actions*

- 2018-2020 Participates in *Solarize Outer Cape* program for residential rooftop solar
  - 2021 To date, 14 electric cars are registered with the town of Truro
  - 2021 Climate Action Committee meets with Truro Residents for feedback
  - 2022 Climate Action Committee works with Cape Light Compact to sign up 17 Truro businesses for an energy audit
  - 2023 CAC with Truro Public Library conducts information sessions on addressing climate change
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**Protect our People, Waters and Land**  
**Pesticide & Fertilizer Reduction, Home Rule Petitions (HRPs)**  
**TRURO request to town citizens**

Our natural environment—the beauty of our land and waters—is what brings people here and makes us want to stay in this special place. It is our most valuable resource and economic asset. The health of our environment directly affects every resident, property owner, visitor, and business in Truro.

**The ask is for the Pesticide reduction HRP & Fertilizer Reduction HRP to be on the Truro Town Warrant, Spring 2025, for citizens to vote on.**

The purpose of these Home Rule Petitions (HRPs) is to reduce outdoor toxic pesticide and fertilizer use in the Town of Truro, in order to protect the public from the hazards of these agents, promote a healthy environment for all, and safeguard our economy. **It is *not* a ban of pesticides and fertilizers, but a reduction of the most harmful.**

**Pesticides** were created with the intention to kill pests. Examples are: herbicides, insecticides, fungicides and rodenticides. Anything ending in ‘cide’ is made to kill its intended target.

**Fertilizers** were developed to aid the growth of plants. That is a good thing for our food supply and for the beauty of our gardens, but most fertilizers contain heavy metals, like nitrogen and phosphorous, which can pollute the waters we love to swim in and contaminate the water we drink.

The problem with outdoor pesticide and fertilizer use is that these agents are not always fully absorbed by the targeted pest or plant. **Pesticides** can travel through the air, water and soil, often spreading thousands of feet from the application site and harming insects, birds and other animals, including humans. Irrigation and storm water can cause **fertilizers** to run off our properties, into nearby bodies of water. **Fertilizer** also permeates the ground, making its way into our aquifers, wells and drinking water, exposing us to dangerous levels of nitrogen, among other harmful chemicals.

**As individuals and as a community, we can make the biggest impact by reducing our use of pesticides and fertilizers.**

A Home Rule Petition is a request (petition) from a city/town to the State Legislature. It asks to let the Town of Truro have the power to make its own decision to reduce the use of pesticides and application of fertilizer, a right the State took away in 2014.

An HRP costs taxpayers and the Town nothing, but the benefits could be lifesaving.

Protecting our waters and land has had a long history of support in Truro and other Cape Cod towns. Orleans voted in favor of a fertilizer reduction HRP in 2022, and a pesticide reduction HRP in 2023. In 2024, Eastham and Wellfleet also voted in favor of a pesticide reduction HRP. Many people and organizations have worked very hard and made significant efforts over the last several decades to move this issue forward.

The Truro Climate Action Committee, [hopefully: the Board of Health, the Conservation Committee and the Select Board] all support this petition. We hope you will, too.

**Truro might be the smallest town on the Cape, but when it comes to voting in the interest of our land and waters, we're mighty!**

Vote YES on Articles \_\_\_\_\_ and \_\_\_\_\_ at Truro Town Meeting, 2025.

[quotes from organizations that support the HRPs]

