

**Truro Climate Action Hybrid Meeting Minutes**  
**Wednesday, April 10, 2024, 1-3 PM**

**Attendees:** Carol Harris, Rebecca Bruyn, Lili Flanders, Mark Gebhardt, Georgia Neill, Emily Beebe

**Public Comment:** none

**Updates from committee members:**

Rebecca shared her draft of a Truro Talks article, which includes data about EVs, solar arrays and business participation in a Cape Light Compact initiative. Attendees gave editorial suggestions. Rebecca will make changes and submit the article to Katie for inclusion in April Truro Talks.

Georgia volunteered to put together a June library solar event geared toward parttime Truro residents. She will reach out to Justine about scheduling and contact solar experts who could be presenters.

Georgia shared her experience of participating in a remote Climate Fresk experience, which she found somewhat disappointing. Instead of pursuing a remote or live workshop in Truro at this time. Rebecca recommended that we make information available to residents who might be interested in pursuing a Fresk experience on their own.

Lili updated the group on the status of the MVP F25 Action Grant, as well as the Climate Leaders application, which she's been working on in coordination with the Energy Committee and the Health & Conservation office. The MVP grant application is due on April 24<sup>th</sup> and the Climate Leaders application is due in July. At this point, work is progressing well enough that the application team is confident about meeting both those deadlines.

**Discuss other immediate business:** Carol offered suggestions and the group discussed talking points for presenting the Climate Action Coordinator article at Town Meeting.

Carol reminded us that though the Climate Action Plan has been written, it still needs to be implemented. We will review the plan and map out next steps at 4/16/24 meeting.

Mark shared his experience of trying to navigate the Truro website in an effort to gather information about CAC and we discussed ways to streamline getting information to residents.

Georgia will put advertisements in the Provincetown Independent and the Banner stating that CAC is seeking new members.

**New Membership:** Mark Gebhardt officially became a member of CAC today, 4/10/24.

**Resignations:** Carol Harris resigned from CAC as of today. Rebecca Bruyn has put in her resignation, effective 5/1/24.

Respectfully submitted by:  
Lili Flanders

**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*

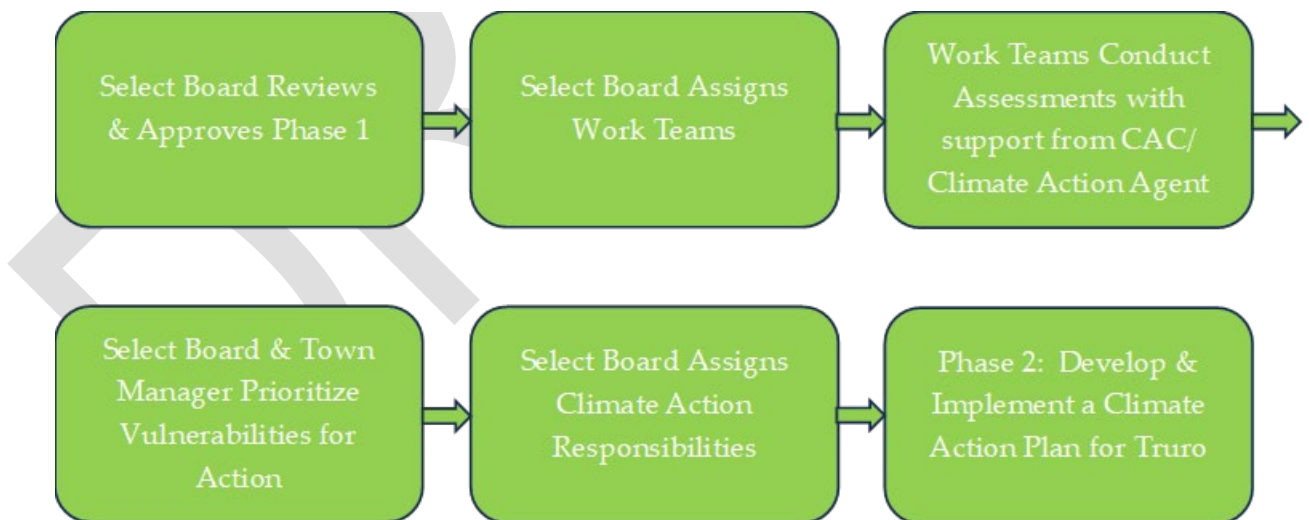
*Values: Openness and Transparency, Collaboration, Sustainability*

*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.

	<h2>Vulnerability Assessment/ Recommended</h2>
<p><b>Goal/Task:</b> Goal #4: Assess Resilience of Infrastructure/Cable Service</p>	
<p><b>Assigned to:</b> DPW &amp; Cable &amp; Internet Advisory Committee</p>	
<p><b>Methodology (how to achieve the goal):</b></p>	
<ol style="list-style-type: none"><li>1. Identify municipal departments, critical town services, and businesses dependent upon cable access</li><li>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.).</li></ol>	
<p><b>Resources Required to Complete the Task (people, data, expense):</b></p>	
<p>Survey municipal departments, critical town services, and businesses.</p>	
<p><b>Cost of Doing Nothing (what does Truro lose?):</b></p>	
<ul style="list-style-type: none"><li>• Town Hall unable to conduct financial tasks</li><li>• Police, fire, and rescue services delayed</li><li>• Businesses cannot process credit cards, reservations, on-line ordering, and ATMs not available</li><li>• Disruption of public safety announcements</li></ul>	
<p><b>Recommended Action:</b></p>	
<p>Work with cable provider to develop redundancy plans.</p>	

## 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.*

## 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.

<b>Recommended Tasks:</b>	<b>Assigned to:</b>
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.

<b>Recommended Tasks:</b>	<b>Assigned to:</b>
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.

<b>Recommended Tasks:</b>	<b>Assigned to:</b>
<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.

<b>Recommended Tasks:</b>	<b>Assigned to:</b>
<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>
1. Assess potential loss of tax revenues due to residential and commercial property loss (flood plain map)	Finance Committee Beach & Rec Dept
2. Assess potential loss of revenues due to loss of beaches and beach parking	
3. Assess potential loss of revenues due to loss of shell and fin fishing (licenses, launch and mooring fees)	Pamet Harbor Commission Shellfish Committee
4. Assess the potential impact of climate change on local businesses and tourism	Finance Committee

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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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