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Truro Climate Action Committee Meeting Wednesday, August 21, 2024, 10:00AM-12:00PM

Minutes

Attendees: Lili Flanders, Mark Gebhardt, Alex Limpaecher (video remote) (members), Rebecca Bruyn, Georgia Neil (volunteers) Emily Beebe (Town Hall liason)

Call to order: Truro Town Hall at 10:00AM.

1. **Remembrance and honoring of Carol Harris:** Rebecca, Georgia and Emily recalled the incredible work that Carol Harris, who recently passed away, did for the CAC. She was the first chair and was deeply committed, informed about climate issues and a devoted leader. She was collaborative and spent many hours/week tirelessly working to get the CAC where it is today. She was a “fixer” and organized a communication system between the CAC and similar groups in Wellfleet and Eastham which led to the grant writing which resulted in many grants over the years. It was proposed and voted unanimously to name the educational series at the Truro Library in her honor: *“The Carol Harris Climate Action Educational Series”*.
2. **Assign note taker:** Mark
3. **The minutes of the April 10, 2024** were approved and will be sent to Town Hall.
4. **Public comment:** none
5. **Introduction of new members and volunteers:** Each member and volunteer discussed their relationship to Truro, their reason for joining or volunteering on the CAC and listed some potential projects of interest such as:
 - a. meeting and/or collaborating with the CAC of Wellfleet and Eastham,
 - b. discuss our relationship and overlap with the Energy committee and whether the two should be combined,
 - c. consideration of divesting in fossil fuel investments and companies,
 - d. using data and computer science (Alex) to help the committee gather appropriate data from the town and organizing it,
 - e. assessing the number of EV’s and solar homes in Truro and new applications for solar installations
 - f. continuing to publish graphs in the Truro Newsletter and
 - g. continuing a monthly educational series (already in effect),
 - h. recruiting more members to the committee, and other ideas going forward.
6. **Vote on new committee Chair:** Lili volunteered and spoke passionately about her interest in the position and plans for moving the committee forward through education and building on past accomplishments, such as building codes and hiring a Climate Coordinator. She was voted as Chair unanimously.

- a. The issue of a “Co-Chair” was discussed which usually means sharing the responsibilities of running the meetings, etc. equally and it was decided instead to have a **Vice Chair**. Mark agreed to that position and was voted in.
- 7. **CAC Meeting Schedule:** This was discussed and we decided to have two meetings a month on the second and fourth Wednesdays of each month. There will be one full meeting on the second Wednesday from 10AM – 12 PM alternating with a shorter, informational discussion from 10-11AM on the fourth Wednesday. The next dates (September 11, 25, October 8 and 22) were decided on and they will be circulated to the committee by email with subsequent dates to follow (which may require a Doodle-poll).
- 8. **Library Informational/Educational Sessions:** Prior sessions were briefly discussed and planning for the Fall schedule is underway.
 - a. There will be one on Green Burials (speakers: Dawn Walsh, Richard Pask and Holly Ballard-Gardner) on September 19 at 6PM at the Truro Public library (Fliers have been made and will be distributed),
 - b. October 17 at 6PM on Waste Water Management (Emily and others),
 - c. November 12, 6PM on divesting from fossil fuels (speakers TBD)
 - d. December on Gardening guidelines to avoid pesticides and fertilizers (Laura Kelly).
- 9. **Review of 2023-2024 goals:** These were reviewed and will be modified for the current year.
 - a. **Goal 1:** Complete Phase 1: Carol Harris had completed Phase 1 CAC plan which was approved by the Select Board but has not yet been funded (pending a Climate Coordinator hire for which there is a search now and this position was approved/funded at ATM). Lili will request a meeting with the TM, Kelly, Stephany Rein to discuss how we will go forward with staff roles regarding issues such as heat pumps, solar panels, bike path to reduce automobile traffic and data collection so we can prioritize new projects.
 - b. **Goal 2:** Review/update charge for the CAC. [Done and Carol submitted draft to the SB.] **This was not done or submitted. Is it a priority?**
 - c. **Goal 3:** Create a Truro Earth Day: This was held last April, 2024 on Earth Day and was a success. The next will be planned for April 22, 2025. We will advertise our progress in the “Truro Talks” newsletter and plan items for the town warrant with new data on solar applications and other items. A banner and new graphs are needed for next Earth Day.
 - d. **Goal 5:** Phase 1 Climate Action Plan Feasibility was discussed regarding gathering data on carpooling/ride share, EV charging stations, public property tree planting (and assess plans for clearing trees when Walsh plans are developed), identify affordable renewable energy sources. This goal somewhat overlaps with Goal 8 and will be discussed between Rebecca and Alex with the potential to combine them into one goal.
 - e. **Goal 6:** Updates to the Select Board: This is done twice/year but we missed June 2024. Lili will do this in December. (there is a form to complete 8 weeks in advance).

- f. **Goal 7:** Articles for Truro Talks Newsletter. We will use the Education Session topics and provide a summary PRIOR to each talk to publicize it and encourage attendance. This needs to be submitted the last week of each month to Courtney. We will start with the Green Burials.
 - g. **Goal 8:** Identify a few measures to monitor, such as residential energy audits, solar installations, the # of registered EVs, and others. Alex and Rebecca will discuss and perhaps combine with Goal 5.
 - h. **Stretch Goals 9-11:** These were tabled for future discussion when we will hopefully have more members on the committee.
- 10. **Update on the Climate Coordinator** – discussed earlier (see above).
 - 11. **Discuss Truro Talks articles:** discussed earlier (see above).
 - 12. **Meeting was adjourned at 12:00PM**

Respectfully submitted,

Mark C. Gebhardt

August 21, 2024

Truro Climate Action Committee

2023/24 Goals

The Climate Action Committee goals for 2023/24 focus on the charge to create a climate action plan and on the charge to educate homeowners and business owners on reducing carbon emissions.

The intent of *Phase 1 Climate Action Plan* is to identify where Truro is most vulnerable, so that actions are focused on mitigation of or adaptation to higher-impact risks. Outreach actions are largely on-going and focus on providing information to homeowners and business owners so that they can support town actions/policies as well as take their own actions.

Prioritized Goals	Key Performance Indicator <i>(what constitutes success/completion)</i>	Lead
1. Complete <i>Phase 1 Climate Action Plan</i> .	<ul style="list-style-type: none">Reviewed by Select BoardResources assigned by Select BoardCOMPLETED	Carol
2. Outreach: continue to develop climate info sessions at the Truro Public Library that inform residents and business owners.	<ul style="list-style-type: none">Identify topics and speakersSchedule and deliver sessionsONGOING	Rebecca Lili Georgia
3. Review/update the charge for the Climate Action Committee (including incorporate climate equity and pollution vs climate change).	<ul style="list-style-type: none">Submit draft to Select BoardNOT COMPLETED. DROP IT OR KEEP IT?	Carol
4. Create a Truro Earth Day event for 2024.	<ul style="list-style-type: none">Set goal(s) and benefitsIdentify components/contentIdentify resourcesDetermine feasibilityCOMPLETED	Lili
5. Address Phase 1 Climate Action Plan Feasibility Assessments.	<ul style="list-style-type: none">Determine feasibility of carpooling/ride sharingAssess EV charging stationsAssess public property for planting trees for shading/coolingIdentify affordable renewable energy sources	CAC

Truro Climate Action Committee

2023/24 Goals

Prioritized Goals	Key Performance Indicator <i>(what constitutes success/completion)</i>	Lead
	<ul style="list-style-type: none"> NOT COMPLETED. WORK WITH CLIMATE COORDINATOR ON THIS? 	

On-Going Responsibilities	Key Performance Indicator <i>(what constitutes success/completion)</i>	Lead
6. Provide updates to Select Board about climate actions twice a year.	<ul style="list-style-type: none"> Submit in June and December ONGOING 	Lili
7. Continue to submit articles for Truro Talks.	<ul style="list-style-type: none"> Submit eight or nine per year ONGOING 	CAC
8. Identify a few measures to monitor, such as residential energy audits, solar installations, the number of registered EVs per year, etc., as a way to measure climate responses in Truro.	<ul style="list-style-type: none"> Determine goal/purpose/benefits Identify specific sources of available data Establish periodic reporting ONGOING 	Rebecca & Alex
Stretch Goals <i>(if time allows)</i>	Key Performance Indicator <i>(what constitutes success/completion)</i>	Lead
9. Research and recommend new plantings around existing town buildings to help reduce energy use and capture carbon.	<ul style="list-style-type: none"> Identify best species for shading and carbon capture Identify costs Identify resources required to plant and maintain SUSPENDED (MAYBE FOLD INTO EARTH DAY?) 	Lili
10. Determine feasibility of creating residents' groups.	<ul style="list-style-type: none"> Identify goal(s) and benefits Identify on-going support requirements 	Rebecca Georgia

Truro Climate Action Committee

2023/24 Goals

	<ul style="list-style-type: none">• ONGOING?	
11. Research green burials to determine if this can be implemented in Truro.	<ul style="list-style-type: none">• Research requirements• Identify benefits• Determine feasibility• COMPLETED	Carol & Georgia

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

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.

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

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.

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.

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.

Phase 1: Assess Vulnerabilities

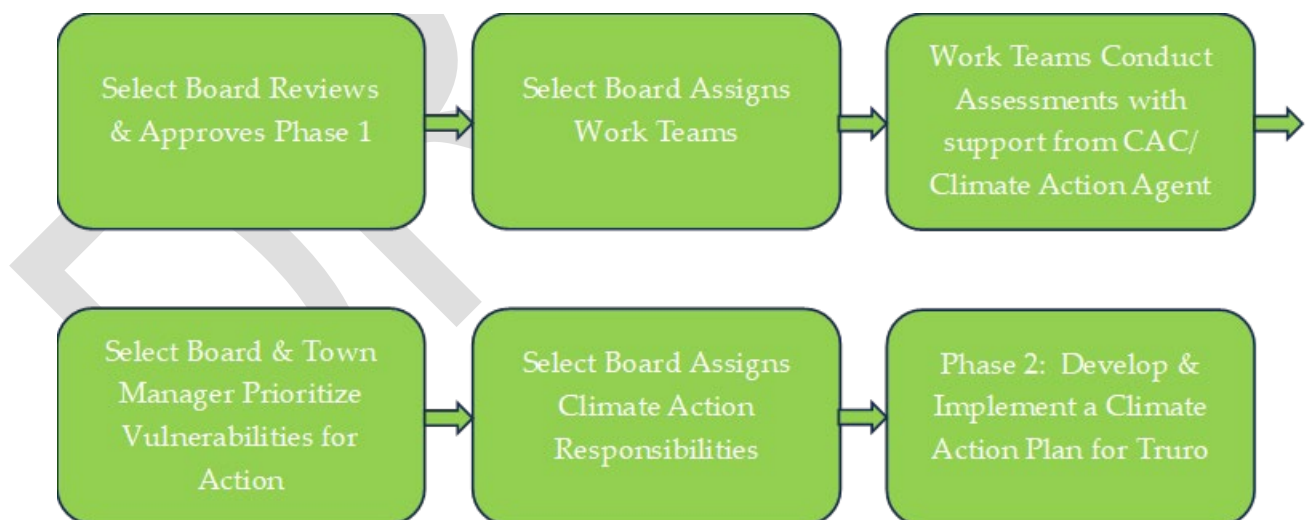
Goals Alignment, continued

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.

Work Process



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

Phase 1: Assess Vulnerabilities

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

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

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

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

Phase 1: Assess Vulnerabilities

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

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

Phase 1: Assess Vulnerabilities

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">1. Identify shade-starved areas and assess strategic planting of trees to provide building shading and cooling2. Research potential reforestation of disturbed areas3. Research protecting the aquifer4. Research protecting salt marshes	CAC Conservation Health

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">1. Assess future energy needs for Truro2. Identify affordable renewable energy sources, including mini grids and battery storage, and assess feasibility	EC/DPW EC/CAC

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

Phase 1: Assess Vulnerabilities

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.

Recommended Tasks:	Assigned to:
<ol style="list-style-type: none">1. Assess viability of heating and cooling shelters in the event of an extended power loss2. Assess viability of cooling centers during extended hot temperatures3. Assess availability of potable water4. Identify existing resources for physical, mental, and emotional health needs	Fire/Rescue/Police Health Dept.

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
-

Phase 1: Assess Vulnerabilities

Goal #8: Assess Economic Viability of Truro, continued

Recommended Tasks:	Assigned to:
<ol style="list-style-type: none">1. Assess potential loss of tax revenues due to residential and commercial property loss (flood plain map)2. Assess potential loss of revenues due to loss of beaches and beach parking3. Assess potential loss of revenues due to loss of shell and fin fishing (licenses, launch and mooring fees)4. Assess the potential impact of climate change on local businesses and tourism	<p>Finance Committee</p> <p>Beach & Rec Dept</p> <p>Pamet Harbor Commission</p> <p>Shellfish Committee</p> <p>Finance Committee</p>

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

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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