

Chebeague Climate Breakfast News

Welcome to the Chebeague Island Climate Action Team (CCAT) Community Breakfast! The Team has worked hard to make this a nourishing event for both body and mind.

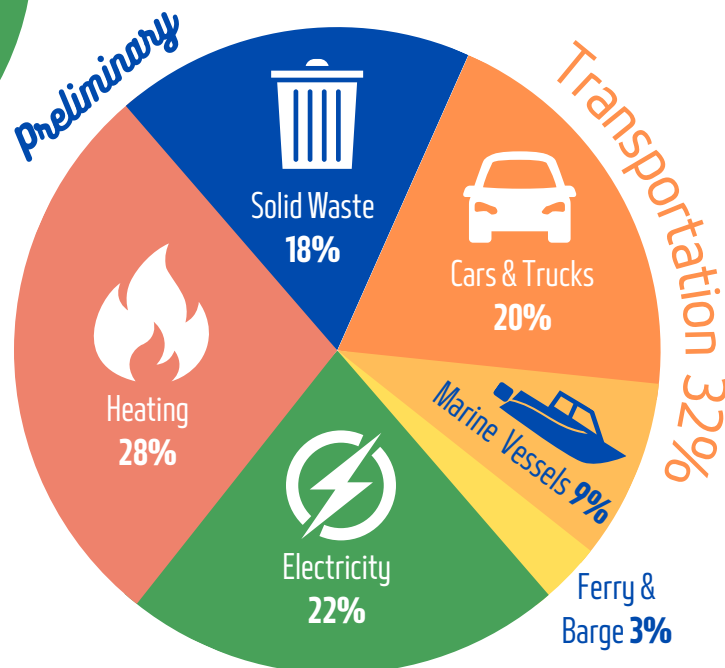
We hope you enjoy it!

"We put the 'ate' in Climate"

PRELIMINARY 2021 GREENHOUSE GAS INVENTORY

The Team has been working on a community-wide inventory of greenhouse gas emissions produced by activities on the island. A number of community members have kindly provided data to help us with this effort. The results are still preliminary, and the Team will be finalizing the inventory over the summer. The 2021 inventory will serve as a baseline for comparing future emissions on Chebeague.

Community-wide emissions: **3,862 metric tons of CO₂**



Note: The Team is still collecting data, but this preliminary inventory gives us a sense of the primary sources of emissions on Chebeague.

GROUNDWATER STUDY

We will begin working on the Groundwater Study this summer and we need your help!

This study involves updating our existing well inventory to 1) add new wells that have been drilled, 2) correct some spatial errors and 3) put the data into a format that can be used in GIS mapping and analysis. The well survey data will be incorporated into a **Groundwater Vulnerability Assessment** of Chebeague Island which will assess the carrying capacity of the island's aquifer, evaluate potential impacts of continued development and assess the potential impacts of climate change including the risk of saltwater intrusion. The results of this study will be used to inform the development land use practices that take groundwater protection and climate resiliency into account.



Well Survey

Tell us about your well! Well survey forms will be mailed to every homeowner and will be available at the town office, library, and online.



Well Sampling

Come join us! During the month of July, CCAT and community volunteers will conduct an island wide well sampling program.



Water Testing

Wells will be analyzed for **specific conductance, bacteria, and sodium chloride** to evaluate the impacts of development and saltwater intrusion.



If you complete a well survey form you will be eligible for a

Free! home water quality test

Fill out your well survey form today by scanning the QR code or pick up a paper copy at the town office or library





CHEBEAGUE ISLAND CLIMATE VULNERABILITY ASSESSMENT

The goal of this task is to identify climate hazards including elevated temperatures, sea level rise, droughts, more frequent and extreme storms, etc. and the potential risks associated with those hazards. Impacts that have not previously been considered on Chebeague include increased fire risk, impacts on our fishing and maritime economy, and increasing costs due to reliance on petroleum-based fuels for our transportation and heating needs. The study will include environmental impacts (risks and vulnerabilities such as saltmarsh migration, erosion, shifting habitats, and human health, etc.) and socioeconomic impacts (risks and vulnerabilities such as impacts on our local economies and maritime heritage, housing, food security, health, and social equity). The Team expects to engage outside expertise to perform much of this work, paid by grant funds. This photo of the Hook, taken last December, illustrates Chebeague's vulnerability to violent weather and sea level rise.

new! TIDE GAUGE PROJECT

A separate initiative, funded by a ShoreUp grant from the Island Institute, is the installation of an ultrasonic, high-precision tide gauge on Chebeague, along with two basic tide staffs for visual observations. Although not a part of the CCAT's original charge, the project complements the Team's groundwater and climate vulnerability work. Installation is expected this summer. Data from the gauge will be available online, in real time.

Interested in CCAT?

Upcoming meetings are posted on the Town's website if you are interested in joining us. You can also send us an email at chebeagueCAT@gmail.com to be added to our mailing list.

We always welcome new teammates!

