C-CAN 5/2/20 Webinar – draft of presentation by Bob Leer, CCF President

Established in 1962, the Mission Statement of the Chatham Conservation Foundation is to "preserve land for the benefit of the people, plants, animals and ecosystems of Chatham". For many years the primary focus was the acquisition of open space and conservation restrictions and to allow these lands to remain in their natural state. CCF has control over and protects over 820 acres, which includes 212 acres of salt marsh, 146 of fresh water wetlands, with the remaining primarily upland forest land. These lands are those that it has purchased, that have been donated by Chatham citizens or that the Town acquired and asked CCF to manage under permanent conservation restrictions.

More recently our emphasis has shifted from acquisition to maintaining and monitoring our properties and encouraging public engagement. These activities have required increased emphasis on clarifying property boundaries, monitoring encroachments, repairing storm damage, clearing invasive plants and trails and collaborating with other entities to study current conditions and plan for future environmental challenges, most of which have been brought about by climate change.

The Chatham Conservation Foundation is dedicated to preserving and protecting these ecosystems because they provide habitat for birds and wildlife, protect surface and groundwater quality, provide flood control and storm damage prevention. In addition, salt marshes protect against some of the effects of climate change by buffering ocean storm surges, protecting adjacent areas from flooding and other effects of sea level rise.

Moreover, our protected lands are important as they also offset a considerable share of Chatham's carbon footprint. As the Massachusetts Land Trust Coalition states "**Preservation of Land is climate mititgation** – by two methods. First, by keeping land in its natural, un-developed state, open lands eliminate the attendant CO2 emission that would result from development. Second, by Carbon Sequestration – by uptake of CO2 by preserving trees and forest lands, as well as by uptake by the roots of healthy salt marsh grasses, which can sequester several times more carbon per acre than forest lands and keep it buried for much longer. Additionally, salt marshes store, and prevent the release of, methane (50 times more dangerous than CO2) from degraded and/or dying salt marshes.

Due to its geography, Chatham is both more exposed to the effects of climate change and potentially more equipped to mitigate it. CCF is now striving to increase this natural sequestration of greenhouse gases by restoring Chatham's heritage of salt marshes through long-term strategic management via a Salt Marsh Task Force. An initial goal of the Task Force is to survey CCF properties associated with salt marshes and to understand how to protect these marshes under expected changing conditions during the next 20 years. The task force is developing detailed maps of the marshes to project effects of sea-level rise on migration and to target strategic land-acquisition possibilities.

Chatham is uniquely rich in former, current and potential future salt-marsh acreage, much of it already owned by CCF. This includes areas around Frost Fish Creek, Muddy Creek, Strong Island, Cotchpinicut Marsh, Cranberry Lane, Cockle Cove, Forest Beach, Red River, Morris Island, Tom's Neck, Champion Creek, Mill Pond and Oyster River. Each of these areas is quite different and requires careful study to determine specific stewardship priorities.

The Task Force works closely with CCF's full-time Land Steward and the CCF Land Stewardship Management Committee, as well as with the Town of Chatham, C-CAN, APCC, Friends of Chatham Waterways and the Pleasant Bay Alliance Work Group. The Foundation is currently investigating studies

on Frost Fish Creek and its adjacent marsh areas, which receive drainage from approximately _____acres and empties into Pleasant Bay through a very obstructed culvert under Route 28. We have collaborated with APCC in an initial water quality study and are hoping to conduct two more comprehensive assessments this summer which would provide important information on the consequences of reopening the culvert to increased tidal flow with a hoped for restoration of degraded/deteriorated fringing salt marsh. The Chatham CPC is recommending that Town Meeting approve \$85,000 for baseline studies that are necessary for the state to consider this project for funding the actual restoration work. We hope that the Town and the state will work together to implement this important project

We also have been working with U. Mass. Amherst on a study of Red River Marsh, an area of _____acres at the Harwich border on Nantucket Sound. The initial goal of the project is to develop a model to use drones to monitor the health of salt marshes. Unfortunately, it appears that this activity may be delayed this summer due to the pandemic. However, the use of drones to monitor salt marsh migration is very promising.

With regard to the fresh water wetlands that we protect we are expanding our monitoring for encroachments that degrade the quality of the shorelines and water. In these efforts we can collaborate with the Chatham Conservation Commission, which has enforcement powers should neighbors be reluctant to cooperate.

Finally, state funding for projects under the Municipal Vulnerability Project and Coastal Zone Management has just been approved for land trust lands, as well as municipal lands. We hope that in the future, CCF protected lands will be among their priorities.

If you would like to support CCF's efforts, we welcome your participation:

- 1. Discuss with CCF options for donating land, or Conservation Restrictions;
- 2. Vote at Town Meeting to support the Chatham CPC recommendation for a grant of \$85,000 to CCF for important work at Frost Fish Creek.
- 3. Join the Salt Marsh Task Force, become a land steward, or volunteer to help out in the office (from home at this point).
- 4. Become a member of CCF if you are not already, or increase your donation level, so we may continue these important stewardship actions.