

About Us

We are a non-profit society dedicated to the preservation and protection of the Eisner Cove Wetland. We believe that:



- Precious natural resources belong to all residents of Nova Scotia.
- Our province and cities can and must make better decisions to allow growth in a more sustainable manner, prioritizing the protection of our environment.
- The Eisner Cove Wetland and its protective forest belt should be returned to public ownership, and preserved as a wild area for recreational and educational use only.

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Find Us:

<https://www.protecteisnerwetland.ca>



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We know better. It's time we do better!



Wetlands

+

Carbon

The Facts, The Story.



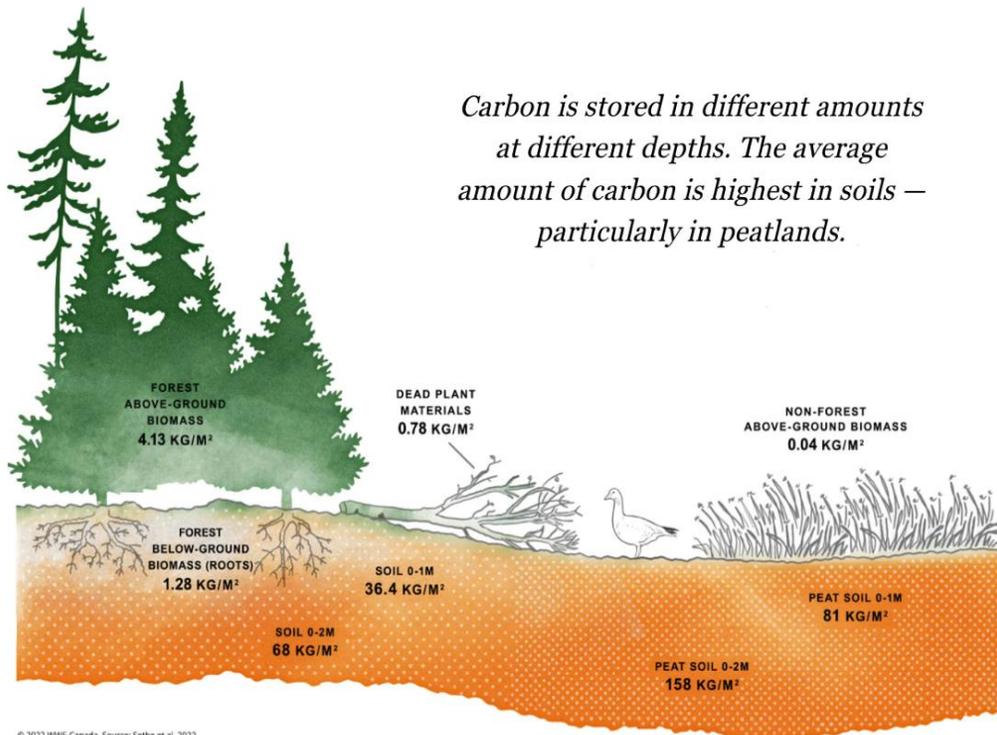
Protect Eisner Cove Wetland
in Dartmouth, Nova Scotia

Wetlands + Carbon

Wetlands & carbon go together, like macaroni & cheese, like a needle & thread, like salt & pepper.

Wetlands are the best tool we have today to manage carbon emissions, greenhouse gases, and climate change. Nature gives us these wetlands free of charge, all we have to do is take care of them.

Caring about climate change, caring about carbon management, caring about greenhouse gas reduction, means **caring about wetlands**.



Wetlands + Carbon, The Facts

Wetlands are also called *peatlands*, *fens*, *swamps* or *bogs*. They come in various shapes and sizes but they are **absolutely critical** for preventing and reducing the effects of **climate change**, preserving **biodiversity**, minimising **flood risk**, and **purifying water supplies**.

- Wetlands are the world's largest natural carbon storehouse. The world's wetlands hold *twice* the carbon that the world's forests hold.
- Peat is formed when dead plants decompose slowly in waterlogged conditions. The partially decomposed plants pile up and become compacted, forming peat.
- The carbon that the plants absorbed from the atmosphere when they were alive is stored within peat soils. This helps to cool the earth and the air, which in turn helps to reduce climate warming.
- Healthy wetlands depend upon the surrounding forests and undergrowth to develop and become a carbon storehouse.
- Damage to wetland landscapes releases huge quantities of carbon in the form of greenhouse gasses.
- If wetlands in HRM are destroyed, the released greenhouse gases will be added to all the other emissions in the city. HRM has to reduce emissions to meet its carbon targets so adding even more carbon is not smart.
- Finding solutions to take greenhouse gasses out of the atmosphere and lock them in the ground will be expensive. Wetlands and their ecosystems provide this service free of charge. That's a win-win situation.

Wetlands and their surrounding forests and undergrowth are significant allies in the global efforts to combat climate change. Their protection and restoration are vital in the transition to a global zero-carbon society.

Wetlands + Carbon, The Story

Scientists have been telling us for years that our climate is changing. We are now at a point where that changing climate has turned into a crisis. All over the world we are seeing out-of-control forest fires, devastating floods, droughts and a loss of biodiversity.

Wetlands, the Carbon Storage Rock Stars

Peatlands are one of the most valuable terrestrial ecosystems in our fight against climate change. These unique ecosystems cover just 3 percent of the earth's land mass yet they are second only to oceans in the amount of carbon they store. They hold twice the carbon that is held by the world's forests. *In Canada, one square metre of peatland can contain up to **five times** as much carbon as the same area of Amazon rainforest.*

The loss of an existing wetland means not only the loss of future carbon storage, but the wetland, the surrounding soil, the trees and the vegetation will all release stored carbon. When disturbed or warmed, wetlands release the three greenhouse gases (GHGs) that contribute the most to global warming: **carbon dioxide** (CO₂), **methane** (CH₄) and **nitrous oxide** (N₂O).

According to a recent WWF-Canada study (2022) led by scientists at McMaster University's Remote Sensing Lab:

Disturbed peatlands throughout the world emit two gigatonnes of carbon dioxide each year, which is equivalent to five per cent of human-produced greenhouse gases (or the annual output of 500 coal plants). Canada is home to a quarter of the world's remaining peatland carbon stores.

This study has measured, for the first time, how much carbon is stored in Canada's landscapes. The results are staggering. Canada stores a massive 327 Pg (that's 327 billion tonnes) of carbon in its terrestrial ecosystems - equivalent to about 25 years of human-caused global greenhouse gas emissions at 2019 emission levels.

About 6% of Canada's carbon is stored in vegetation (trees, shrubs, grasses, dead leaves and roots). The remaining 94% is found in the top one metre of soil, with **32% of this carbon found in peatlands!**

The fate of existing wetland ecosystems should therefore be factored in when predicting carbon emissions. In fact, a carbon emission prediction should be calculated as part of any urban or rural development.



Nature's Climate Engineering Miracles

Recent learnings about carbon storage in peatlands have significant implications for both Canada and the world. Locating high-carbon regions allows for more targeted conservation measures. Implementing nature-based climate solutions (NBCS), such as protecting and conserving areas and actively managing whole landscapes in these regions, can help ensure this globally significant amount of carbon remains "locked in nature", and increase the possibility of more absorption in the future.

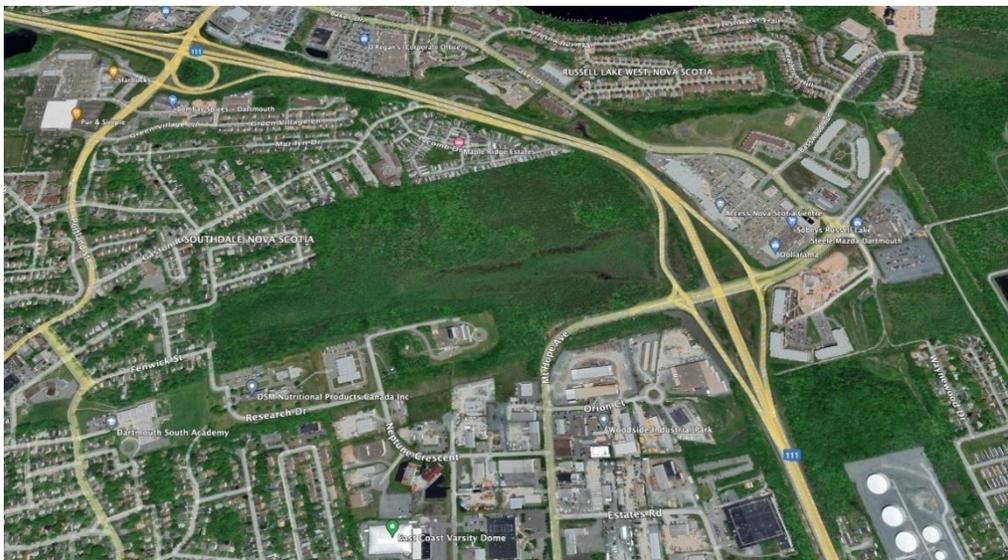
Nature Based Climate Solutions (NBCS) also provide important habitat for wildlife, including Species At Risk (SAR), allowing us to fight climate change and biodiversity loss at the same time. And let's not forget, climate-induced flooding is a big part of our lives now. Wetlands play a key role in helping to mitigate these floods.

The bright minds of the engineering world are in a race to invent a factory that would draw down and lock in carbon. Such a factory would cost billions.

Nature has already solved this engineering problem, and has been doing this for thousands of years. It can take hundreds of years for a healthy wetland to develop and build up peat. It takes no time for an excavator to release tonnes of carbon into the atmosphere.



**This is why we must save the
Eisner Cove Wetland in
Dartmouth!**



The Eisner Cove Wetland, at risk

The Eisner Cove Wetland is in the Southdale / Woodside area of Dartmouth, Nova Scotia. At one time the wetland stretched all the way to the harbour. After years of surrounding development, the remaining wetland area is in the core of the city. It is an unspoiled wild area, home to many species of plants, birds and animals.

Developments proposed for the wetland location

Two mixed-residential housing developments have been proposed for the location of the Eisner Cove Wetland. They include 1200 housing units and an infilled roadway crossing the wetland. If approved, the developments would replace almost all of the forest around the wetland.

The results would be disastrous for the wetland, in so many ways:

- The forest that feeds and protects the wetland would be destroyed.
- Runoff and pollutants from construction and heavy machinery would flow into the wetland.
- The roadway across the wetland would cut off its flow of water.
- Adjacent human habitation would result in car exhaust, road salt and increased flow of stormwater into the wetland.

Save the wetland, for our future

The Eisner Cove Wetland and its protective forest belt total about 23 acres in size, a little more than 17 football fields. These lands store an enormous amount of carbon.

Halifax Regional Municipality is already behind in its carbon targets, yet Council is willing to consider these proposals, which would release tonnes of extra carbon into the atmosphere! To plan a development without consideration of its ecological function is just bad planning. If this and other wetlands are disturbed, the City will have to find more expensive and more complicated ways to offset rising greenhouse gases. Time is running out.

Disturbing the Eisner Cove Wetland could cause this carbon storehouse to actually become a **carbon-emitting chimney**. When these gases mingle with the carbon-saturated atmosphere, the warming effect will be compounded provincially and nationally, and ultimately it will affect global warming. The costs of mitigating climate change will also increase. Who will bear the burden of these costs? The taxpayer.

Protecting wetlands and their surrounding ecosystems is not only ecologically sound, it is cost-effective. A win-win situation.

At a time when cities the world over are scrambling to reintroduce lost wetlands, HRM cannot afford to destroy these essential carbon storehouses. That is why we invite you to **help protect the Eisner Cove Wetland in Dartmouth**. For your future and the future of your children.

Let your city council and provincial government know that they can choose better locations for housing. They must make better choices for our future.