Wettlands Warriors of Climate Change

Mitigation

Reducing emissions and stabilizing the levels of greenhouse gases we allow into the atmosphere

Adaptation

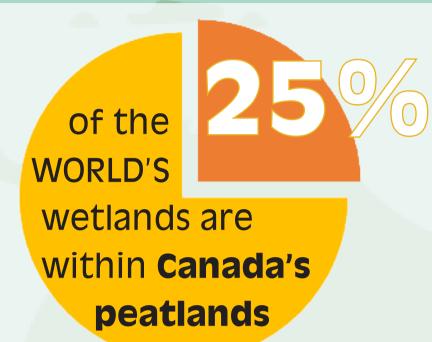
Any modification in a system or process in order to address uncertainties related to climate change

Giant Sponges



Carbon Sink

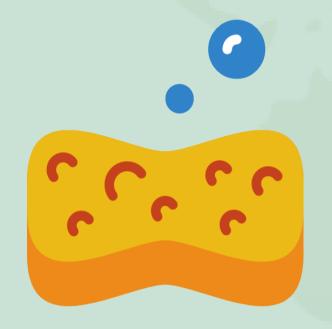
Wetlands on the earth can store 2 Trillion Tonnes of CO²



Canada's wetlands hold 147 Tonnes of

CARBON in the form of un-decayed vegetation, aka **PEAT**

Peatlands can store on average **10X** more CO, than other ecosystems



One acre of 30cm deep wetland can hold 1.2 million liters of water

SWAMPS OASTAL WETLANDS Slow down and hold flood waters

Wetlands absorb WATER during extreme weather events such as Floods, Hurricanes, & Tidal Waves



Prevents Drought

After absorbing flood waters, wetlands **SLOWLY RELEASE** water back into the environment

This slow release makes water available for drinking, food production, and sanitation during droughts

Maintaining corridors of wetlands allows wetland-dependent plants and animals to move to new areas in response to changing climatic conditions



Considered NATURE'S KIDNEYS, wetlands purify water by trapping sediments, excess nutrients, and pollutants

cleans Water

One city saved \$2.8 Billion by purchasing the land around reservoirs that purify the water supply for FREE

Demand for clean water is growing at 2X the rate of population increase



Wetlands naturally filter water through thick layers of moss



Free Services The Millennium Ecosystem Assessment gave wetlands and their services a value of \$18 Trillion

In the Caribbean, the shoreline protection services provided by wetlands are valued at \$2.7 Billion

Leaving wetlands natural can **REDUCE** flood damage costs by



wetlands globally have been lost through drainage

Conserve & Restore

If damaged, wetlands release greenhouse gases into the atmosphere

By Conserving and Restoring wetlands, we can reduce carbon emissions and increase our ability to ADAPT to climate change

WETLANDS ARE NOT WASTELANDS









Environment and Climate Change Canada

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