

# Protecting our Wetlands

Protecting our Wetlands Public Meeting hosted by Councillor Glen Gower – Stittsville Ward on June 8, 2023

Janet Stavinga

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“Despite their importance, wetlands have long been treated with indifference or even outright hostility — an attitude researchers say can be traced back to the beginnings of agrarian civilizations...”



Source: "Swamp as sacred space: Save wetlands to save ourselves, say experts"  
Moirá Donovan. CBC Ideas. Posted October 17, 2022



A photograph of a wetland landscape. In the foreground, there is a body of water reflecting the sky and the surrounding vegetation. The middle ground is filled with tall, golden-brown grasses and reeds. In the background, a line of trees with autumn-colored foliage stretches across the horizon under a blue sky with scattered white clouds.

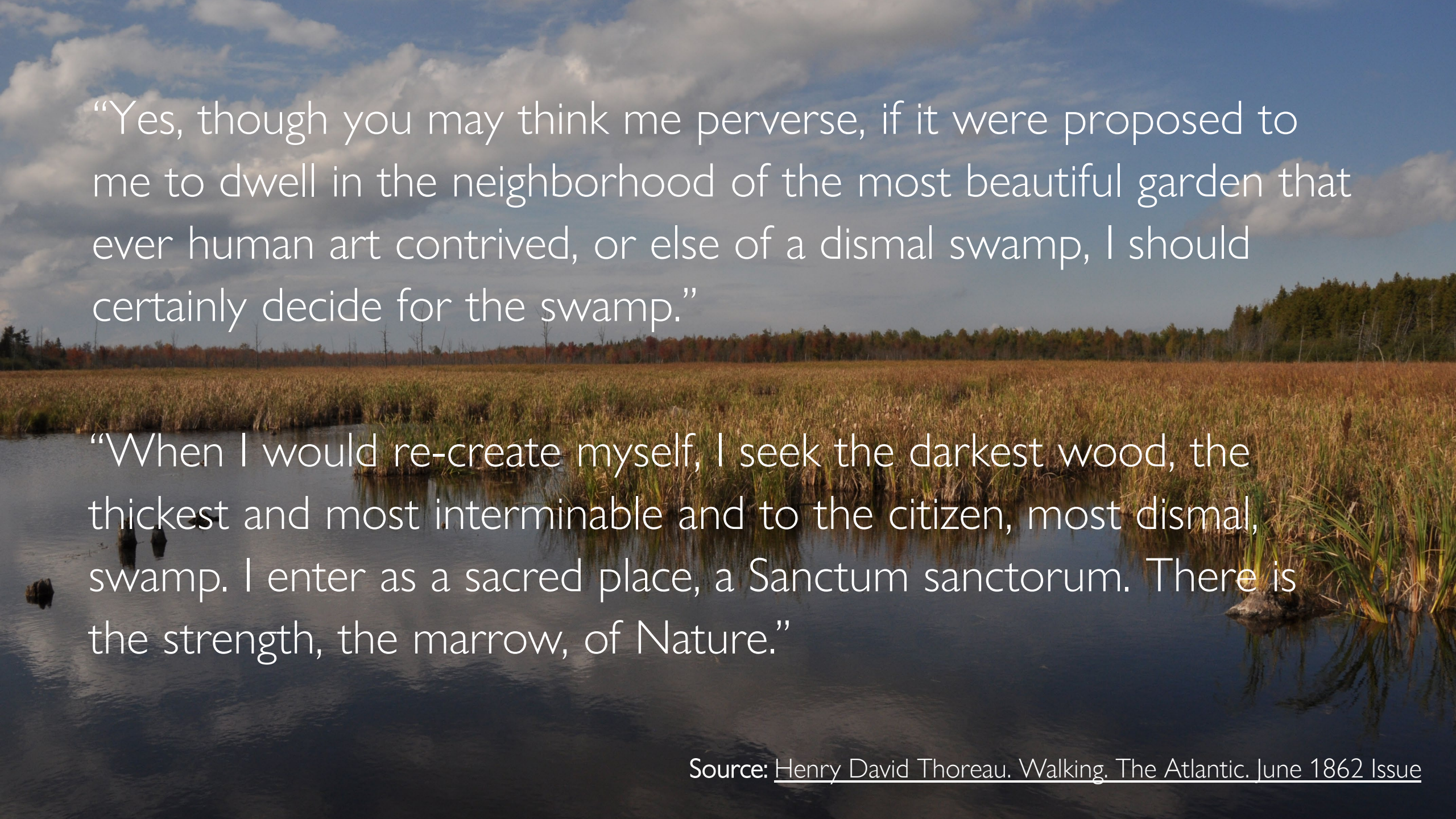
“The reason we agrarian societies viewed wetlands negatively is because we viewed wetlands as stumbling blocks to agrarian development, because their soil exerts such a major stress on the growth of crops.”

“So throughout history, our view has been that a good wetland is a destroyed wetland.”

Source: "Swamp as sacred space: Save wetlands to save ourselves, say experts"

Faisal Husain, Environmental Historian of the Ottoman Empire  
and Assistant Professor of History at Pennsylvania State University  
Moira Donovan. CBC Ideas. Posted October 17, 2022



A landscape photograph of a swampy area. In the foreground, there is a body of water reflecting the sky. The middle ground is filled with tall, golden-brown reeds and grasses. In the background, a line of trees with autumn foliage is visible under a blue sky with scattered white clouds.

“Yes, though you may think me perverse, if it were proposed to me to dwell in the neighborhood of the most beautiful garden that ever human art contrived, or else of a dismal swamp, I should certainly decide for the swamp.”

“When I would re-create myself, I seek the darkest wood, the thickest and most interminable and to the citizen, most dismal, swamp. I enter as a sacred place, a Sanctum sanctorum. There is the strength, the marrow, of Nature.”

Source: Henry David Thoreau. Walking. The Atlantic. June 1862 Issue



# Four Types of Wetlands in Ontario

- . Swamps
- . Marshes
- . Bogs
- . Fens





# Why Wetlands Matter





# Wetlands – The Key to Coping with Climate Change

Wetlands naturally absorb and store carbon.

Wetlands are the most effective carbon sinks on Earth.

The loss of an existing wetland means not only the loss of that particular carbon sink, but also that the carbon stored in that wetland will be released.

The fate of existing wetlands is a factor in predicting carbon emissions.

Sources:

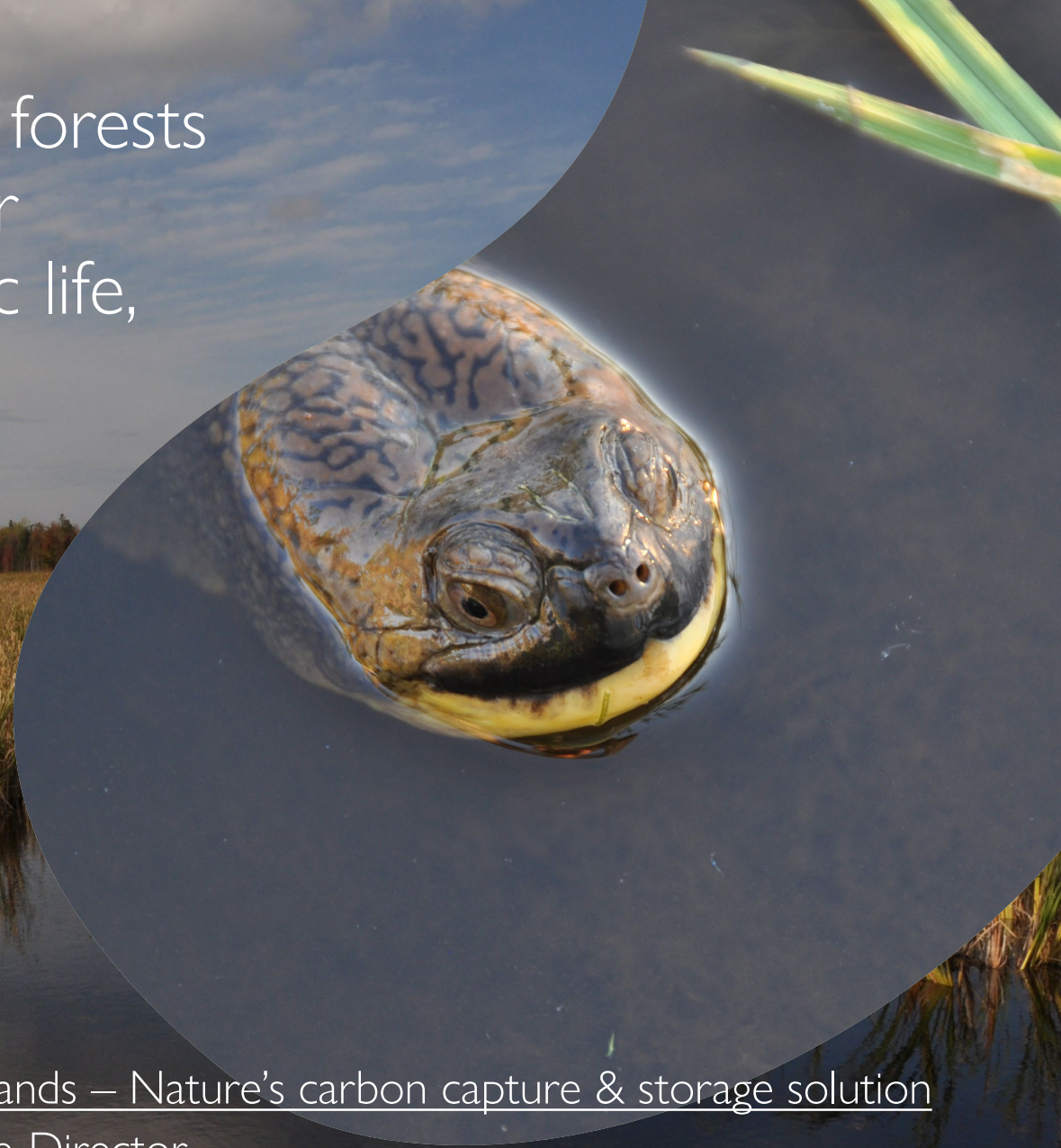
Ramsar Convention on Wetlands

Minnesota Board of Water and Soil Resources

Carbon Sequestration in Wetlands



“Effective conservation of our wetlands, forests and grasslands...are providing habitat for species at risk, migratory birds or aquatic life, they also take us a long way down the road to meeting our global commitments on climate change and carbon emissions.”



**Source:** Grasslands, forests & wetlands – Nature’s carbon capture & storage solution  
Gord Vaadeland, Executive Director  
Saskatchewan Chapter of the Canadian Parks and Wilderness Society



# Ramsar Convention on Wetlands

“Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar)” was adopted in 1971 at an international conference in Ramsar, Iran.

The mission of the Ramsar convention is the conservation and wise use of all wetlands through local and national actions and international co-operation, as a contribution towards achieving sustainable development throughout the world.

Source: [Ramsar](#)



# Ramsar Convention on Wetlands

There are several international treaties, or conventions, focusing on the environment, but Ramsar is the only international convention that deals with one ecosystem or habitat type – wetlands.

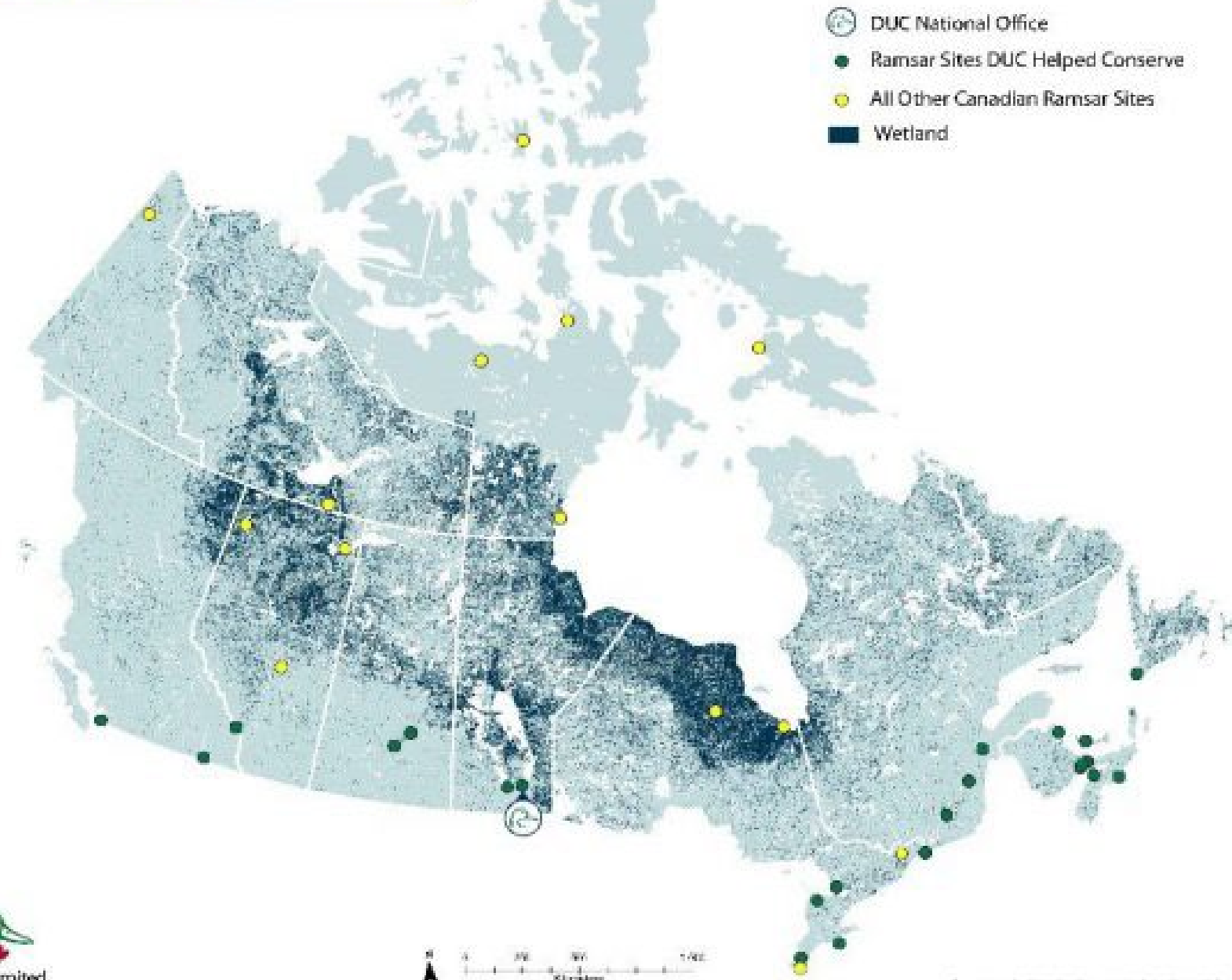
Canada signed on to the Ramsar Convention in 1981.

To date, 172 countries, including Canada, have signed on to the convention.

Source: [Ramsar](#)



## Wetlands Of International Importance (Ramsar Sites) in Canada





# Wetland Loss in Canada



Areas of wetland lost shown on the map are from 2010-2015

\* Lost or degraded

\*\* Conservative estimate; applies to large wetlands (>10 ha) only

## SOURCES

<sup>1</sup> Environment Canada. 1991. *The federal policy on wetland conservation*. Minister of Supply and Services. p. 14.

<sup>2</sup> Lea, T. 2008. Historical (pre-settlement) ecosystems of the Okanagan Valley and Lower Similkameen Valley of British Columbia—pre-European contact to the present. *Davidsonia* 19(1): 3-36.

<sup>3</sup> Ducks Unlimited Canada. 2010. *Southern Ontario Wetland Conversion Analysis*.

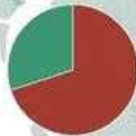
<sup>4</sup> Jean, M., and G. Létourneau. 2011. *Changes to the wetlands of the St. Lawrence River from 1970 to 2002. (Technical Report Number 511)*. Environment Canada, Science and Technology Branch, Water Quality Monitoring and Surveillance Section. p. 293.

## DATA LAYERS

Ducks Unlimited Canada. 2011. *Hybrid Wetland Layer*.  
Natural Resources Canada. 2020. *2010-2015 Land Cover Change of North America at 30 metres*. Canada Centre for Mapping and Earth Observation and the Commission for Environmental Cooperation.

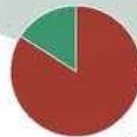
## Pacific estuaries

70% LOST<sup>\*1</sup>



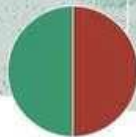
## Okanagan and Lower Similkameen valleys

84% LOST<sup>2</sup>



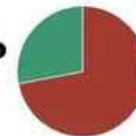
## Prairie potholes

>50% LOST<sup>1</sup>



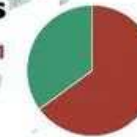
## Southern Ontario

72% LOST<sup>\*\*3</sup>



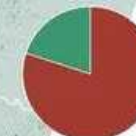
## Atlantic Canada coastal salt marshes

65% LOST<sup>1</sup>




## St. Lawrence River (Montreal Region)

80% LOST<sup>4</sup>



Source: Dan Kraus. Marking 50 years of wetland conservation and loss.  
Hamilton Spectator. February 2, 2021 on the 50<sup>th</sup> Anniversary of Ramsar Convention.



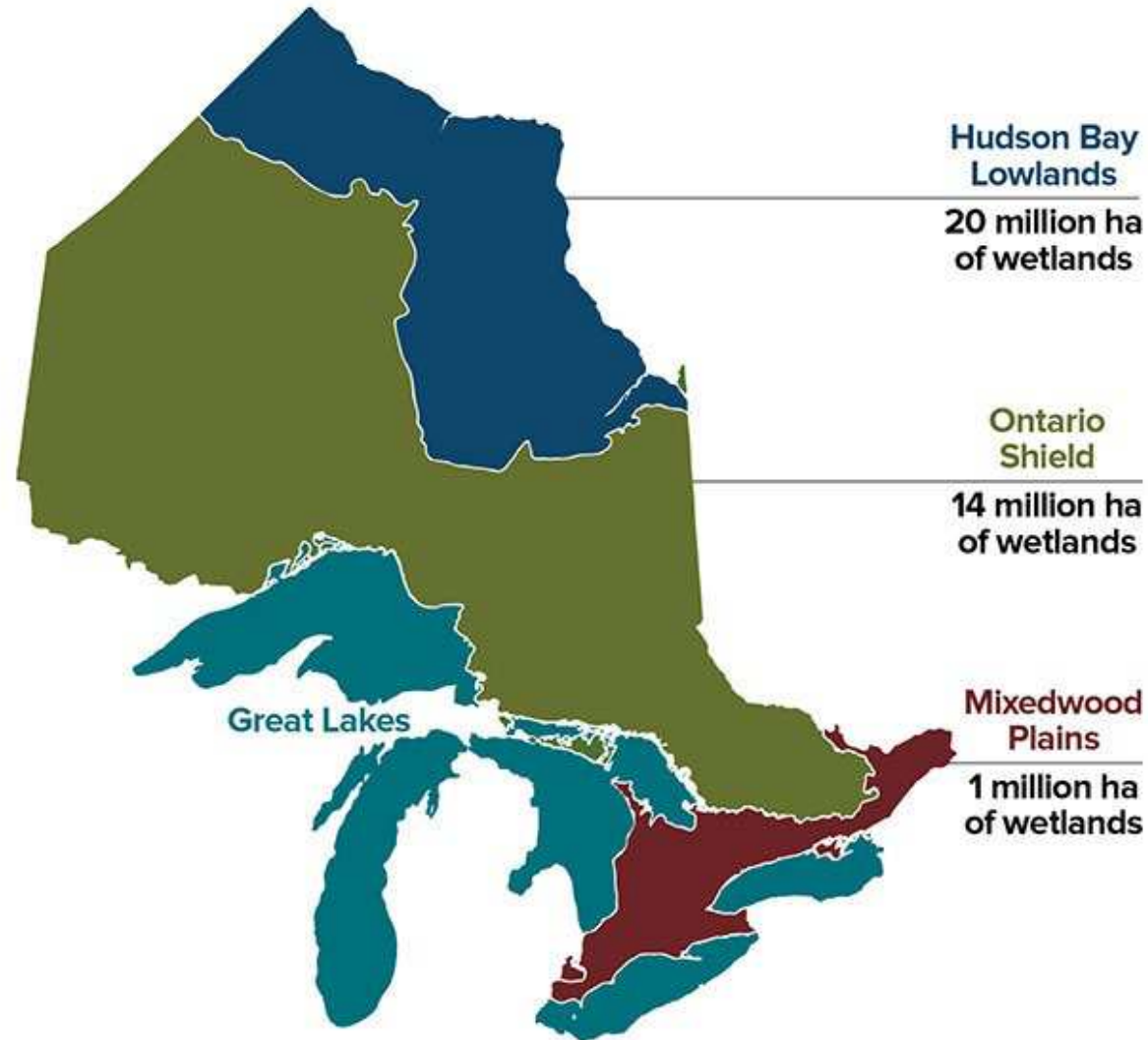
A photograph of a wetland landscape. In the foreground, there is a body of water reflecting the sky and the surrounding vegetation. Several small, dark, irregular shapes, possibly logs or rocks, are visible in the water. The middle ground is dominated by a dense field of tall, golden-brown reeds or grasses. In the background, a line of trees with autumn-colored foliage stretches across the horizon under a blue sky with scattered white clouds.

“Canadians need wetlands now, more than ever...[Wetlands] are the Swiss Army knife of ecosystems...We can’t afford to lose them. The best use of wetlands is to have them remain as wetlands.”

**Source:** Dan Kraus. Marking 50 years of wetland conservation and loss. Hamilton Spectator, February 2, 2021 on 50th Anniversary of Ramsar Convention.

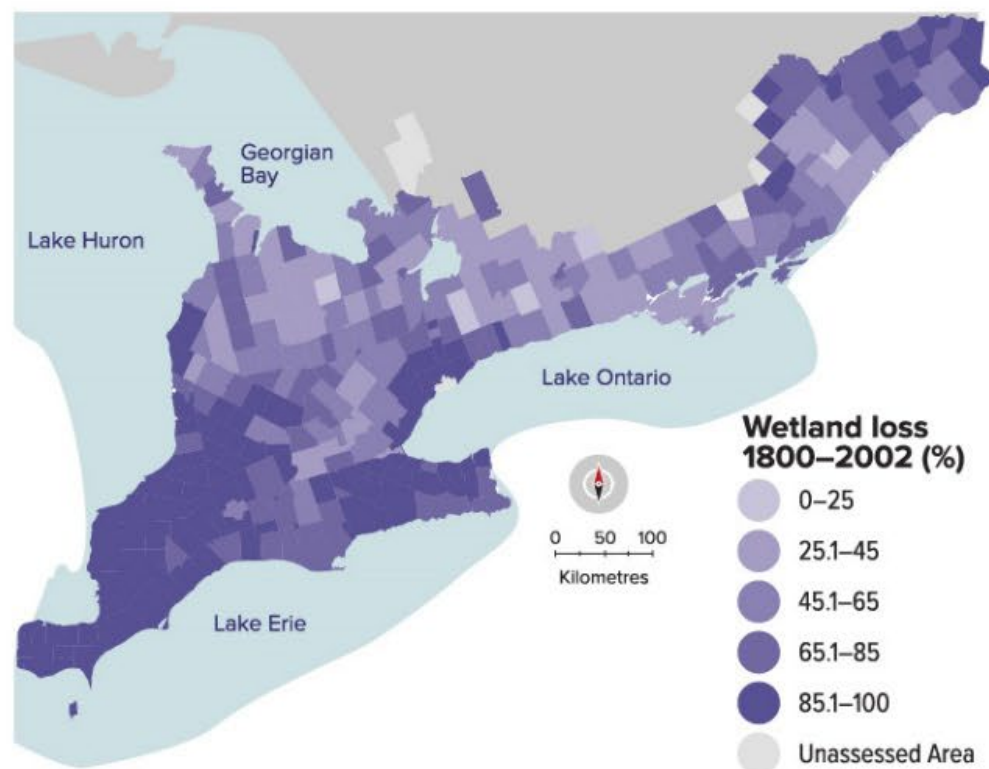


# Province of Ontario

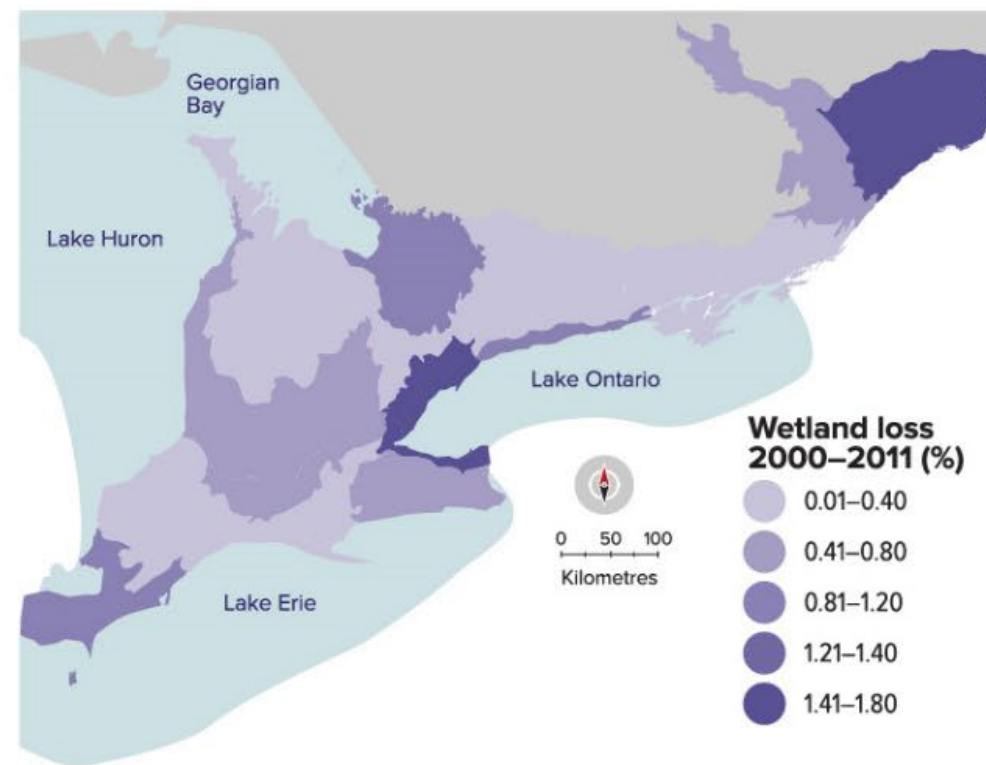




# Wetland loss in the Mixedwood Plains Ecozone



State of Ontario's Biodiversity Report 2010: Loss of original wetland area by township, from 1800 to 2002 (1.4 million ha)



State of Ontario's Biodiversity Report 2015: Loss of wetlands by ecodistrict, between 2000 and 2011 (6,152 ha)



# The Changing Landscape of Stittsville







1976





1999





2002





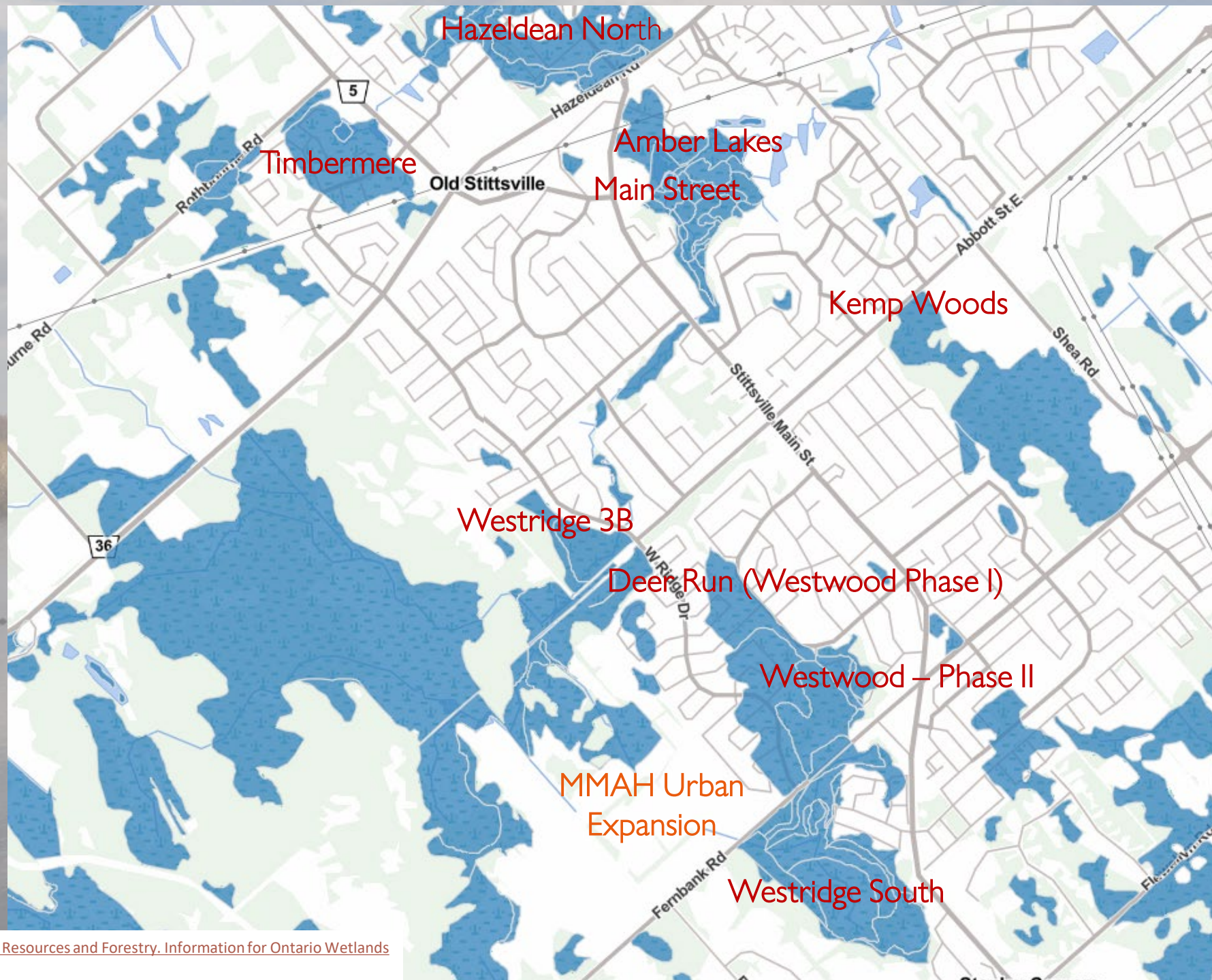


# Growth of Stittsville and Impacts on Wetlands

## Wins and Losses









Ram's Head Lady Slipper is considered globally vulnerable, and is **rare** or **endangered** throughout much of its range

Ecosystem Type: bogs, fens and swamps







“One position that is being advanced is that competing interests of urban land development have indicated that a residential designation is the most appropriate one.”

“However, the alternative position would be that if this area is indeed subject to the pressures of urban development does this not further justify the need to protect this area from urban encroachment.”

Column by Councillor Stavinga on Amberlakes Development Proposal  
in the Stittsville News dated May 3, 1995 – Goulbourn Township



# Threats to Wetlands

Land conversion

Drainage for development and agriculture

Invasive species

Pollution

Climate change

Artificial modification of Water Levels






# Threats to Wetlands

Abandonment of the Wetland Conservation Strategy for Ontario 2017-2030 as noted in the 2021 Ontario Auditor General's Report on the Environment

Bill 23 More Homes Built Faster Act, 2022





“Bill 23 More Homes Built Faster Act, 2022 will impact the cultural heritage landscape and the ecological integrity of our natural systems in which our collective health and our societal livelihood are inextricably linked.”

Correspondence from Stavinga to Government of Ontario dated November 24, 2022



# Lessons Learned

Anticipate, anticipate and anticipate more – be ahead of the curve

Cannot count on provincial legislation, regulations and policy statements to protect wetlands

Open doors of communication with private landowners

Mobilize the Community

Develop strategies and action plans to protect wetlands

Build awareness as to why wetlands matter

Build Partnerships

Bring in Knowledge Holders

Explore Land Trusts, Ecological Gifts, Land Acquisition





# Transformational Shift

“Ecospirituality, over and above environmental attitudes, environmentalist identity, and political orientation, uniquely predicted several aspects of moral concern for nature, such as including nature in one's moral circle, treating nature as a sacred value, and endorsing a reasoning style that places importance on principles and duties to nature.”

Source: Ecospirituality: The psychology of moral concern for nature. Journal of Environmental Psychology, Volume 87, May 2023.



# Connecting People to Wetlands

Beginnings of the TransCanada Trail through Stittsville-Goulbourn

Establishment of a ByWays of Ottawa-Carleton Committee

Formation of Community-based Ottawa-Carleton Trailway Committee

Constructing the Trail in 2001

Building the Viewing Platform



# National Léger Survey reveals Canadians' Trail Use on the Rise in 2023

- 72% of Canadians have used trails in the past 12 months, up slightly from 70%, with 80% of Canadians noting that they intend to use trails in the next year.
- 89% of Canadians agree that trails add value to the quality of life in their community.
- 69% of Canadians said that easy access to trails and outdoor activities have an impact on where they choose to live.



# National Léger Survey reveals Canadians' Trail Use on the Rise in 2023

- Top three reasons that respondents identified for using trails include: to be outdoors and get fresh air (98%); to enjoy nature and see beautiful landscapes (97%) and to enhance mental health and relieve stress (94%).
- 90% of respondents agree that trails allow for nature preservation and conservation.



# National Léger Survey reveals Canadians' Trail Use on the Rise in 2023

- 87% of trail users across Canada do so to minimize their impact on nature and the environment and 93% agree it's important to make nature accessible.
- 92% of those surveyed feel trails are an important tool to connect people to nature, to biodiversity and to culture.
- 70% of Canadians are concerned about the impact that the changing climate will have on their trail use and their enjoyment of trail activities.



# A Bold, Audacious Vision

To protect, restore, regenerate and rewild our wetlands



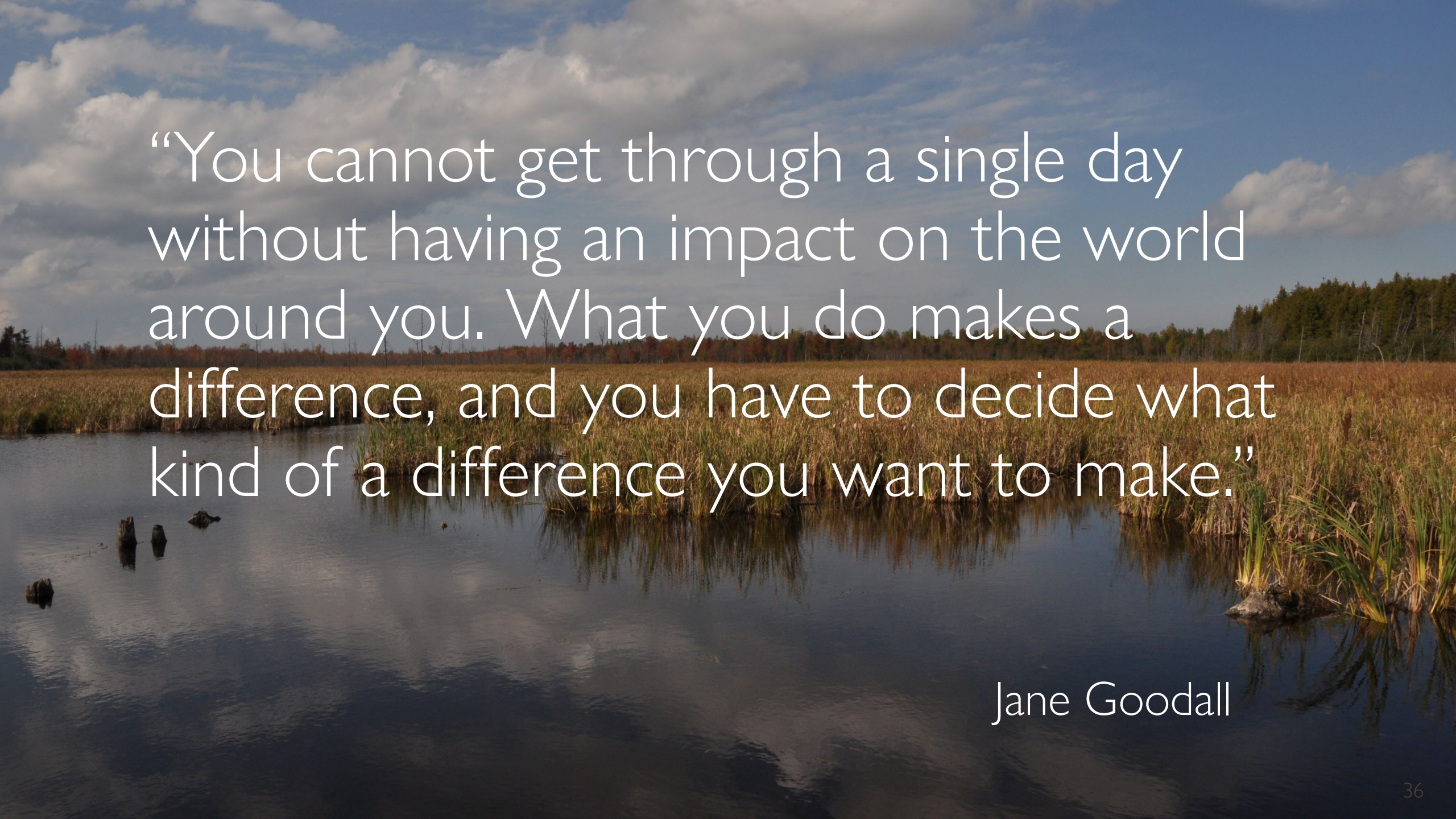


A landscape photograph showing a wide, flat area of dark, wet earth, possibly a beach or marsh, with scattered pieces of bleached driftwood. In the foreground, there are clumps of tall green grass and small yellow wildflowers. The middle ground is a mix of low-lying vegetation and more driftwood. In the background, a dense line of evergreen trees stretches across the horizon under a pale, overcast sky.

“What is the use of a fine house if you haven’t got a tolerable planet to put it on.”

Henry David Thoreau



A serene landscape featuring a calm body of water in the foreground, reflecting the sky and the surrounding vegetation. A dense patch of tall, golden-brown reeds or grasses grows in the middle ground, partially submerged in the water. In the background, a line of trees with autumn-colored foliage stretches across the horizon under a blue sky with scattered white clouds. The overall mood is peaceful and contemplative.

“You cannot get through a single day without having an impact on the world around you. What you do makes a difference, and you have to decide what kind of a difference you want to make.”

Jane Goodall



A photograph of a wetland landscape. In the foreground, there is a body of water reflecting the sky and the surrounding vegetation. Several small, dark, rocky or woody objects are visible in the water. The middle ground is filled with dense, tall reeds or grasses, some of which are partially submerged. In the background, a line of trees with autumn-colored foliage stretches across the horizon. The sky is blue with scattered white clouds.

# Thank you!

My sincerest thanks to Sylvie Sabourin for her permission to use the photographs contained in this presentation. Sylvie is a photographer and long-time Stittsville resident who advocates for Nature.