



Walking the path to nature-positive communities by protecting and enhancing biodiversity

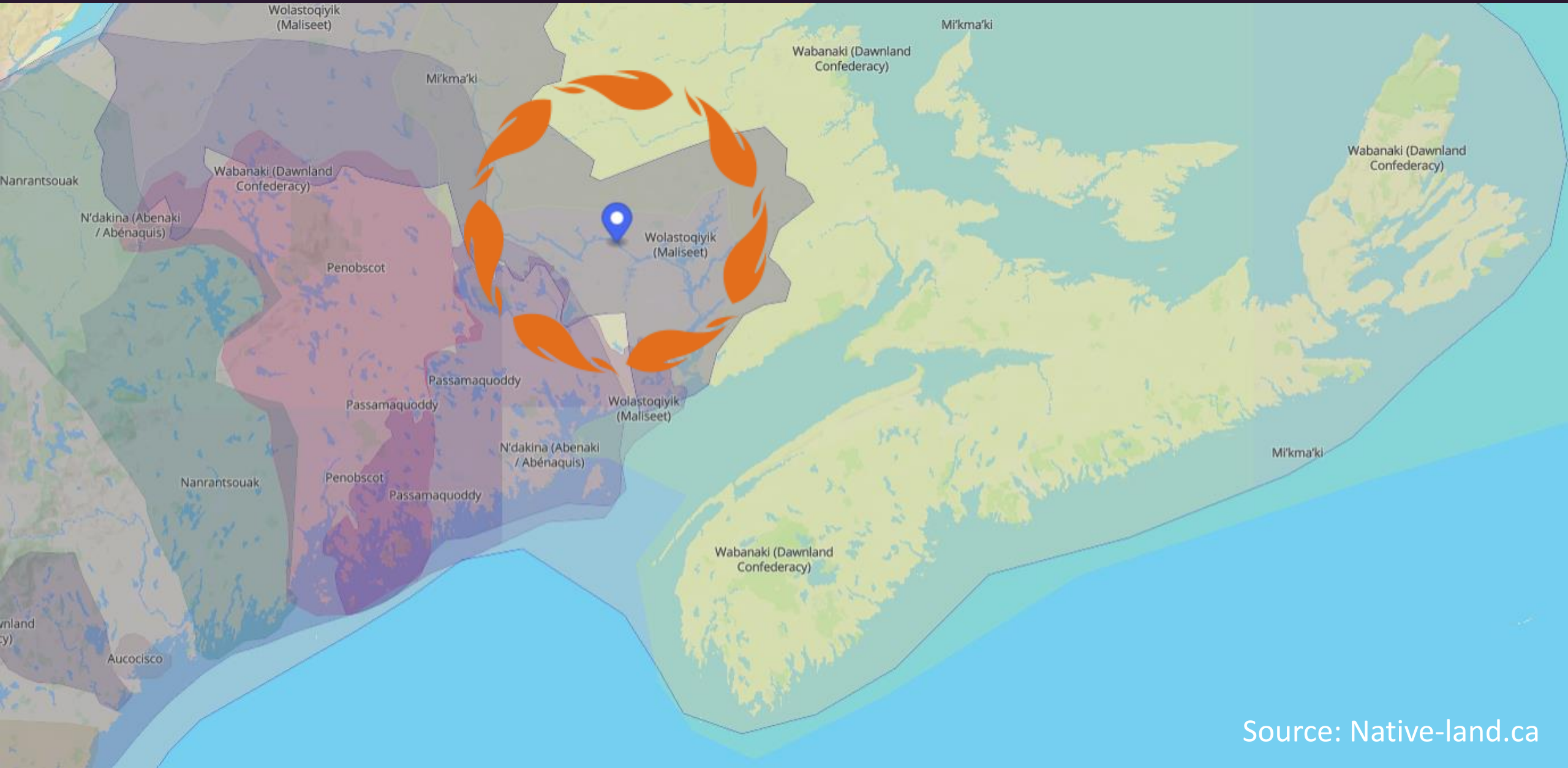
Workshop

February 13, 2025

10:45 - 12:00pm

Room Nashwaaksis

Land Acknowledgement



Join at
slido.com
#SCC2025CCD



HOUSEKEEPING / BIENSÉANCE

❖ Ask questions through Slido at [slido.com // #SCC2025CCD](https://slido.com/#SCC2025CCD)

❖ Simultaneous interpretation is available to listen in French or English – grab a headset

❖ Copies of the workshop material & content are available at <https://bit.ly/scc-learning>



❖ Posez vos questions via Slido à [slido.com // #SCC2025CCD](https://slido.com/#SCC2025CCD)

❖ L'interprétation simultanée est disponible pour écouter en français ou en anglais – prenez un casque

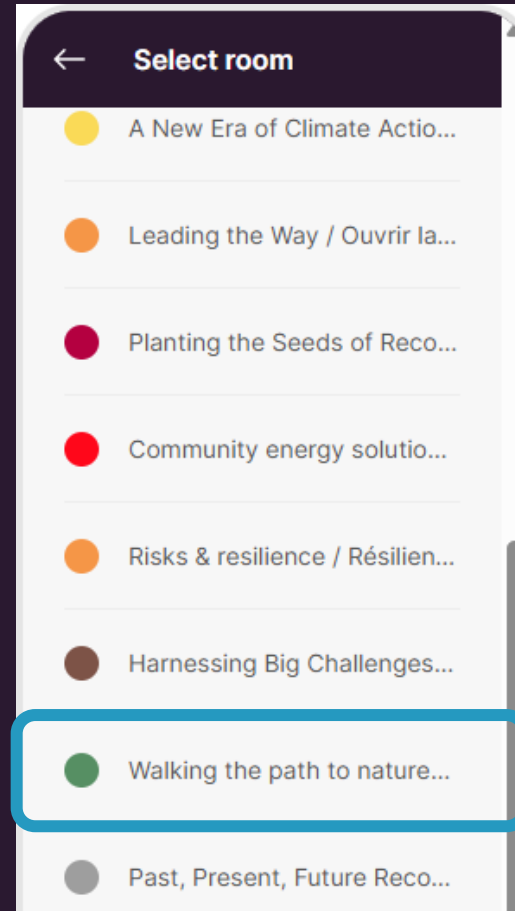
❖ Des copies du matériel & contenu de l'atelier sont disponibles à <https://bit.ly/ccd-apprentissage>

Your turn / À votre tour

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[slido.com](https://www.slido.com)

#SCC2025CCD

Quiz



slido


Please download and install the Slido app on all computers you use



How many Biosphere Regions (UNESCO-designated biosphere reserves) are there in Canada? // Combien de régions de la biosphère (réserves de biosphère désignées par l'UNESCO) y a-t-il au Canada ?

① Start presenting to display the poll results on this slide.

Agenda / Ordre du jour

|  Activity | Activité |
|---|---|
| 10:45 SLIDO Welcome & Opening remarks | Bienvenue et mots d'introduction |
| 10:52 Activity: Mini-games to spark conversations and interest in biodiversity at the municipal-level / With Dylan Rawlyk | Activité: Petits jeux pour susciter des conversations et de l'intérêt pour la biodiversité au niveau municipal / Avec Dylan Rawlyk |
| 11:10 Presentation – Creating bird friendly cities, to enhance & restore biodiversity / by Autumn Jordan | Présentation – Bâtir des villes amies des oiseaux, pour améliorer et restaurer la biodiversité |
| 11:25 Presentation - Moving to Nature-Positive Communities Through Kitchener's Urban Creek Rehabilitation Program | Presentation - Évoluer vers des collectivités favorables à la nature avec le programme de réhabilitation du ruisseau urbain de Kitchener |
| 11:40 SLIDO Period of Q&A Zoom on how can GMF support your community | Période de Q&R + Zoom sur comment le FMV peut aider votre collectivité |
| 11:55 Activity: Did you know ...? Prizes & Wrap up | Activité: Saviez-vous ...? Prix & Mots de clôture |
| 12:00 | End of workshop / Bon appétit! |

Agenda / Ordre du jour



10:4

SLIDO

10:5

11:1

11:2

11:4

SLIDO

11:5

12:0



Activité

L'introduction

discuter des
pour la biodiversité au
n Rawlyk

amies des oiseaux,
biodiversité

collectivités
programme de
bain de Kitchener

sur comment le FMV
activité

Activité: saviez-vous ...?
Prix & Mots de clôture

p / Bon appétit!

Activity

Three games to spark conversations and interest in biodiversity at the municipal-level

- Game 1: Integrated Biodiversity in Land-Use Planning
- Game 2: Official City Birds Challenge
- Game 3: Municipal Nature Supports

Stick till the end for the Prize ceremony!

Game kit at your table

5 min per game

No right or wrong answer

Remember your team name

Activity

Three games to spark conversations and interest in biodiversity at the municipal-level

Our Teams:

- 1 Little Brown Myotis (*Myotis lucifugus*)
- 2 Whooping Crane (*Grus americana*)
- 3 Burrowing Owl (*Athene cunicularia*)
- 4 Blue Whale (*Balaenoptera musculus*)
Atlantic population
- 5 Woodland Caribou, Atlantic-Gaspésie
population (*Rangifer tarandus*)
- 6 Pacific Water Shrew (*Sorex bendirii*)
- 7 Red-headed Woodpecker
(*Melanerpes erythrocephalus*)
- 8 Small-mouthed Salamander
(*Ambystoma texanum*)
- 9 Spotted Turtle (*Clemmys guttata*)
- 10 Monarch Butterfly (*Danaus
plexippus*)

Activity

Integrated Biodiversity in Land-Use Planning



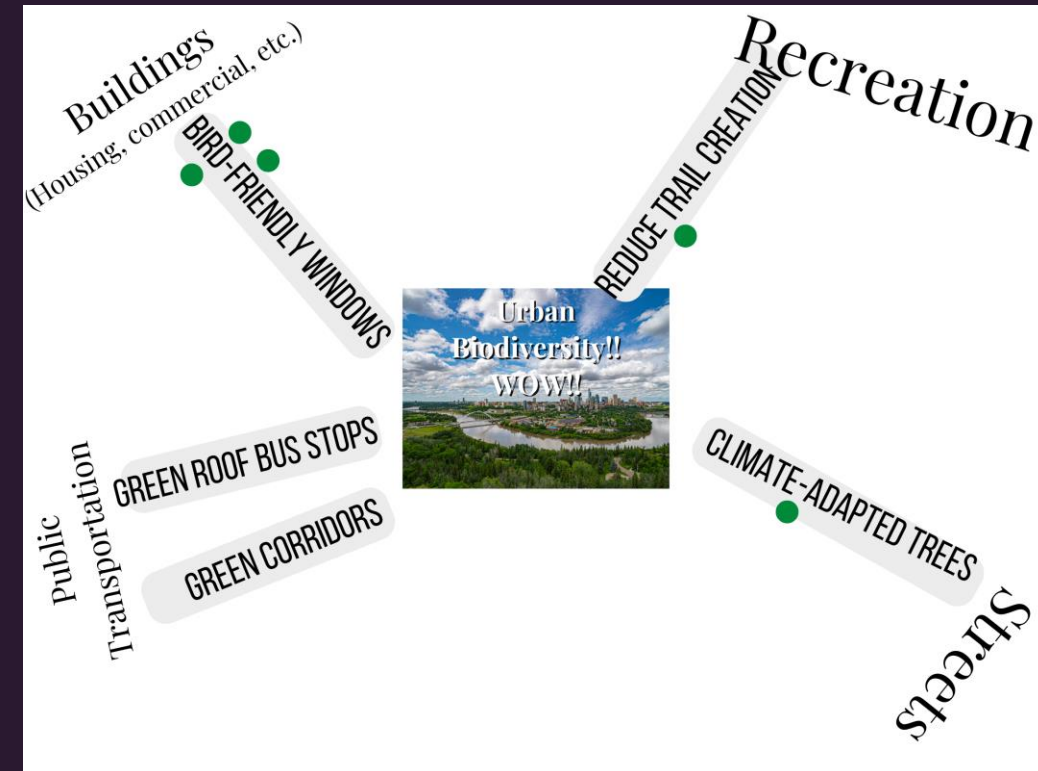
Your task is to brainstorm and write down ways that the outer layers of community structures could support biodiversity.

STEP 1

Jot down ideas for how the community structures could be planned in a way that supports biodiversity, creating links across the web.

STEP 2

Use stickers to highlight the actions your community is already moving forward.



The group with the most biodiversity-supporting links will be crowned **NATURE-POSITIVE THINKERS**.
The group with the most stickers will win the title of **NATURE-POSITIVE ACTORS**.

Activity

Official City Birds Challenge

Your task is to attempt to correctly match* the Official Birds to their community.


*This will be a challenge

What can help?

Use the Fun Fact sheets, start with those with fill in the blank facts or unique distribution.


FACT SHEETS

Anna's Hummingbird
(*Calypte anna*)




Canada's Conservation Status

- Not applicable
- Unranked
- Unrankable
- Presumed extirpated
- Possibly extirpated
- Critically imperiled
- Imperiled
- Vulnerable
- Apparently Secure
- Secure



Two fun facts:
Conservation risk level was reduced in 2020!
A beautiful and coloured bird found mostly in southern and coastal BC, even throughout the winter!

Sources
Map from Birds of the World
Conservation status: wildspecies.ca

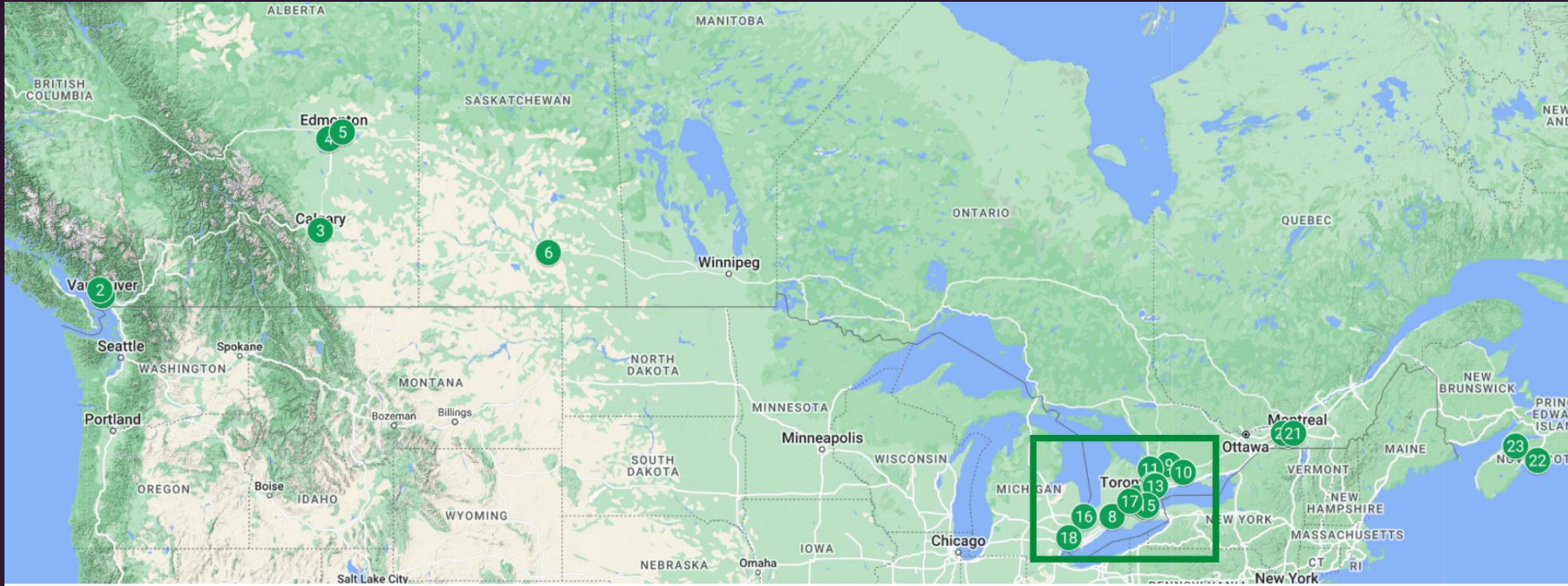


OFFICIAL BIRDS



Activity

Official City Birds Challenge



Municipalities with Official Birds

BRITISH COLUMBIA

- 1 Vancouver
- 2 Lions Bay

ALBERTA

- 3 Calgary
- 4 Devon
- 5 Strathcona County

SASKATCHEWAN

- 6 Regina

ONTARIO

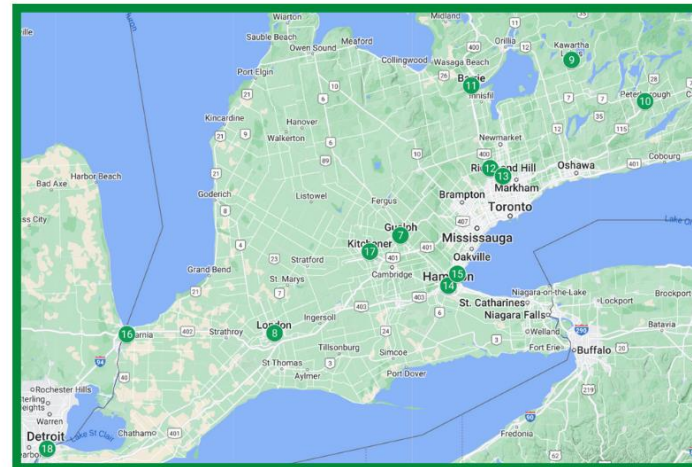
- 7 Guelph
- 8 London
- 9 Kawartha Lakes
- 10 Peterborough
- 11 Barrie
- 12 Township of King
- 13 Richmond Hill
- 14 Hamilton
- 15 Burlington
- 16 Sarnia
- 17 Kitchener
- 18 Windsor

QUEBEC

- 19 Sainte-Anne-de-Bellevue
- 20 Hudson
- 21 Dorval

NOVA SCOTIA

- 22 Halifax
- 23 Kentville



Activity

Municipal Nature Supports



Your task: reimagine the city of *Naturavelle* as a thriving, nature-positive space that fosters biodiversity, clean air, and a harmonious relationship with the environment.

What can help?

Review the factsheets - think about which organizations and programs could support their work.



This could look like:

Our big idea to make Naturavelle a model for nature-friendly urban planning is to:
Plant biodiverse forests and throughout the our industrial sites to help remediate them and turn them into protected greenspaces. We'll stay accountable with these partners

CitiesWithNature

A global voluntary platform for municipalities that want to track their progress towards nature-positive goals. Platform used with the Montreal Pledge.



2 Billion Trees

Federal funding program to help groups plant new trees in the ground.





Autumn Jordan
(She/They/Elle/Iel)

Organizer
@ Nature Canada



Paul Gregory
(He/It)

Nature Network Organizer
@ Nature Canada



Bu Lam
(He/It)

Director, Sanitary and Stormwater
Utilities | Infrastructure Services
@ City of Kitchener (ON)

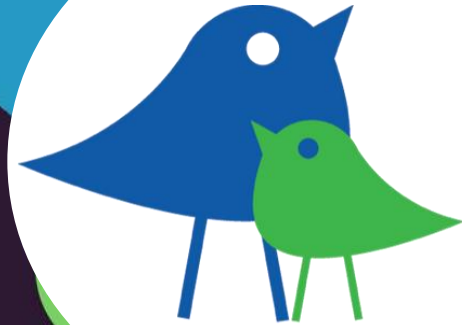
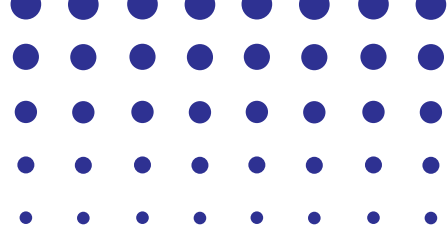
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Q&A





CREATING BIRD FRIENDLY CITIES

TO ENHANCE & RESTORE BIODIVERSITY

AUTUMN JORDAN, ORGANIZER



[NATURECANADA.CA/BFC](https://naturecanada.ca/bfc)



GREEN
MUNICIPAL
FUND

FONDS
MUNICIPAL
VERT



Sustainable
Communities
Conference

ABOUT NATURE CANADA



Sustainable
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Conference

We are Canada's Voice for Nature!

For 85 years, we have helped protect, defend, and restore nature!

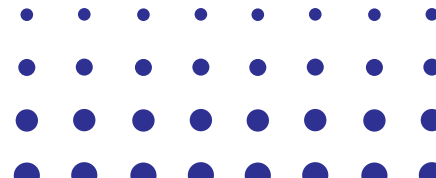
- Represents a network of over 250,000 members and supporters!
- Work with more than 1,200 nature organizations!

1939

Founding Year



[NATURECANADA.CA/BFC](https://naturecanada.ca/bfc)





NATURECANADA.CA/BFC



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VILLE AMIE DES OISEAUX -CERTIFICAT BIRD FRIENDLY CITY-CERTIFICATE

London, ON

VILLE/CITY

High

NIVEAU/LEVEL

November 7, 2023

DATE

Emily McMillan
Directeur Exécutif/Executive Director
Nature Canada

Steven Guilbeault
Minister of Environment and
Climate Change of Canada



BIRD FRIENDLY CITY PROGRAM

Action plan based on best-practices and current science to protect, defend & restore bird populations & biodiversity!

- 3 levels of Certification & 3 Pillars

Habitat Restoration
& Climate Resiliency

Threat Reduction

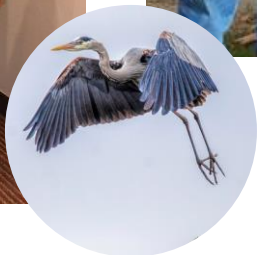
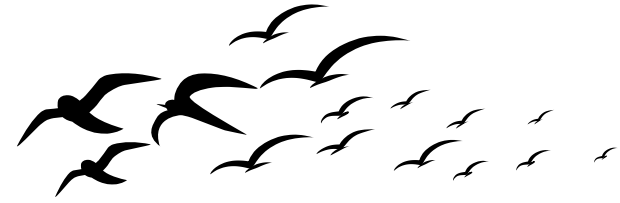
Community Outreach
& Education

- Local Bird Teams lead initiatives with support of municipality on policy



WHAT IS A BIRD TEAM?

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Mandatory Requirements



[NATURECANADA.CA/BFC](https://naturecanada.ca/bfc)



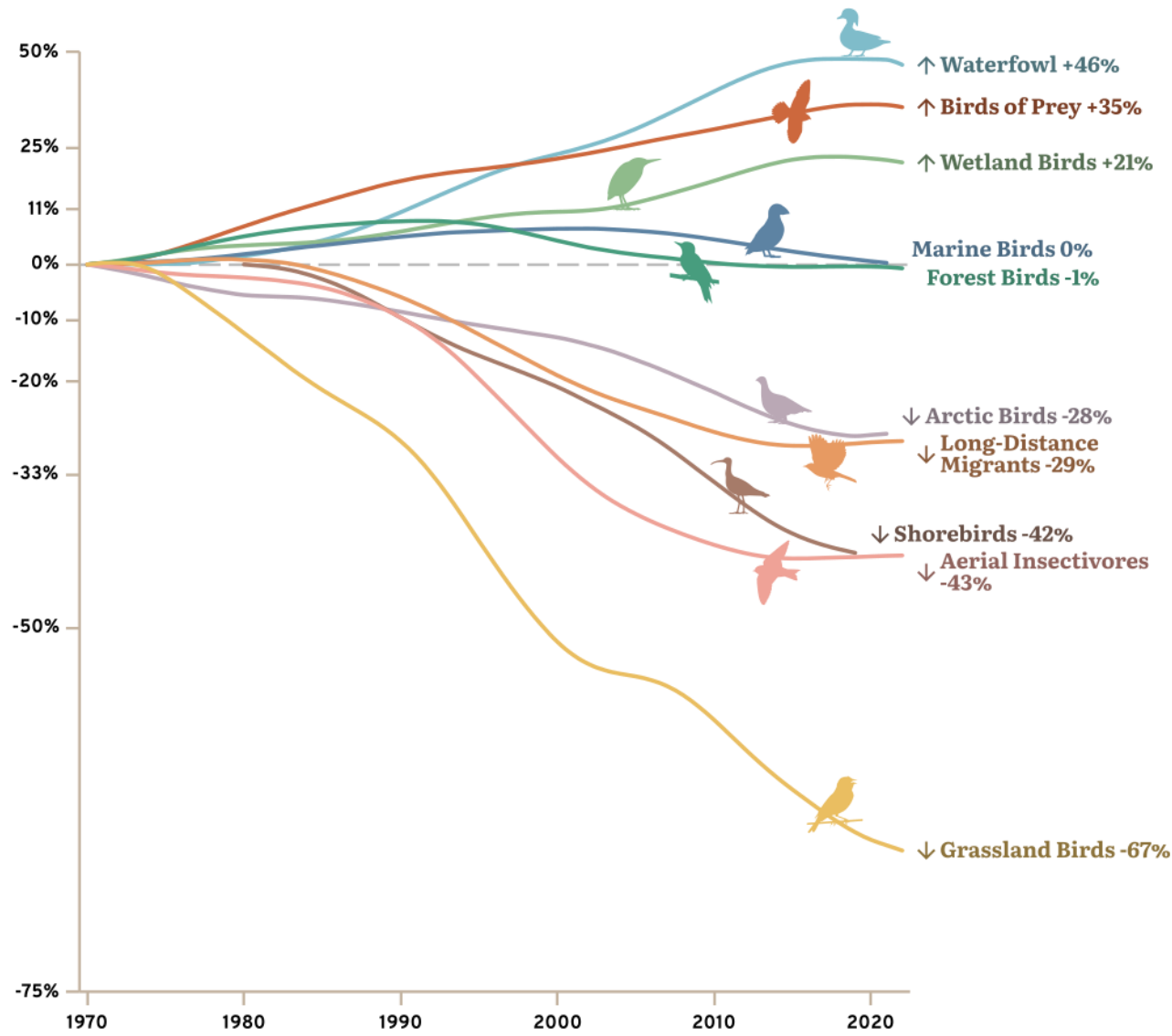
Mandatory Requirements

MEET THE BIRD TEAMS



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Population change since 1970



Source: Birds Canada, Environment & Climate Change Canada, The State of Canada's Birds 2024

BIODIVERSITY & ECOSYSTEM SERVICES

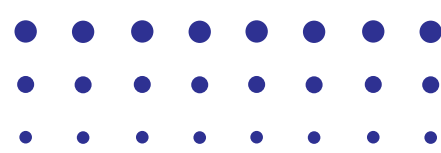


As indicator species, birds provide a variety of services for our environments:

01. Seed dispersal & pollination
02. Pest control & predation
03. Nutrient cycling & ecosystem engineers
04. Habitat building for other species

Habitat Restoration & Climate Resiliency Actions





NATURE- BASED SOLUTIONS & URBAN PLANNING

- Multi-solving through policy, governance & local collaboration
 - Wetland restoration
 - Tree protection for urban forests
 - Biodiversity plans
 - Natural heritage inventory
 - Wildlife crossings

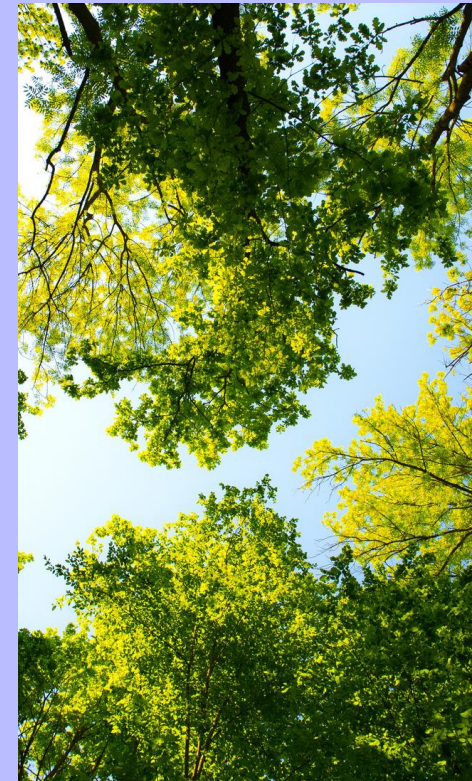
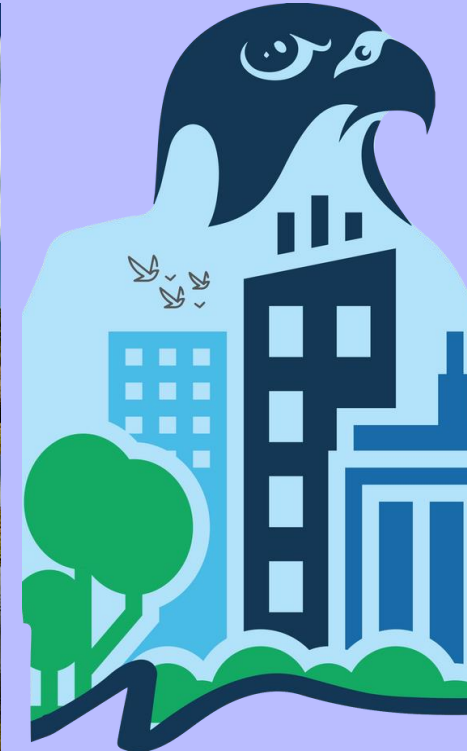


**Habitat Restoration &
Climate Resiliency Actions**

VILLE AMIE DES OISEAUX

BIRD FRIENDLY CITY
NatureCanada.ca/BFC

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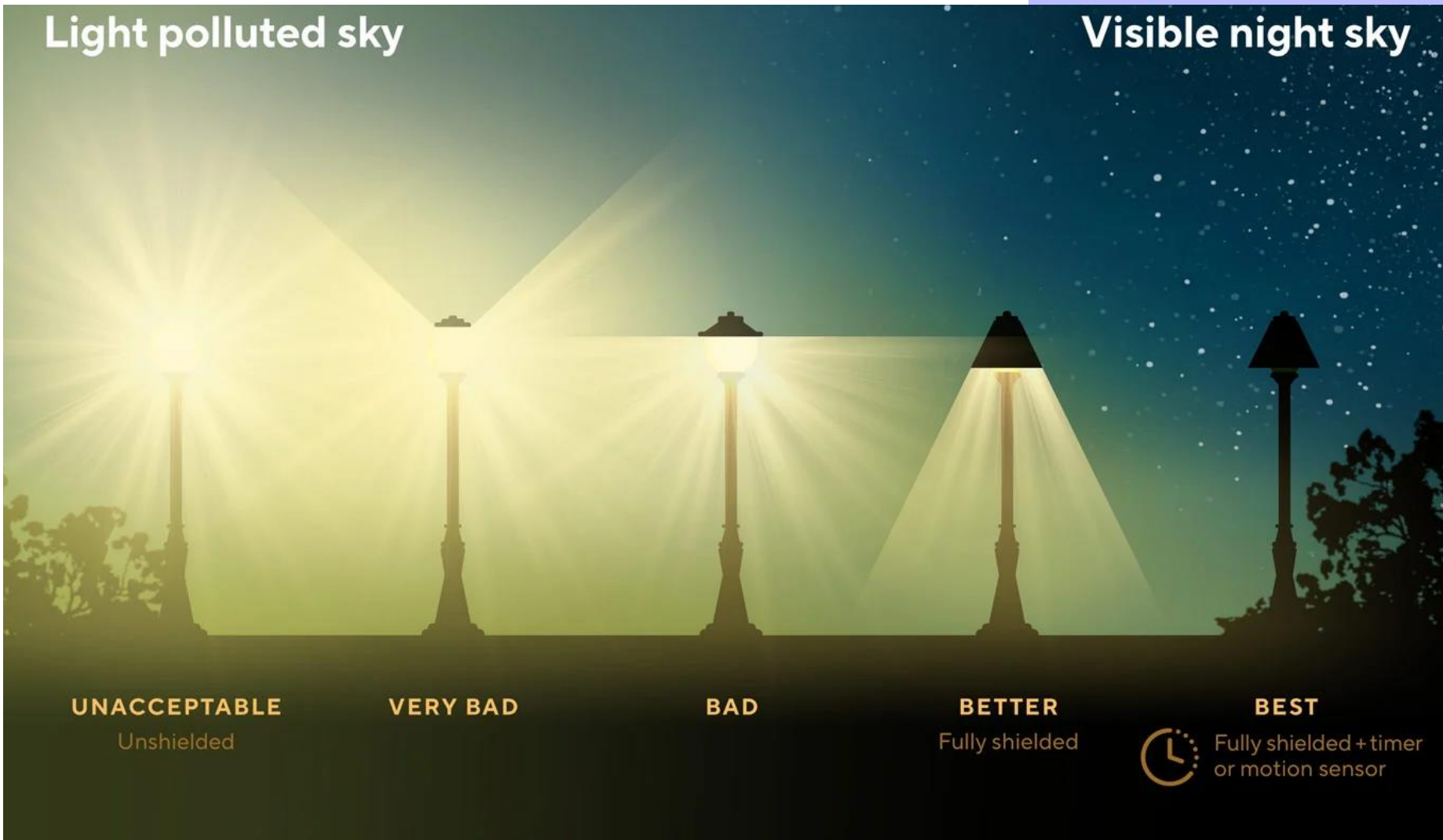


LIGHT POLLUTION MITIGATION

Threat Reduction Actions

Light polluted sky

Visible night sky



Examples:

- Saint-Laurent Dark Sky lighting Bylaw (2024)
- Township of Muskoka Lakes Dark Sky By-law (2014)
- Light Efficient Community, Strathcona County (2010)

Source: DarkSky International, 2024



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BIRD-GLASS COLLISION MITIGATION

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Ottawa

Bird-Safe Design Guidelines



Photo credit: The Convenience Group Inc
and Thomas Ryan of NREL.



BIRD-FRIENDLY
Best Practices **Glass**

TORONTO

Threat Reduction Actions

PESTICIDE MITIGATION

Threats to **Birds** due to **Pesticides**



Breeding Impaired



Toxic Seed Coatings



Poisoned Water Sources



Insect Shortages

Source: SongBird Survival Research (2021); Monaigu & Goulson (2021); Hallman et al., (2014); Millot et al., (2017)

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Municipal Examples:

- La Ville de Gatineau règlement 955-2024
 - Bans neonics & glyphosate
- Pickering, ON Animal Poisoning Prevention Policy (2023)
- Rodenticide Ban across province of B.C (2023)



Threat Reduction Actions

COMMUNITY ENGAGEMENT & WELL-BEING

- ✓ Cultural significance
- ✓ Health & social benefits
- ✓ Community building & advocacy



Community Outreach & Education Actions

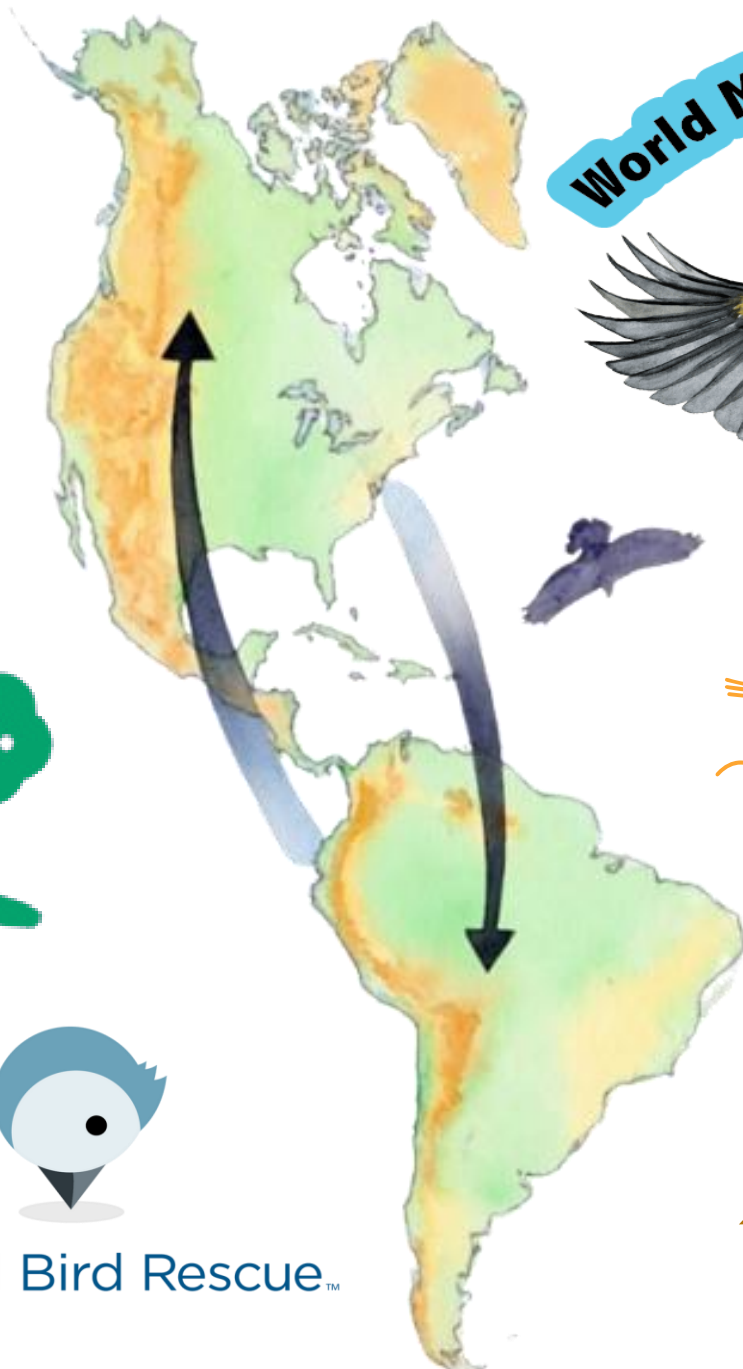




World Migratory Bird Day



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Global Bird Rescue™

OTHER CAMPAIGNS

World Migratory Bird Day

- Shared-Spaces: Creating Bird Friendly Cities & Towns

Municipal Protected Areas Program

Tree Equity & Restoration

Nature-based Climate Solutions

THANK YOU TO OUR PARTNERS & FUNDERS



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Environment and
Climate Change Canada
Environnement et
Changement climatique Canada



F L A P
C A N A D A



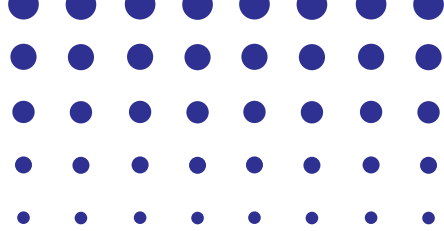
REGROUPEMENT
Québec Oiseaux



Feather Friendly®



BIRDS
CANADA OISEAUX
CANADA



THANKS FOR LISTENING!

INTERESTED IN
BECOMING BIRD
FRIENDLY CERTIFIED?



AUTUMN JORDAN
AJORDAN@NATURECANADA.CA

PLEASE VISIT: [NATURECANADA.CA/BFC](https://naturecanada.ca/bfc)




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Q&A





Moving to Nature-Positive Communities Through Kitchener's Urban Creek Rehabilitation Program

FCM – Sustainable Communities Conference
February 13, 2025 - Fredericton, NB

Bu Lam, Ph.D.
Director, Sanitary and Stormwater Utilities
City of Kitchener



Overview

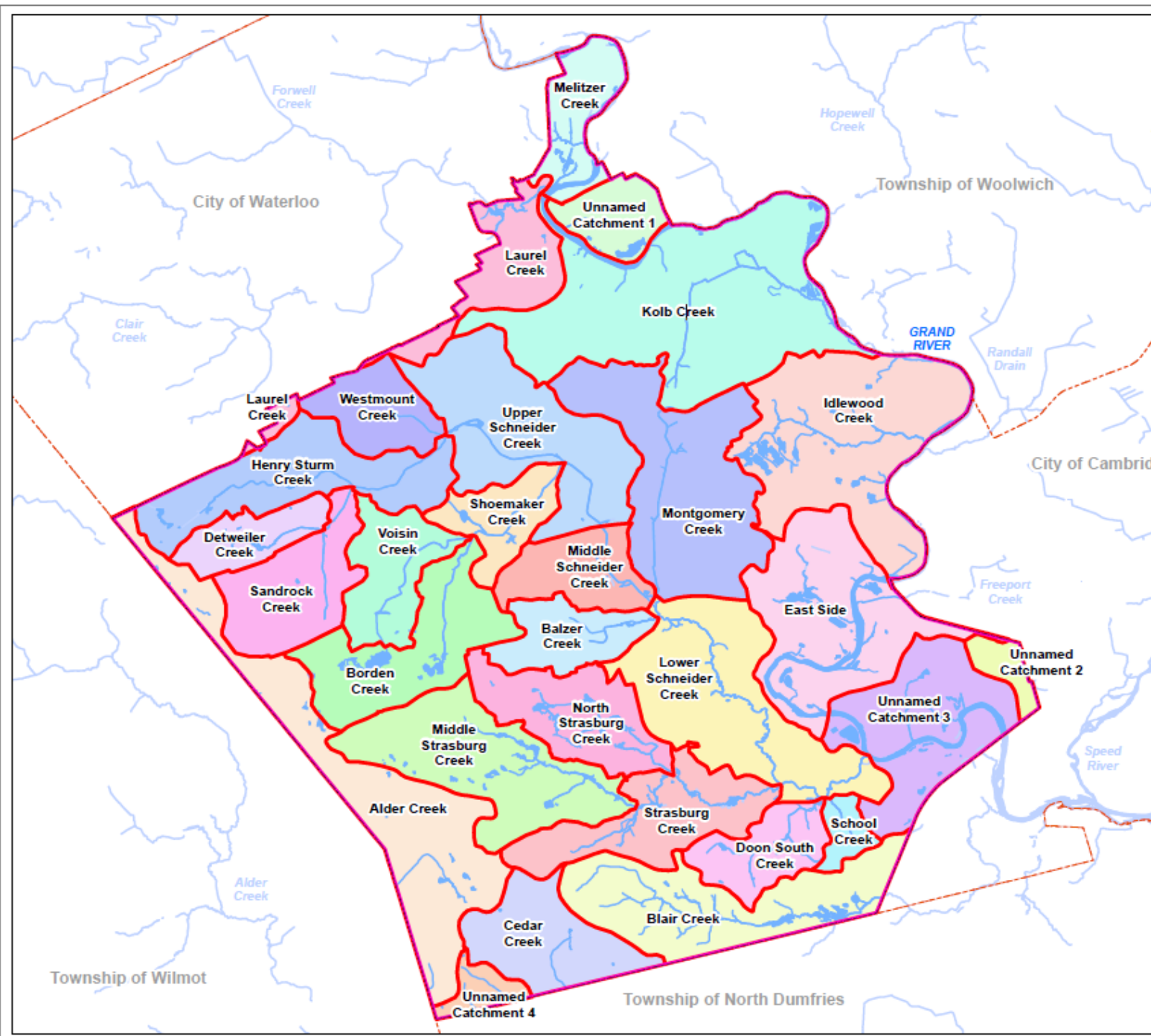
- Kitchener's Creek Rehabilitation Program
- Example: Filsinger Creek (completed 2015)
- Example: Montgomery Creek (completed 2022)
- Example: Schneider/Shoemaker Creek (in-progress)





Stormwater Management Principles

- Address water quantity
- Address water quality
- Protect public safety
- Mitigate damage to infrastructure & property



Kitchener's Creek Network

- 29 subwatersheds
- ~135 km of watercourses
 - Kitchener responsible for ~67km
 - ~ 23% (15km) is channelized or concrete







Current vs. Past approaches

Current approaches

- Focus on detention, retention and infiltration
- “green” approaches or “soft-scaping”

Historical approaches

- Conveyance
- “Hard-scaped engineering”



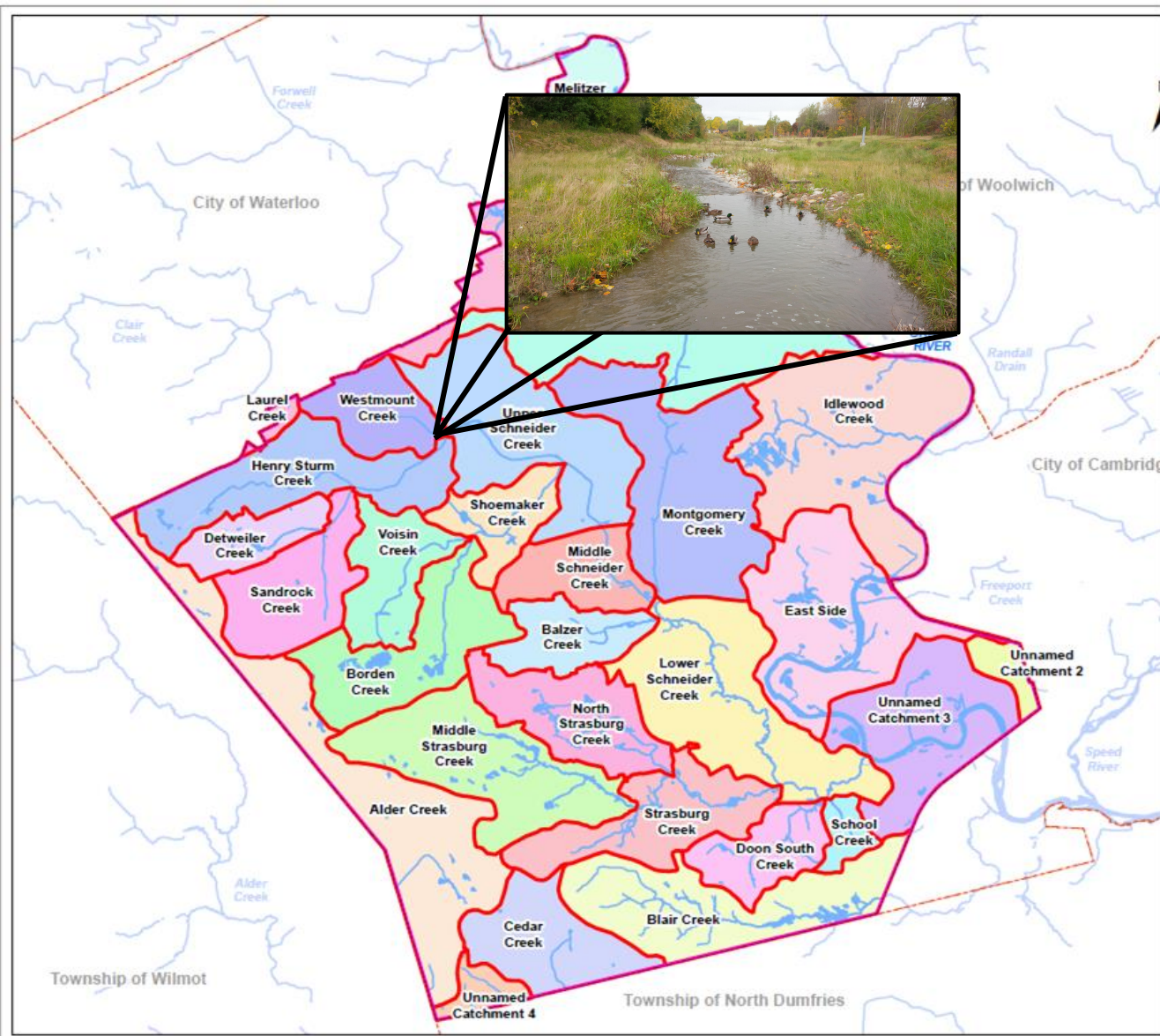
Grey infrastructure is strongest on day 1 and only weakens over time...

Green infrastructure is weakest on day 1 and only strengthens over time

Benefits of nature-based approaches for stormwater management

- Flood reduction
- Water quality improvement
- Groundwater recharge
- Biodiversity and habitat creation
- Climate resilience
- Aesthetic, recreation, and community benefits





Filsinger Creek
Naturalization
Completed 2015

Ruisseau de
Filsinger
Naturalisation
Complétée en 2015



Filsinger Creek Naturalization 2015

- Filsinger Park

Before construction



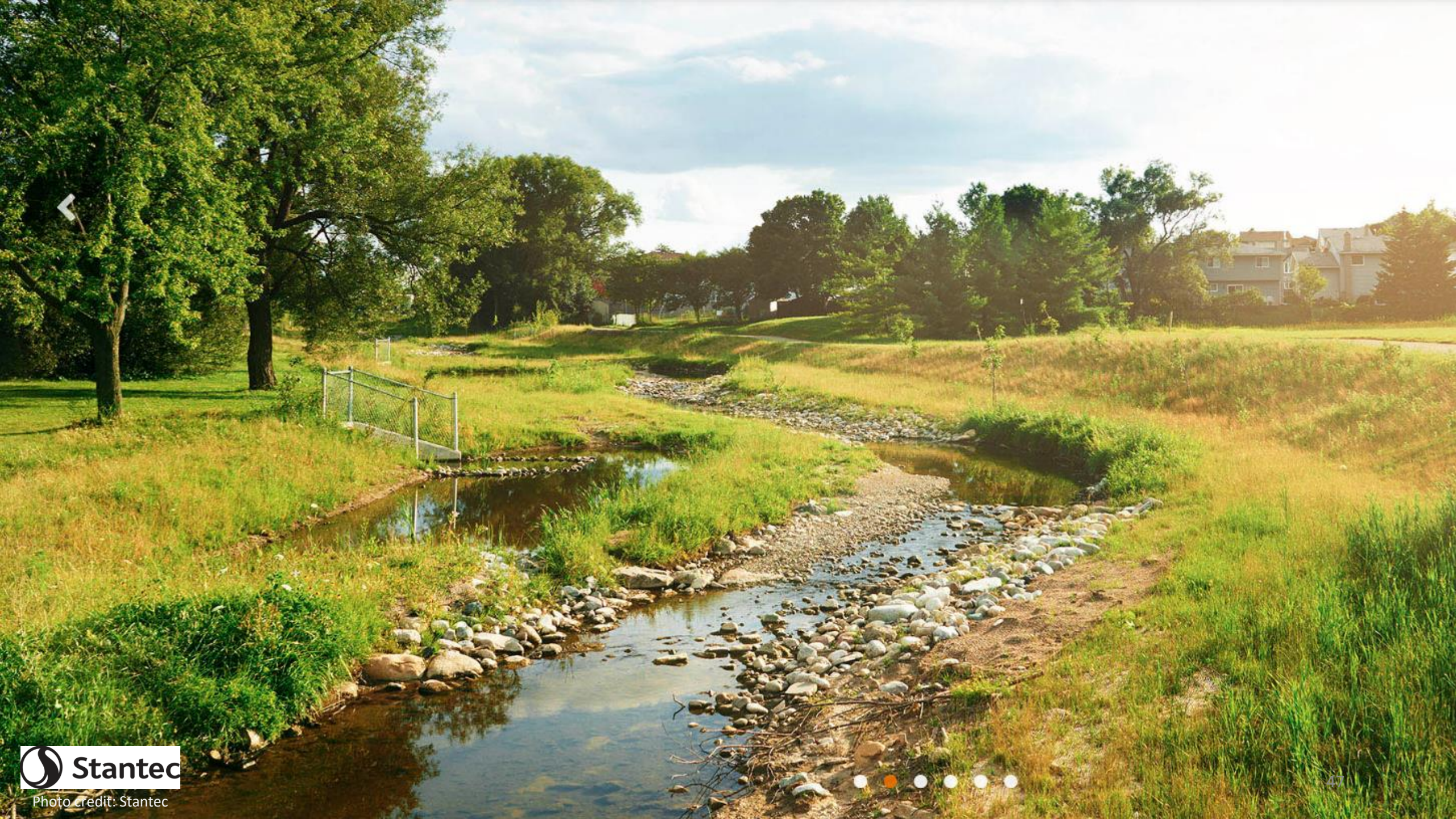
During Construction











Filsinger Park

Google

52

8





Pre-construction

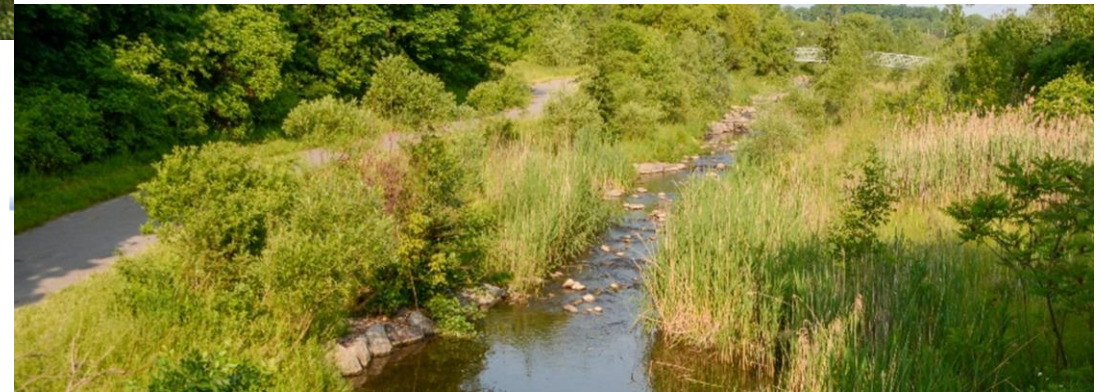
During Construction



First Spring after construction

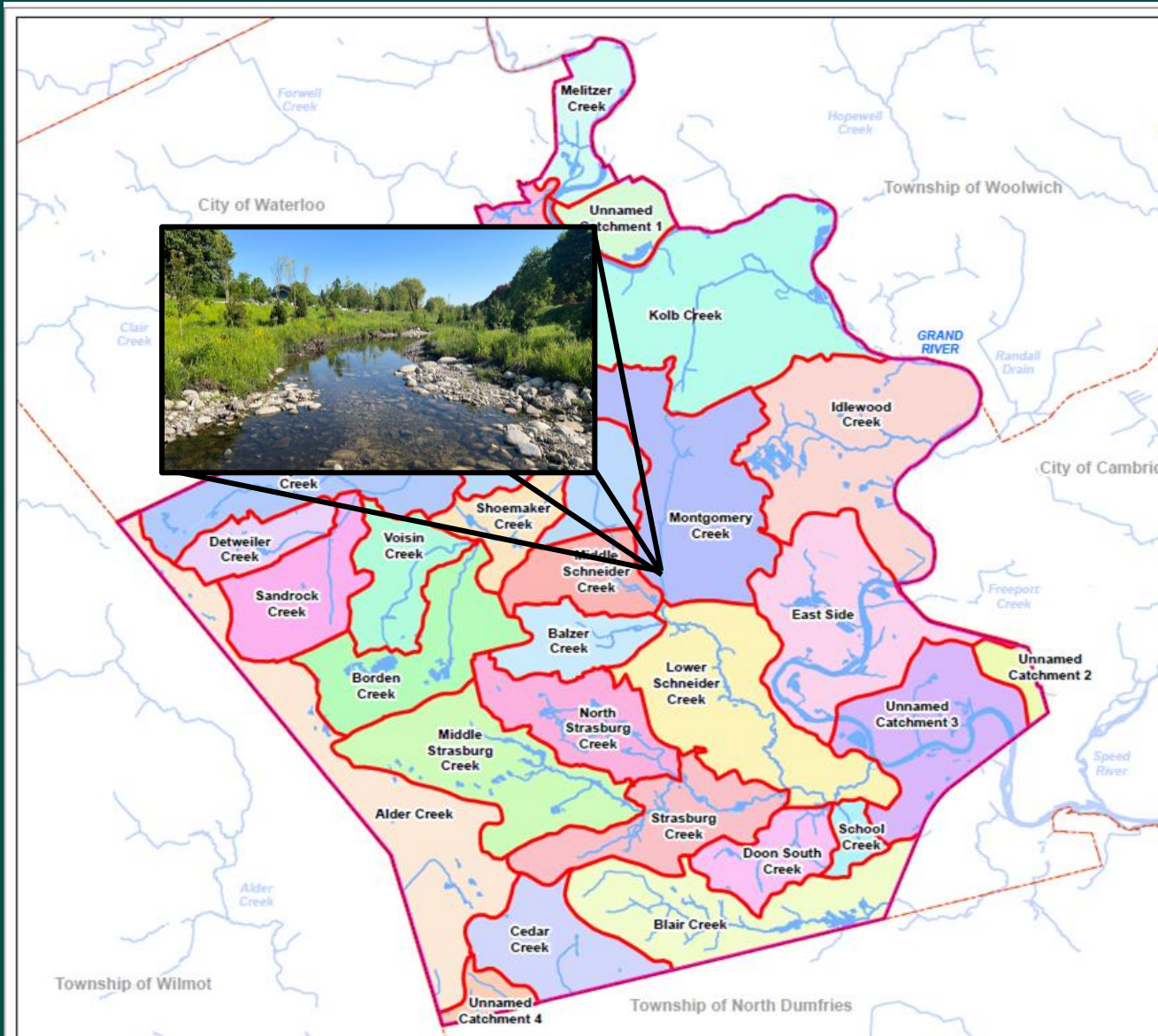


5+ years after construction



Montgomery Creek
Rehabilitation
Completed 2022

Ruisseau de
Montgomery
Réhabilitation
Complétée en 2022





WILSON

MARKETTE



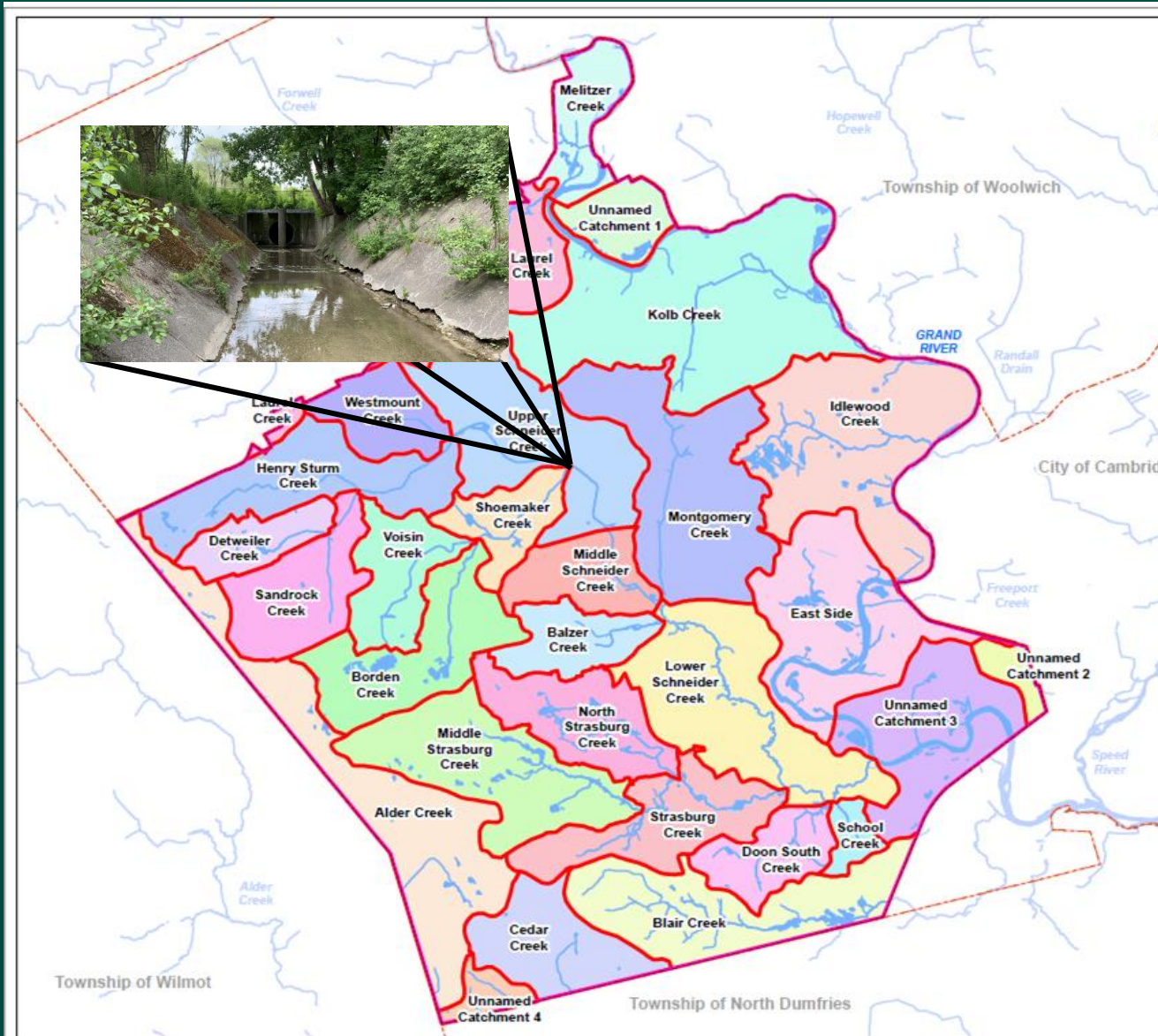






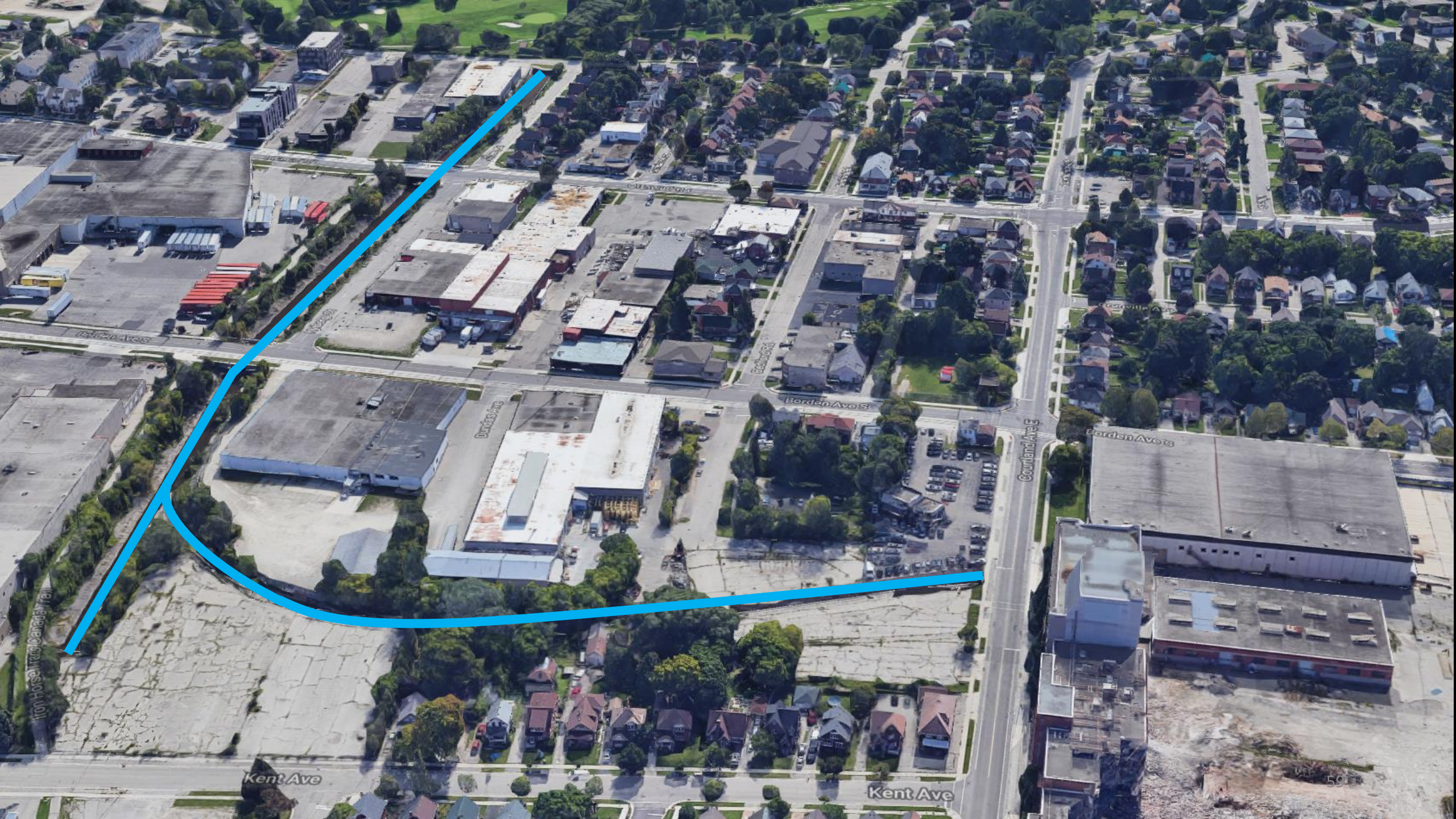






Ruisseau de Schneider
/ Shoemaker Creek
Naturalisation
En cours

Schneider /
Shoemaker Creek
Naturalization
In-progress



Kent Ave

Kent Ave

Borden Ave S

Courland Ave

Borden Ave S

Borden Ave S

Iron Horse Living Community Trail

















Thank you!
Merci !



Photo credit: Stantec

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#SCC2025CCD

Q&A



Green municipal fund (GMF)

Program of **\$2.4 B** funded by the Government of Canada and implemented by FCM.

Our unique mix of **funding** and **capacity building** delivers clear environmental, economic and social impact—creating better lives for people in Canada.

Growing Canada's
Community
Canopy (GCCC)

Local Leadership for
Climate Adaptation
(LLCA)



LLCA Overview

\$530 million

Funding for

1400+ initiatives

by

2024-2031

Supporting climate change adaptation in communities across the country



Climate-Ready Plans and Processes

Climate risk assessments and integration of climate considerations in plans, processes and management systems



Adaptation in Action

Municipal adaptation projects reducing risks of climate change impacts



Growing Canada's Community Canopies (GCCC) Initiative

Support Canadian local governments in growing, managing and protecting their community canopies

- **Tree planting** funding and **strategic** funding
- **Capacity development** offered by FCM and Tree Canada



\$291 million

Funding for 500+ initiatives

1.2M Trees

By March 2031

Meet GMF staff at the booth to learn about **funding** and **learning** opportunities



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Audience Q&A

① Start presenting to display the audience questions on this slide.

Activity

Did you know ...?

Your task:

- Grab a Did you know cards
- Write down one thing you learnt today, or that you want to share
- Give or exchange your card with another SCC delegate

Did you know that the Belted Kingfisher is Barrie's official city bird and has one of the coolest bird hairstyles across Canada?

Did you know that Woodland Caribou has been listed as an Endangered species (SARA) since 2004?

Did you know that green infrastructure only strengthen over time when grey infrastructure don't?

Did you know

Sustainable Communities Conference 2025
FREDERICTON • FEB 10-13

Did you know that ...

▶ **Contact me at** _____

if you want to chat about _____

Workshop: Walking the path to nature-positive communities by protecting and enhancing biodiversity

Activity

Official City Birds Challenge ANSWERS

Vancouver, British Columbia (Anna's Hummingbird)

Lions Bay, British Columbia (Seagull is their historical bird)

Calgary, Alberta (Black-capped Chickadee)

Devon, Alberta (Black-capped Chickadee)

Strathcona County, Alberta (Pileated Woodpecker)

Regina, Saskatchewan (Black-capped Chickadee)

Guelph, Ontario (Black capped Chickadee)

London, Ontario (Northern Cardinal)

Kawartha Lakes, Ontario (Osprey)

Peterborough, Ontario (Great Blue Heron)

Barrie, Ontario (Belted Kingfisher)

King Township, Ontario (Black-capped Chickadee)

Richmond Hill, Ontario (Great Blue Heron)

Hamilton, Ontario (Peregrine Falcon)

Burlington, Ontario (Trumpeter Swan)

Sarnia, Ontario (Red-head Woodpecker)

Kitchener, Ontario (Dark-Eyed Junco)

Windsor, Ontario (Tufted Titmouse)

Sainte-Anne-de-Bellevue, Quebec (Pileated Woodpecker)

Hudson, Quebec (Belted Kingfisher)

Dorval, Quebec (Northern Cardinal)

Halifax, Nova Scotia (Common Nighthawk)

Kentville, Nova Scotia (American Crow)

Prizes

And the Awards go to

Game 1: Integrated Biodiversity in Urban Planning

- NATURE-POSITIVE THINKERS
- NATURE-POSITIVE ACTORS

Game 2: Official City Birds Challenge

- AVID BIRDERS

Game 3: Municipal Nature Supports

- NATURE-FRIENDLY VISIONARIES
- MOST NATURE-NETWORKED



Learn more

Resources & Tools



- **GMF factsheet:** [Working with nature to improve infrastructure project outcomes](#)
- [Bird Friendly City website, program overview booklet & questionnaire](#)
- Webpage - **Engage Kitchener:** <https://www.engagewr.ca/schneidershoemakercreeks>
- Sign-up to **LLCA Community of Practice:** 1st meeting (Feb. 18) focused on Nature-based Solutions for Adaptation: Infrastructure Protection & River Corridor Restoration

Share your feedback / Partagez vos retours

Please take out your phone
/ Sortez vos cellulaires



Scan this code /
Scannez ce code

