

Climate Change Mitigation Strategy

LSRCA Board of Directors

July 24th 2020

Ben Longstaff, General Manager, IWM

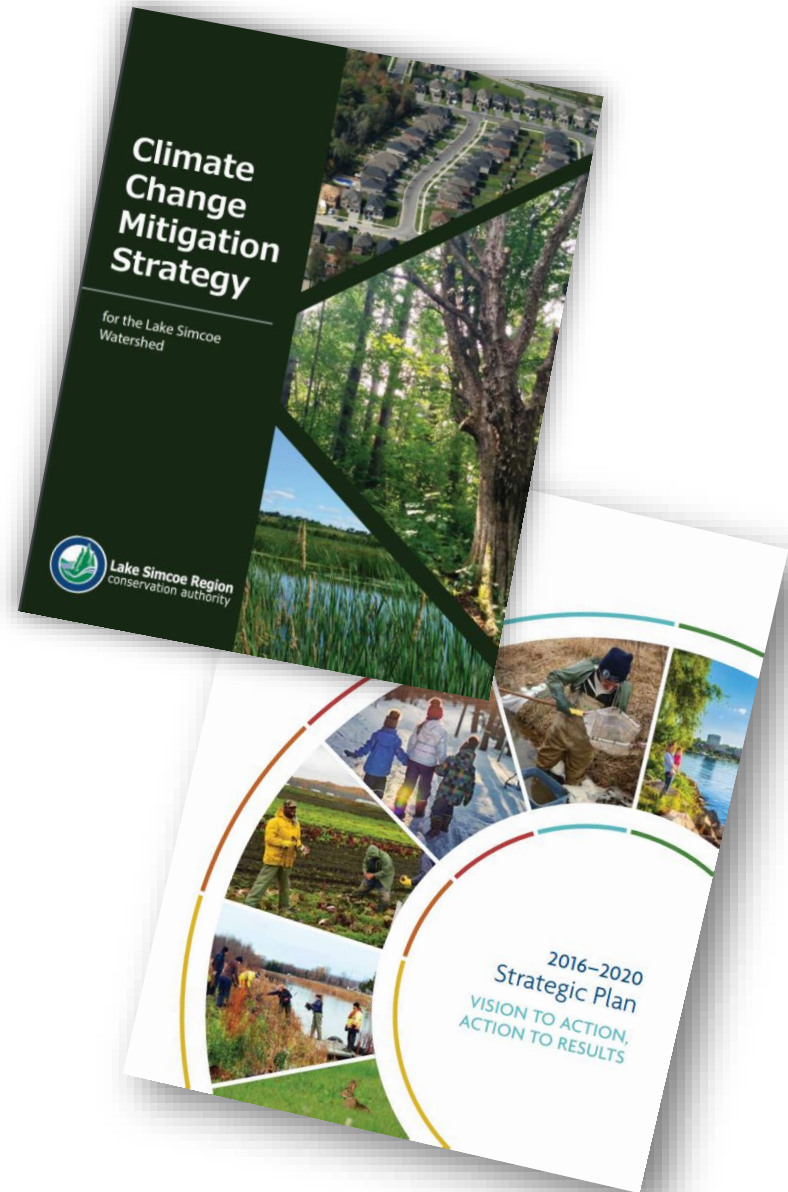
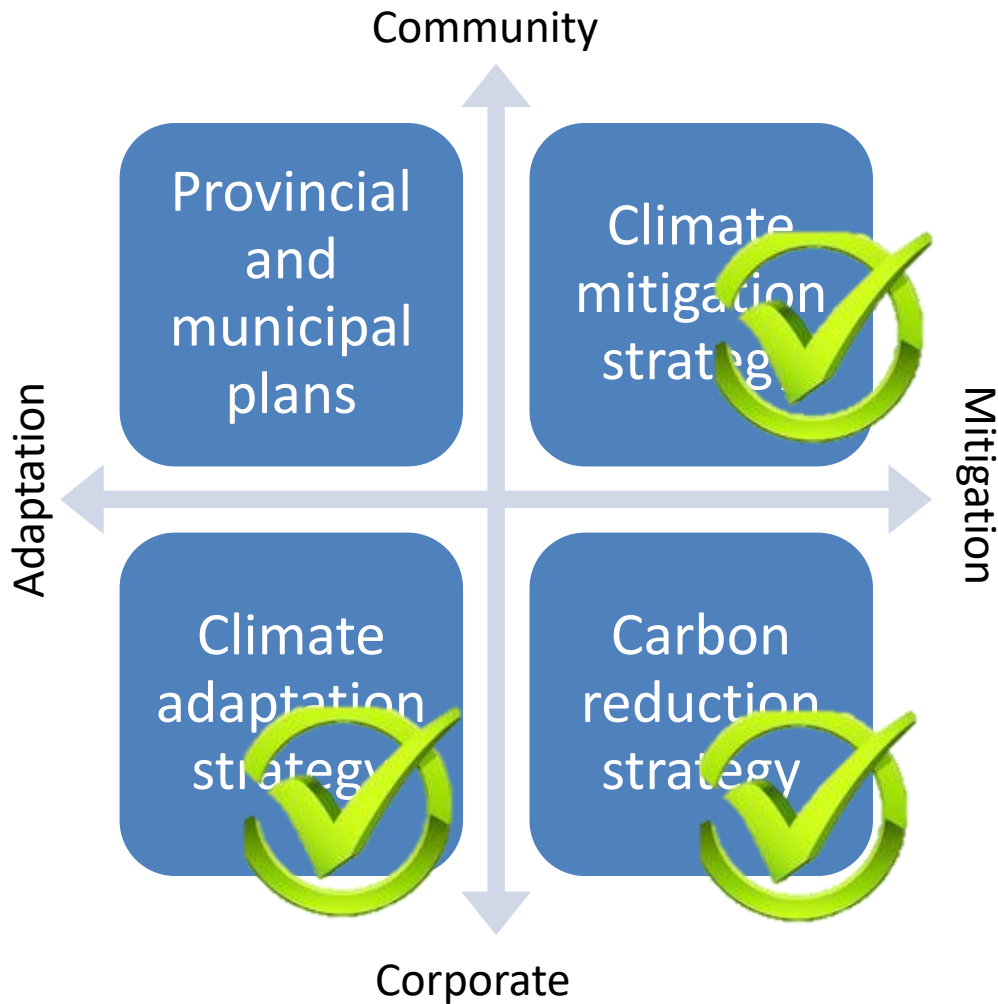


Lake Simcoe Region
conservation authority



Member of Conservation Ontario

LSRCA's approach to climate change



Climate Change Mitigation Strategy

Contents:

1. Emissions inventory & forecast
2. Sequestration inventory & forecast
3. Carbon budget
4. Recommendations





Carbon Emissions in the Lake Simcoe Watershed

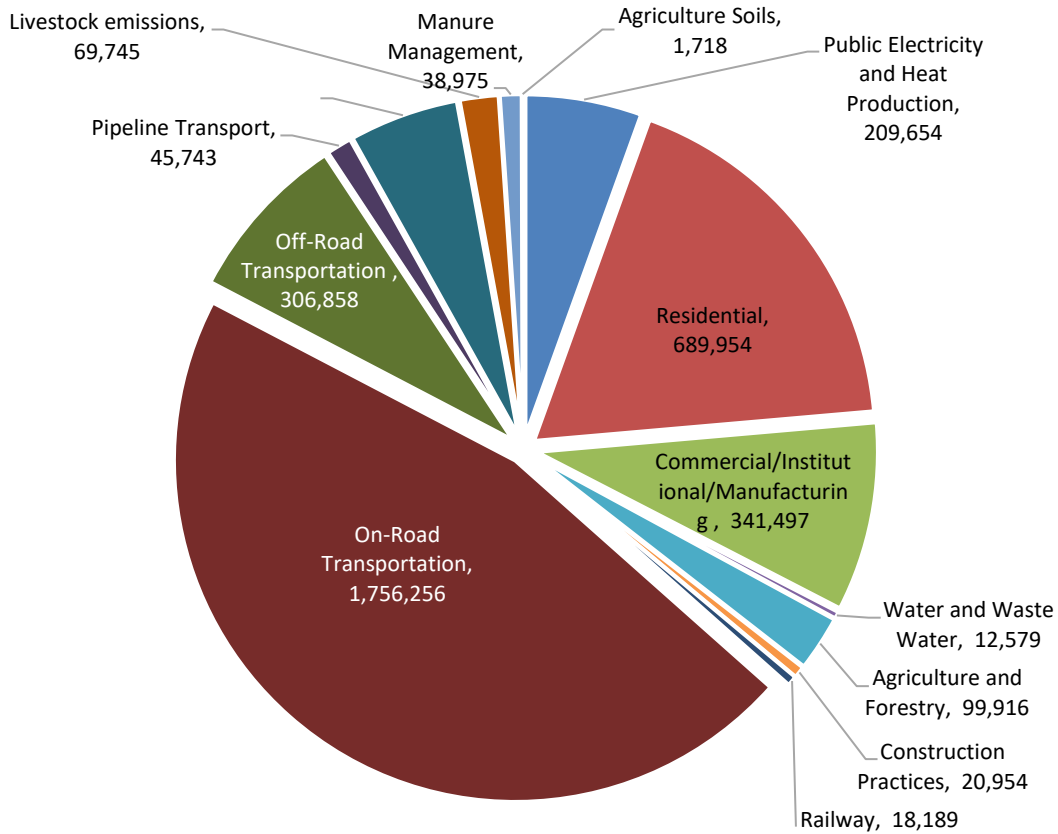
- IPCC tier 1 method followed
- 2016 baseline
- Estimated watershed emissions of:

3,800, 000 tCO₂e annually

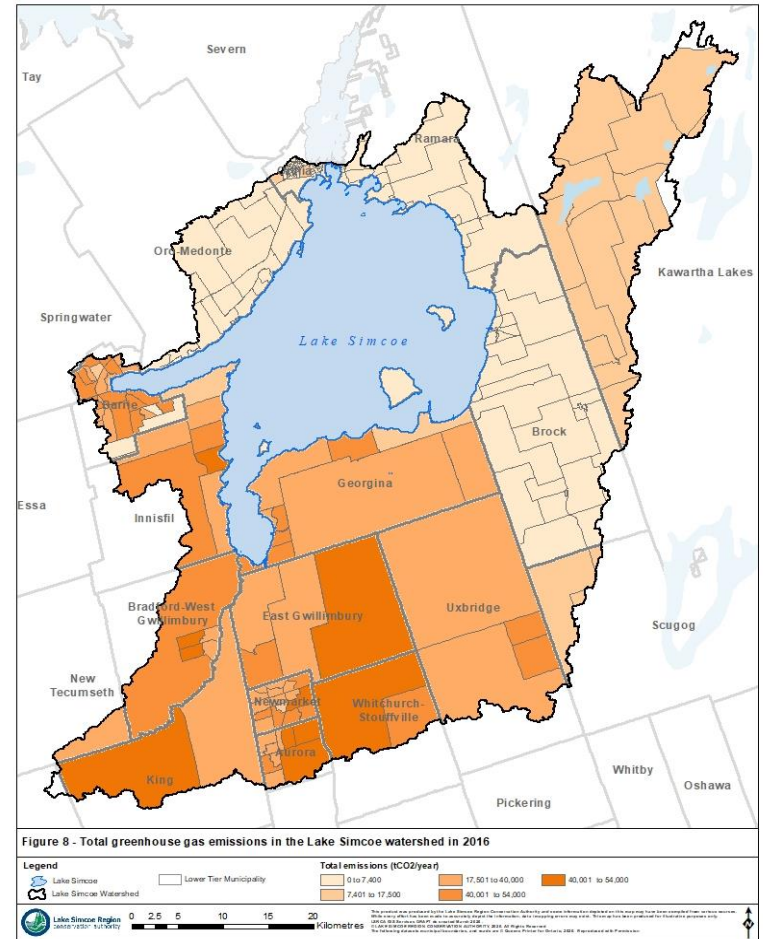
or

7.44 tCO₂e per capita

Emissions

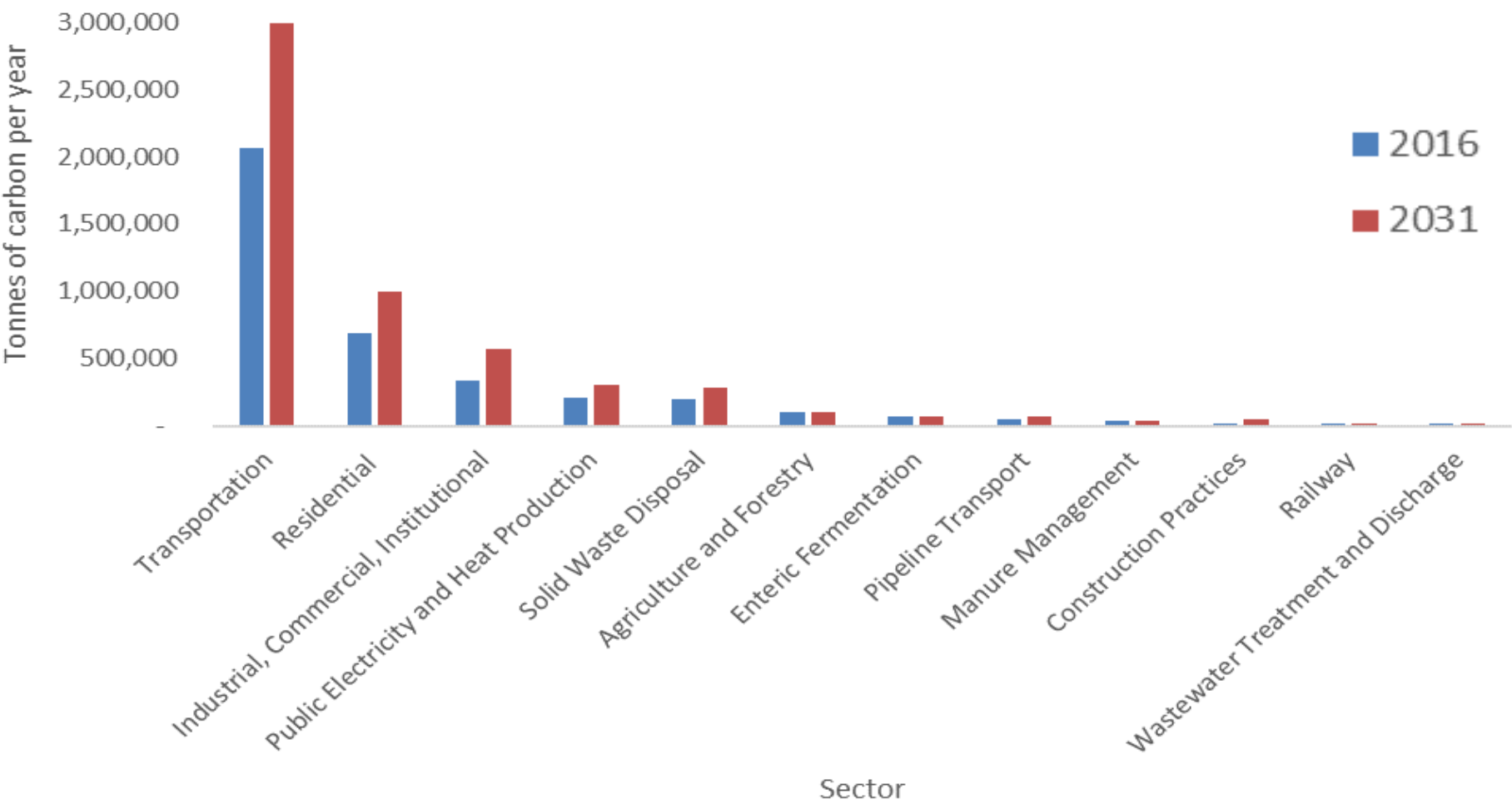


Sector



Watershed
(Census tract)

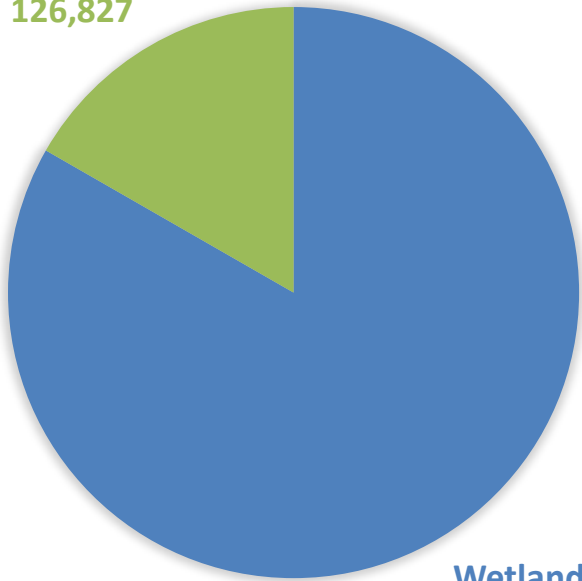
Emission forecasting



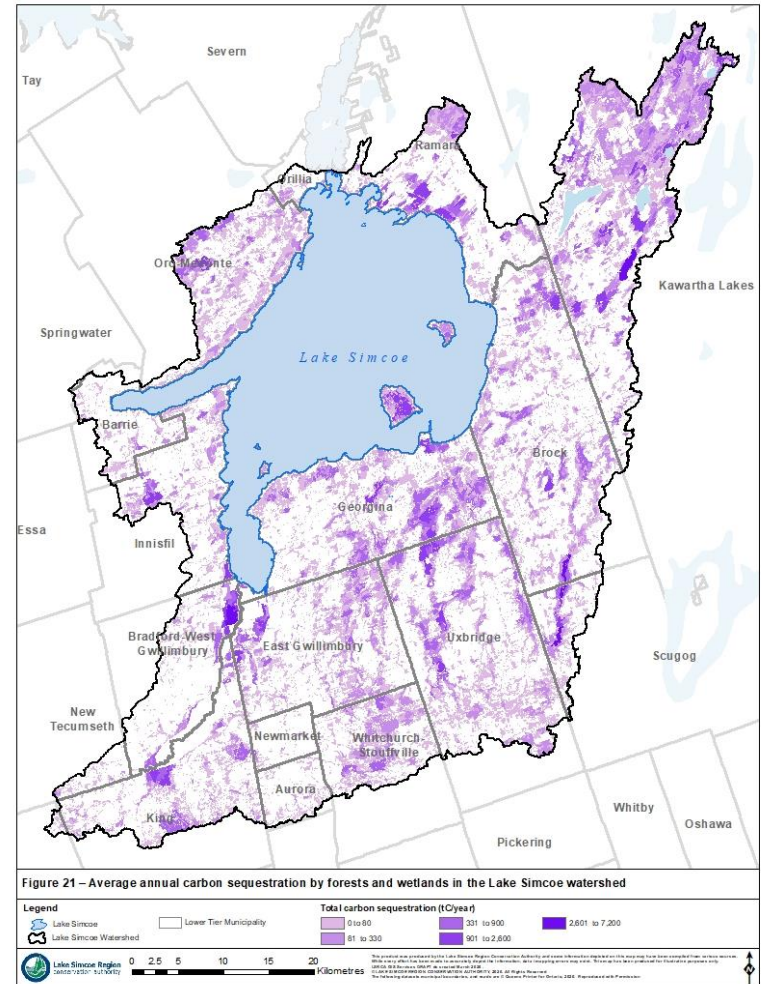
Carbon Sequestration

Carbon Sequestered Annually (t)

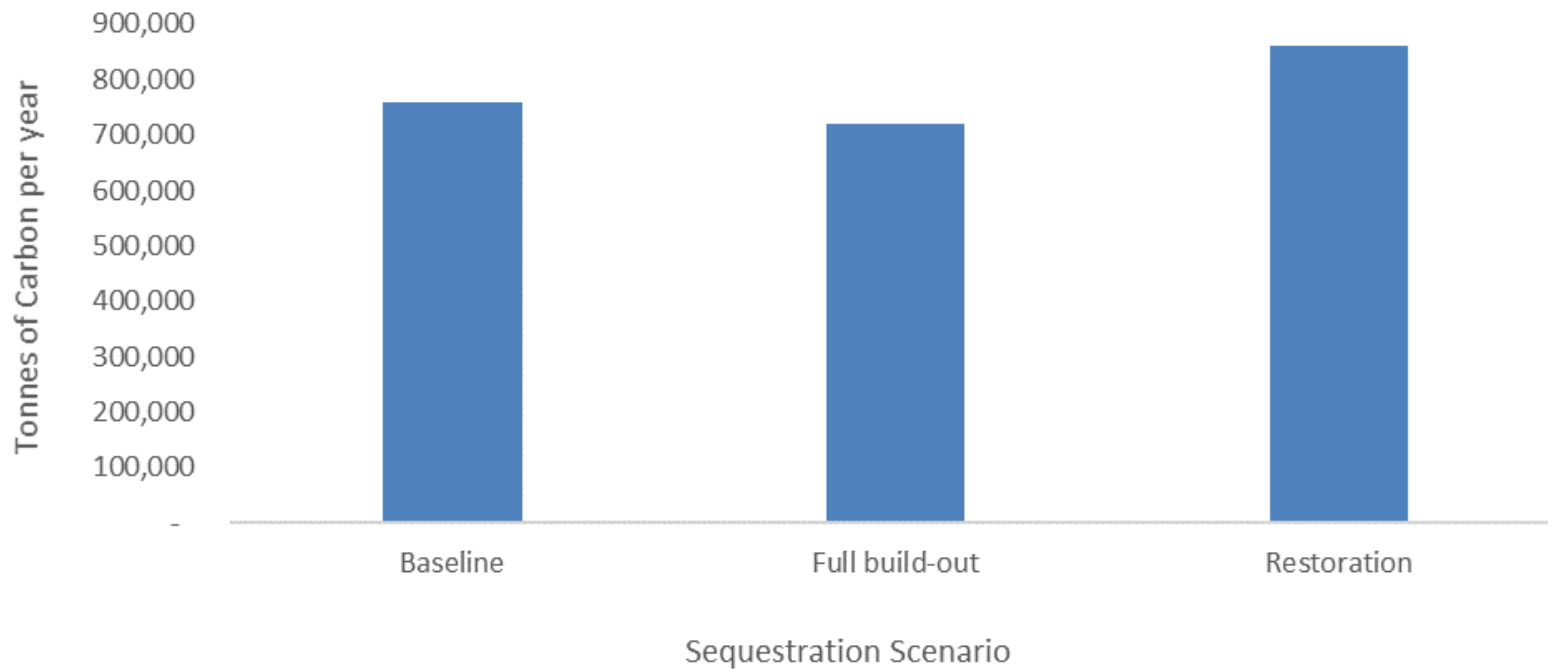
Forests
126,827



Wetlands
632,212



Sequestration forecast

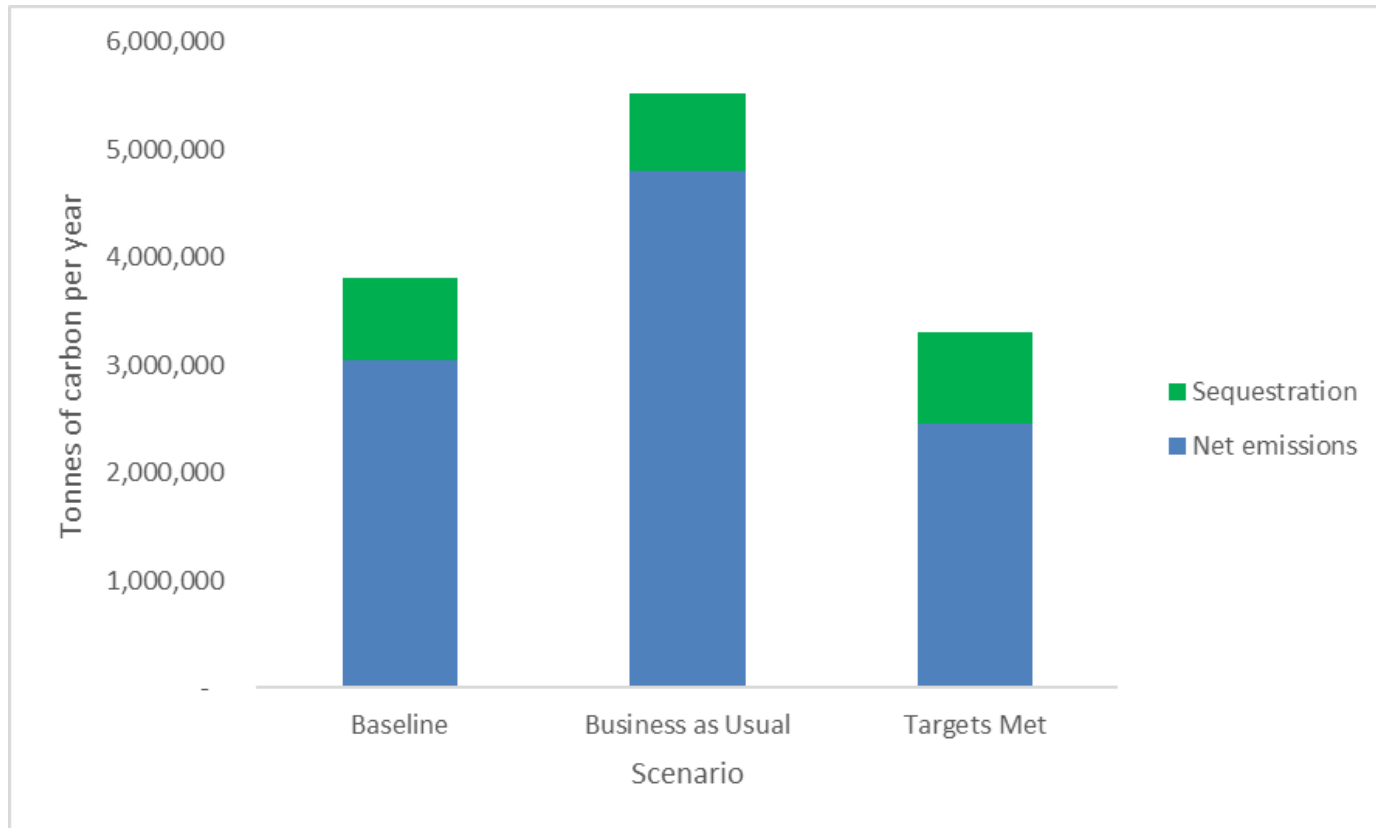


Full build-out: assumes loss of any unprotected forest or wetland, no ecological offset

Restoration: Target in LSRCA natural heritage system restoration strategy met

As growth proceeds...

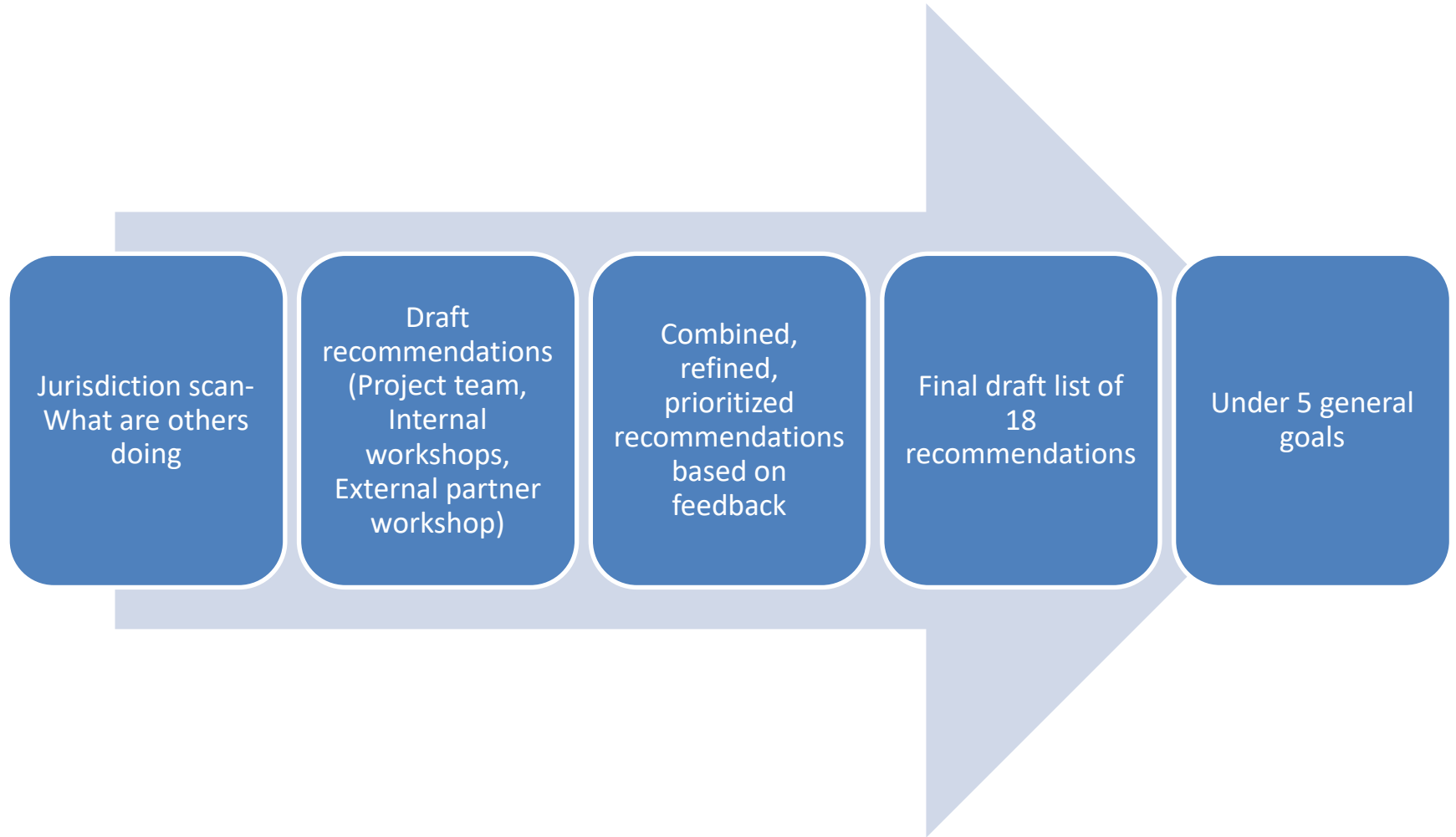
What could happen?



Business as usual: Forecasts as previously presented

Targets met: For example if all municipalities achieved a 40% per capita reduction

Developing recommendations





Goals

1

Provide **leadership** in the field of climate change and carbon sequestration by continuing to support our municipal partners.

2

Effectively **communicate** the necessary information in order to **educate** and empower people within the Lake Simcoe watershed to take action to combat climate change within their communities.

3

Provide the **tools and resources** that will allow our LSRCA and our municipal partners to apply best practices to carbon reduction or sequestration efforts.

4

Use the tools and resources to expand and **build** upon our collective **knowledge** and understanding of climate change mitigation and carbon sequestration.

5

Support municipalities in incorporating carbon sequestration into **community design** and energy plans.



Example Recommendations

Leadership

- Continue to **play a leadership** role in municipal climate change working groups to **help coordinate municipal climate mitigation activities and build expertise** in carbon capture and sequestration in watershed municipalities.

Communicate and Educate

- **Expand current climate change educational programming** to include public workshops as well as resources and tools so watershed residents can engage in climate change mitigation/carbon sequestration efforts within their homes and communities.



Tools and Resources

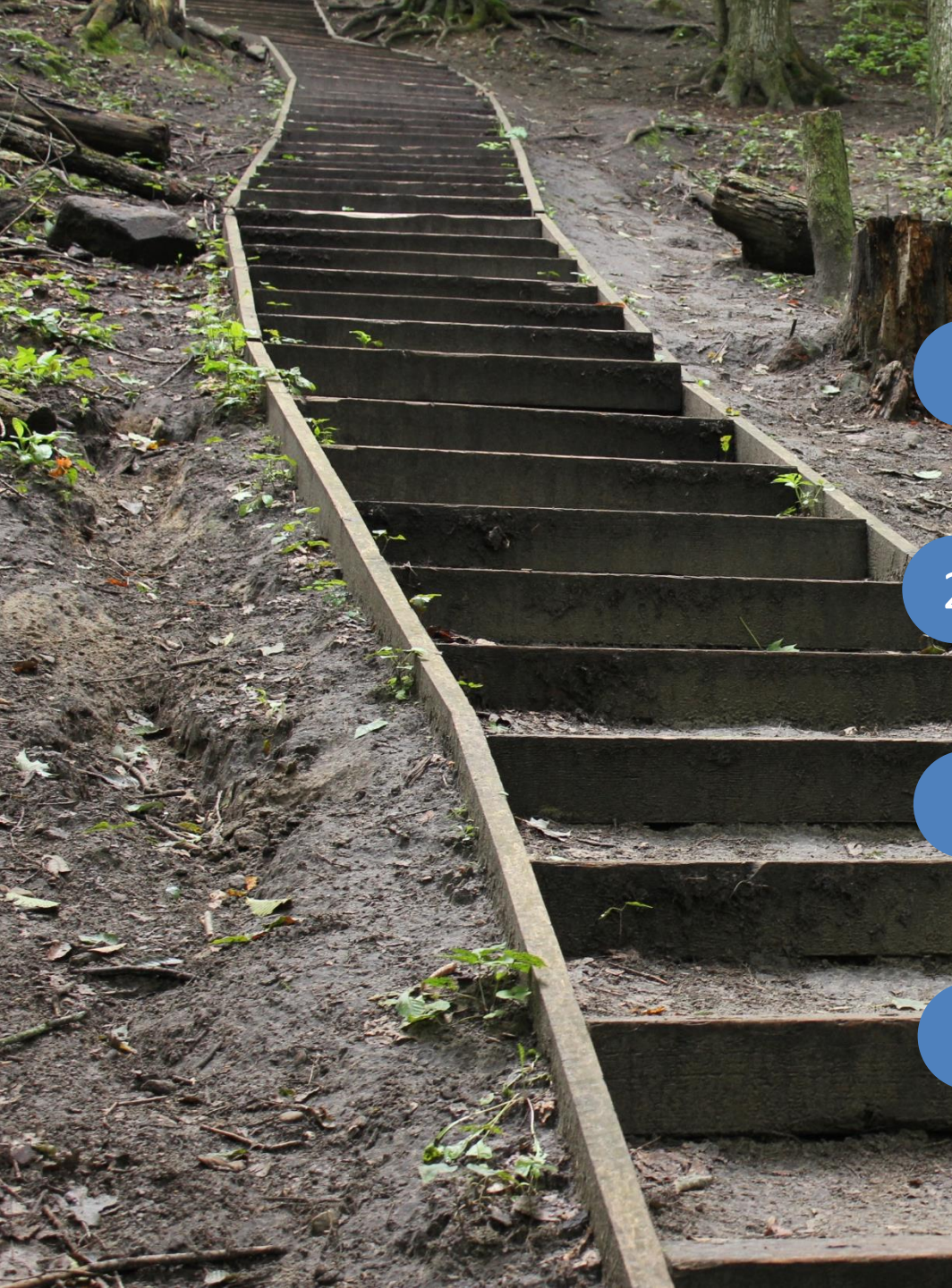
- Use LSRCA's Natural Heritage System Restoration Strategy, and data from sequestration studies, **to identify areas within the watershed that are not reaching their full carbon sequestration potential**, as well as additional areas that could sequester substantial carbon if restored to natural habitat

Build knowledge

- Building off York Region's expertise in carbon capture of urban forests, **expand the implementation of Urban Forest studies to other watershed municipalities**. Use the results of these studies to further our understanding of the current and potential carbon sequestration in urban canopies.

Sustainable Communities

- Support municipalities in developing or updating Green Development Standards that include carbon budgets as a consideration.



Next Steps

1

Release and promote the strategy

2

Prepare Implementation Plan

3

Implement recommendations (underway)

4

Track and report progress



Thank you

Our process and timeline

