



Muskoka

WATERSHED COUNCIL

Minutes

Friday, April 21, 2023

1:00 pm

Pine Room (District of Muskoka) & Zoom

Present (In-person)

Peter Sale (Chair)
Andrew Fyfe
Peter Johnston
Michael Peppard

Nancy Alcock
Kathleen Hedley
Peter Kelley
Geoff Ross

Lance DeCaire
Neil Hutchinson
Pete LeMoine
Kevin Trimble

Present (Zoom)

Patricia Arney
Richard Lammers

John Cooper
Sabrina Richards

Chris Cragg

MWC Staff

Rebecca Willison

DMM Staff

Christiane Masters
Alana Perez *

Lauren Valliere

Christy Doyle

Guests

Gary Donald *
Greg Padulo *
Penny Thomas *

Forrest Pengra *
Andrew McCammon *
Rupert Kindersley *

Julie Cayley
Sandy Cairns

* Attended by Zoom

Welcome

MWC Chair Peter Sale called the meeting to order at 1:05 pm. MWC member Lance DeCaire provided an Indigenous Land Acknowledgement. Peter added an item on communications to the agenda.

Confirmation of Minutes

MOTION

Moved by Kevin Trimble, seconded by Peter Johnston

THAT the minutes of the Muskoka Watershed Council meeting dated March 24, 2023, be approved.

CARRIED

Business Arising from the Minutes

None.

Communications

Peter Sale provided an update that three delegations to municipal councils have been booked so far in June and July. Peter is looking for volunteers to present to the council in their part of the watershed.

A Muskoka EV Show has been organized by Climate Action Muskoka and the Muskoka Conservancy to take place in Bracebridge on May 27th.

Presentation

[Measuring and Reducing Greenhouse Gas Emissions in Muskoka](#) – Lauren Valliere, Climate Initiative Coordinator, District Municipality of Muskoka

Christy Doyle introduced Lauren Valliere, the Climate Initiatives Coordinator for the District of Muskoka, who then gave a presentation about various initiatives the District of Muskoka is involved in around planning and taking action towards climate change.

The District has completed greenhouse gas (GHG) inventories for both the District as a corporation as well as the Muskoka community. The GHG inventory for the District's operations shows that most emissions come from three sources: wastewater facilities, district buildings, and fleet/equipment. A Climate Action Steering Committee (CASC), comprised of District staff from all departments, has been formed to create an actionable plan to reduce the district's GHG emissions and is expected to be finalized in late 2023.

The GHG inventory for the community shows that about 70% of the emissions come from the use of private vehicles. A Climate Change Mitigation Taskforce (CCMT), comprised of representatives from District and Area Municipalities, local high schools, the transportation, manufacturing, retail, tourism, healthcare, and power generation sectors, as well as various community organizations, was formed to educate, gather community input, explore options to reduce community GHG emissions, coordinate three way dialogue (between the district staff, CCMT members, and the organizations that the CCMT members are representing), and identify and prioritize actions to create a community GHG reduction plan. The MWC representative on the CCMT is Richard Lammers, and all MWC input into the plan should go through Richard.

The District has started a monthly blog on the EnviroHub called the Climate Corner, which provides small, at-home or individual actions the community can take to reduce GHG emissions in Muskoka.

After answering some questions following her presentation, Lauren was thanked by Peter for her excellent presentation.

MWC Strategic Plan

Pete LeMoine and Geoff Ross provided an update on the development of the Strategic Plan. Input had been received from several MWC and CRT members, but not all. Pete encouraged additional members to send input. A small group of MWC members met earlier this week to talk in detail about

the input received. One discussion was in regards to what can be done with current MWC resources. "Plan for big, prepare for small".

MWC needs money but also people to come forward and work on pieces of the strategic plan. How can each member contribute to furthering the agenda of MWC?

Pete and Geoff will be developing the next draft over the next couple of weeks. Once the next draft is approved by the Board, it will be brought to MWC at a future meeting for more input. The strategic plan is looking at the big picture and capturing what MWC wants to do, including tactics that can be discussed in more detail in a separate document. What tactics work? What tactics can you help with?

How can IWM be incorporated into all of the goals and activities of MWC instead of being a project? The draft mission statement (*To empower the community to take action that protects and enhances watershed health*) captures the shift to IWM.

Pete noted that there has been some restructuring of the strategic goals in order to pull out the housekeeping items separately.

Peter noted that this is the first time MWC has tried to develop a strategic plan and thanked Pete and Geoff for their efforts in pulling this together.

2023 Muskoka Watershed Report Card

Peter Sale gave a brief presentation about the 2023 Muskoka Watershed Report Card. His presentation included the structure of the background report, the indicators being analyzed, the issue with the subwatersheds, and Species at Risk.

Of the 14 indicators, seven have quantitative data. The other seven are more narrative or are at a regional level.

The introduction to the background report includes sections on:

- Shifting Baselines and the Muskoka Watersheds
- The Goal
- Objective (1 short paragraph will be formatted as a Box)
- Rationale
- The Muskoka Environment
- The Muskoka Watersheds – Time for Some Geography
- The Muskoka River Watershed, No. 02EB
- The Black-Severn River Watershed, No. 02EC
- Watershed Use
- Past Indicators of Watershed Health
- Indicators Used in the 2023 Report Card
- Watershed Grades

The indicators in the Report Card are:

- Calcium Concentrations in Muskoka's Lakes
- Phosphorus Concentrations in Lakes

- Benthic Macroinvertebrates
- Chloride Concentrations in Lakes
- Fish Populations Across the Region
- Algal Blooms
- Interior Forests
- Fragmentation
- Road Density
- Bird Populations
- Invasive Species
- Species at Risk
- Climate Change
- Ecological Integrity/Cumulative Impacts

Peter discussed the changes to subwatershed boundaries and noted the confusion that MWC will have to address in the background report.

Peter reviewed the Species at Risk (SAR) indicator. He noted that SAR was a narrative in the last Report Card and will be included in the 2023 Report Card despite the lack of data because it is important in context of global biodiversity loss. Nancy Alcock suggested that MWC develop a position paper on Species at Risk so the topic doesn't get buried. Other MWC members were supportive of this idea.

Rupert Kindersley suggested assessing how SAR are doing in Muskoka and using that as an indication of how well SAR are being protected. He noted that something similar is undertaken in the Georgian Bay area.

The SAR chapter for the background report will be circulated for comment.

Project Updates

- **Integrated Watershed Management** – Kevin Trimble reported that MWC is involved in five activities related to IWM right now.
 1. The CRT is working on the outline for an action plan/roadmap and will be pushing to get recommendations prioritized.
 2. Geoff and Kevin are working to update the CRT terms of reference.
 3. The CRT are in the middle of discussion with DMM on how to best coordinate the path forward.
 4. Delegations to municipal councils are being planned.
 5. An article series for The Muskoka newspaper is in development.
- **Algae Monitoring Program** – Peter Sale reported that the annual report is close to being completed. A meeting will be arranged for sampling volunteers and new lakes are being recruited for the program.

- **Communications** – Neil Hutchinson gave a brief presentation outlining MWC's plan to submit a series of newspaper article for The Muskoka newspaper. The proposal includes five themes with 2-5 articles per theme. Tentatively, the themes are:
 - Theme 1: Our Flooding Waters – Welcome to Spring!
 - Theme 2: Looking at Our Watershed
 - Theme 3: The Cost of Management
 - Theme 4: Climate Change, Credibility and the Scientific Method
 - Theme 5: Think Global – Act Local

Chris Cragg volunteered to help with articles. Other volunteers are encouraged to step forward, as well. Peter suggested that MWC hold a workshop for MWC members on how to write articles.

Partner Updates

- **Lake of Bays** – Councillor Mike Peppard reported that a new bill (Bill 92) will give some power back for site plan control within 120 m of water.
- **Georgian Bay Association (GBA)** – Rupert Kindersley reported that GBA has been working closely with Georgian Bay Forever on climate change matters over the years and that David Sweetnam is very knowledgeable on climate change issues and may be a resource for MWC on the topic. Rupert noted that the major organizations that report on expected climate change impacts, such as the UN and federal governments, consistently understate those expected impacts. For instance, the impacts of the exponential increases in methane gas releases from the permafrost in Canada. GBA is about to release a Septic Guide for their residents which examines the challenges of placing septic systems on the Canadian shield where there is often insufficient soil for a Class 4 system.
- **Algonquin Highlands** – Councillor Sabrina Richards reported that the municipality has received MWC's request for a delegation. She noted that the Upper Trent water management authority is reporting that water levels are high but stable, however the upcoming rain event may have an impact. There has been some flooding on roads, which remains a concern. There is some discussion about turning the water authority into a watershed management body.
- **Severn Sound Environmental Authority (SSEA)** – Julie Caley reported that SSEA just hired a new climate coordinator. SSEA will be celebrating the 20th anniversary of Severn Sound being delisted as an Area of Concern this year.

New Business

- None

Next MWC Meeting

MWC's next meeting is scheduled for Friday, May 19th at 1:00 pm in the Pine Room at the District of Muskoka administration building, located at 70 Pine Street in Bracebridge, and through Zoom.

Adjournment

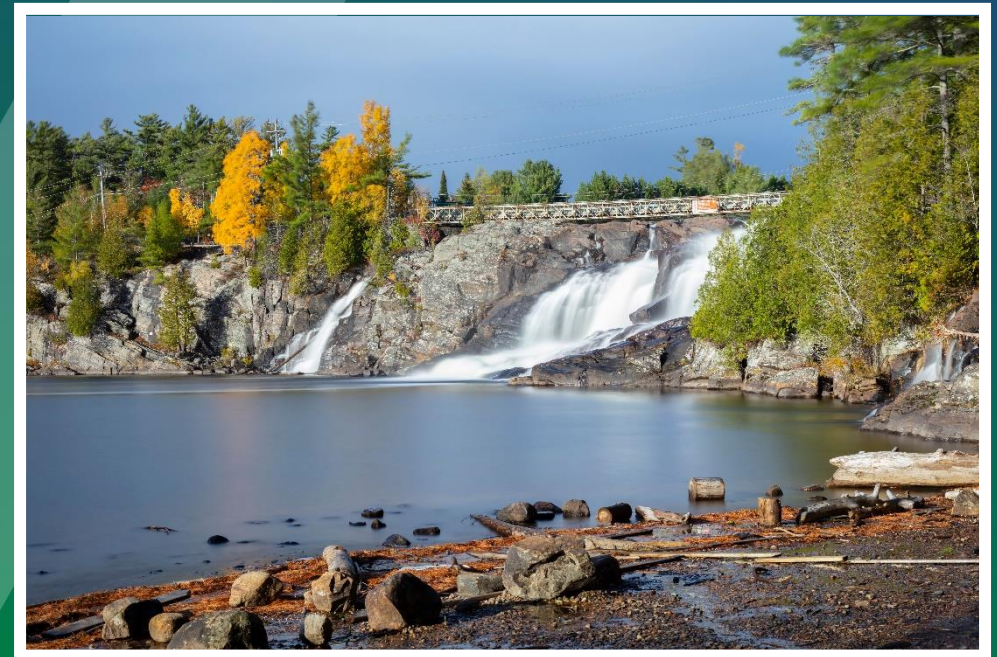
Peter Sale adjourned the meeting at 3:10 pm.

Climate Change in Muskoka

To: Muskoka Watershed Council

By: Lauren Valliere,
Climate Initiatives Coordinator

Date: April 21, 2023



Agenda



1

Background

2

District Initiatives

3

Greenhouse Gas Inventory

4

Climate Action Steering Committee (Corporate)

5

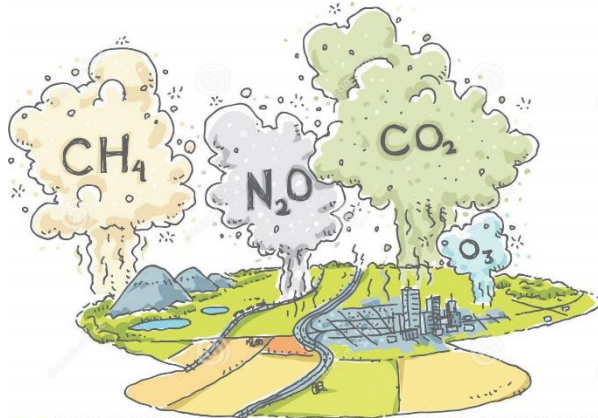
Climate Change Mitigation Taskforce (CCMT)

6

Working Together & Next Steps Discussion



What Causes Climate Change?



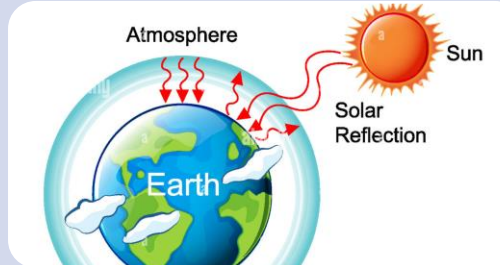
Greenhouse Gas Emissions (GHG)

Carbon Dioxide

Nitrous Oxide

Sulfur Oxide

Chloro-fluorocarbons



GHGs Emitted into the atmosphere from human-caused activities has significantly increased over the past century

Acting like a blanket around the earth, trapping solar energy that has increased the temperature of the atmosphere, known as the greenhouse effect.

Causing a variety of life-altering impacts like extreme weather (heat waves, droughts, flooding, extreme precipitation, etc.)



District Initiatives

In December 2020, the Muskoka District Council officially declared a **Climate Emergency**, deepening the District's commitment to reducing Muskoka's climate change impact, and protecting Muskoka's community, economy, and ecosystems from the impacts of our changing climate.

New Leaf
Climate Action
Plan
Approved 2020

GHG Targets
2030 - 50% Reduction
2050 - Net Zero
Corporate & Community

Regional Climate
Change Adaptation
Plan
Approved 2023

Waste Diversion
Projects
The Path to 60%
Diversion

Green Building
Practices
District New Builds

Fleet
Decarbonization
Project

Community &
Corporate GHG
Reduction Plans

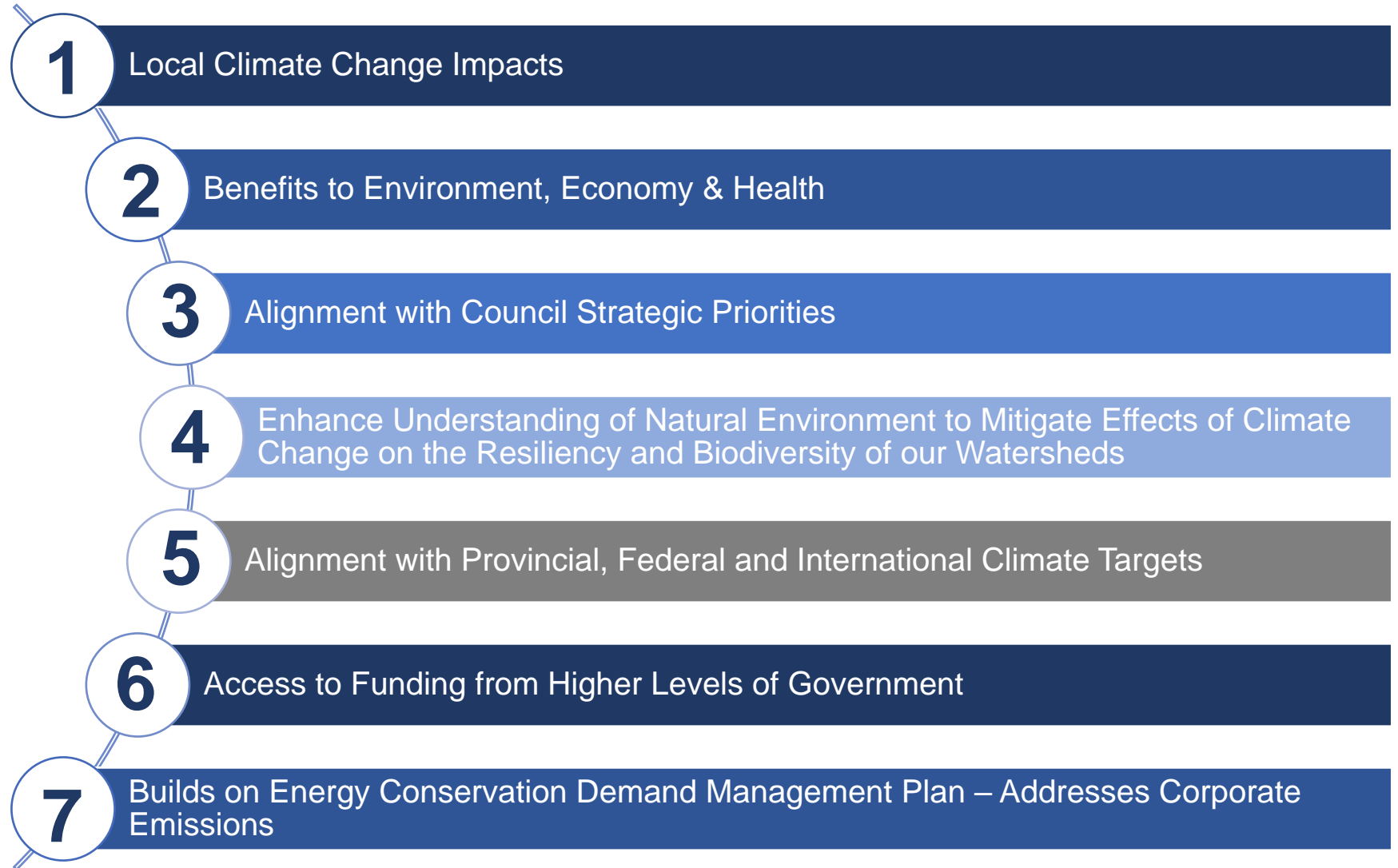
Integrating Climate
Change Impacts
Infrastructure
Construction Projects

Integrated
Watershed
Management
(IWM)

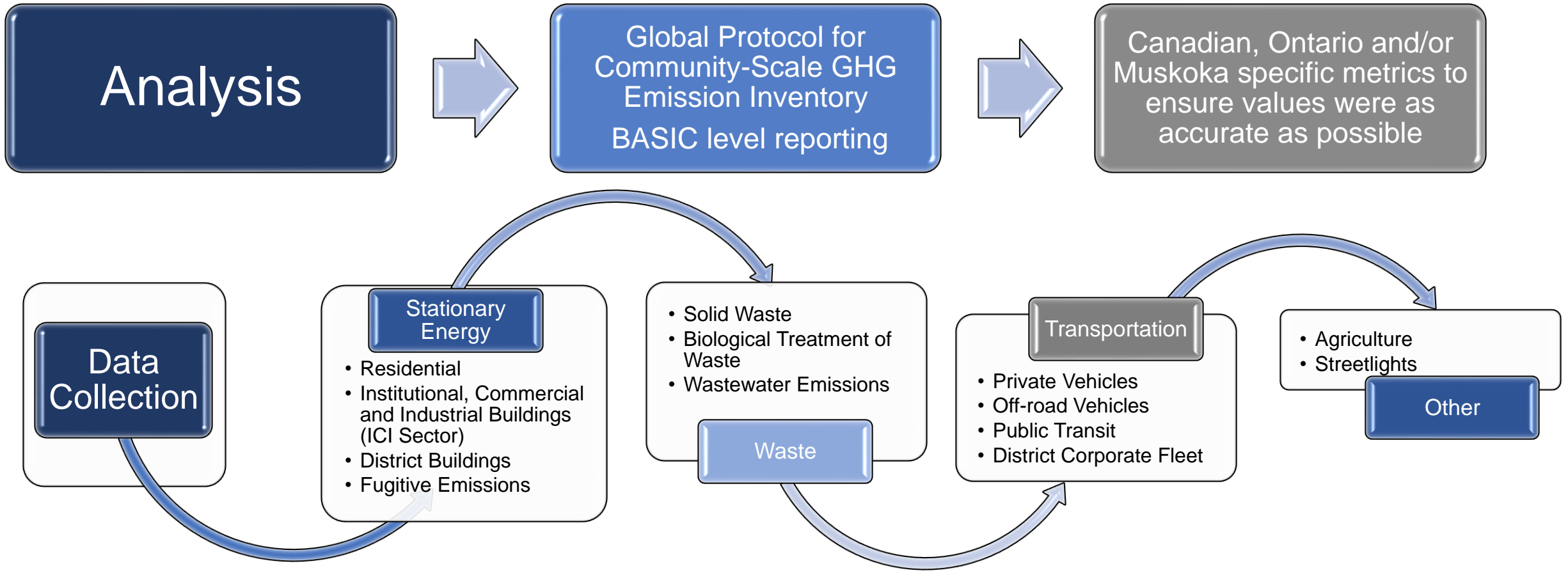
Floodplain
Mapping
(Phases 1 & 2)



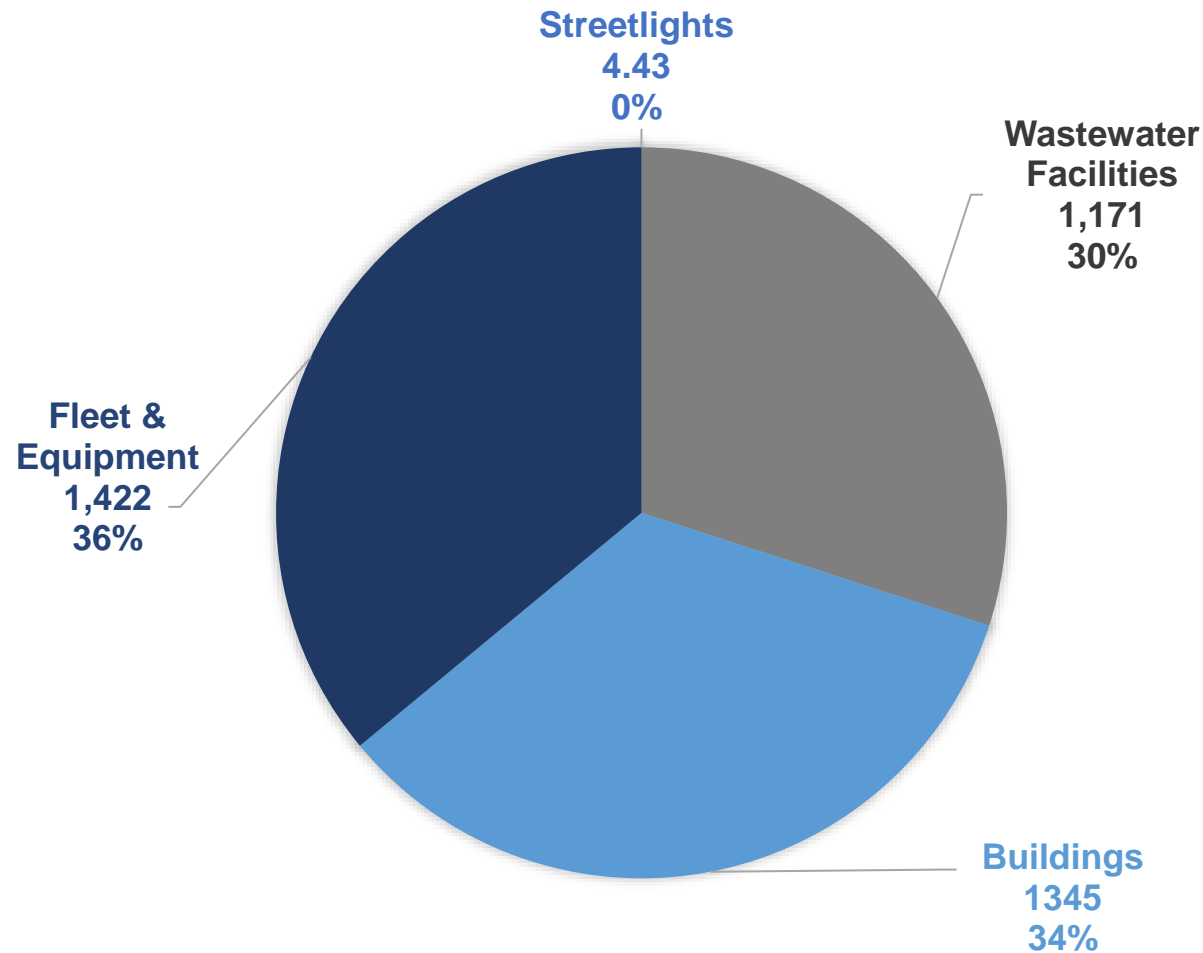
Why? GHG Inventory & Reduction Plan



GHG Inventory - Methodology



GHG Inventory – District Corporate



District Corporate
GHG Emissions
(tCO₂e)
by Subsector (2018)
Pending update in 2023



Key Findings - DMM

Fleet, Wastewater, Buildings
1/3 split

Between 2013 – 2018
47% reduction in GHG
emissions associated with
electricity consumption

Between 2013 – 2018
Overall, 23% reduction in
GHG emissions

These are mainly due to the
change in electrical
conversion factors and
Ontario's Clean electrical
network indicating
importance of outside
factors.

Strategies to reduce the
most GHG emissions, while
saving \$ will be prioritized.



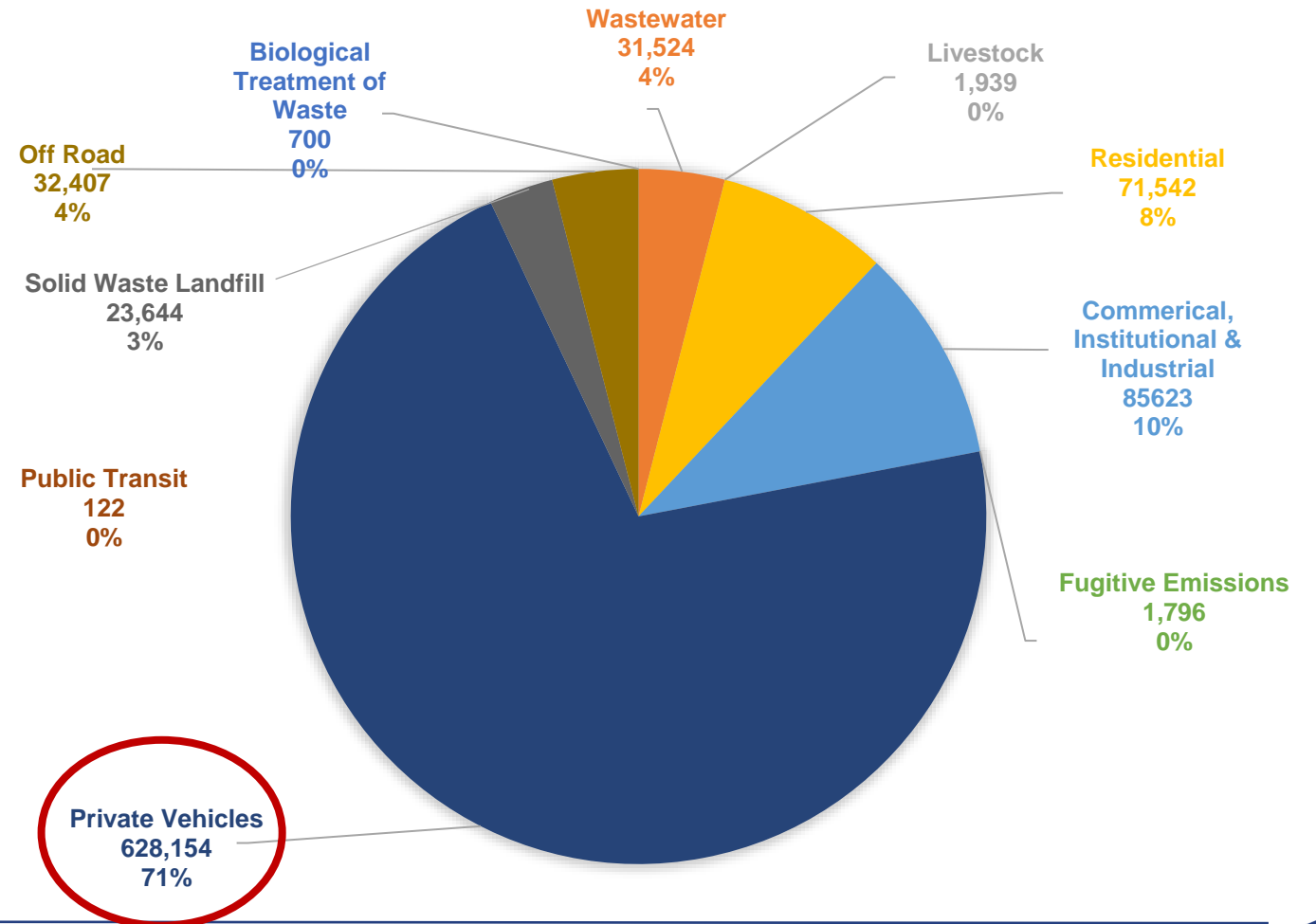
DMM - Corporate GHG Reduction Plan

- **Climate Action Steering Committee (CASC)** = District staff representatives from all departments.
- **Facilitated Meetings:** Regularly throughout 2023. 1st meeting May 2.
- **Purpose:** Gather insight and expertise. Create a Corporate GHG mitigation Plan with actionable insight from each department.



GHG Inventory - Community

Community GHG Emissions (tCO₂e) by Subsector (2018)



Key Findings Community

PRIVATE VEHICLES

70% of GHG
75% including off road vehicles.

COSTS

Transportation (71%),
Residential (17%),
ICI Sector (12%)

\$481.4 million - Muskoka
\$3.329 - Individual

FUEL TYPES

64% gasoline - largest

BUSINESSES & ORGANIZATIONS

10% of Muskoka's total GHG
emissions
54% of GHG emissions in the
building energy sector.

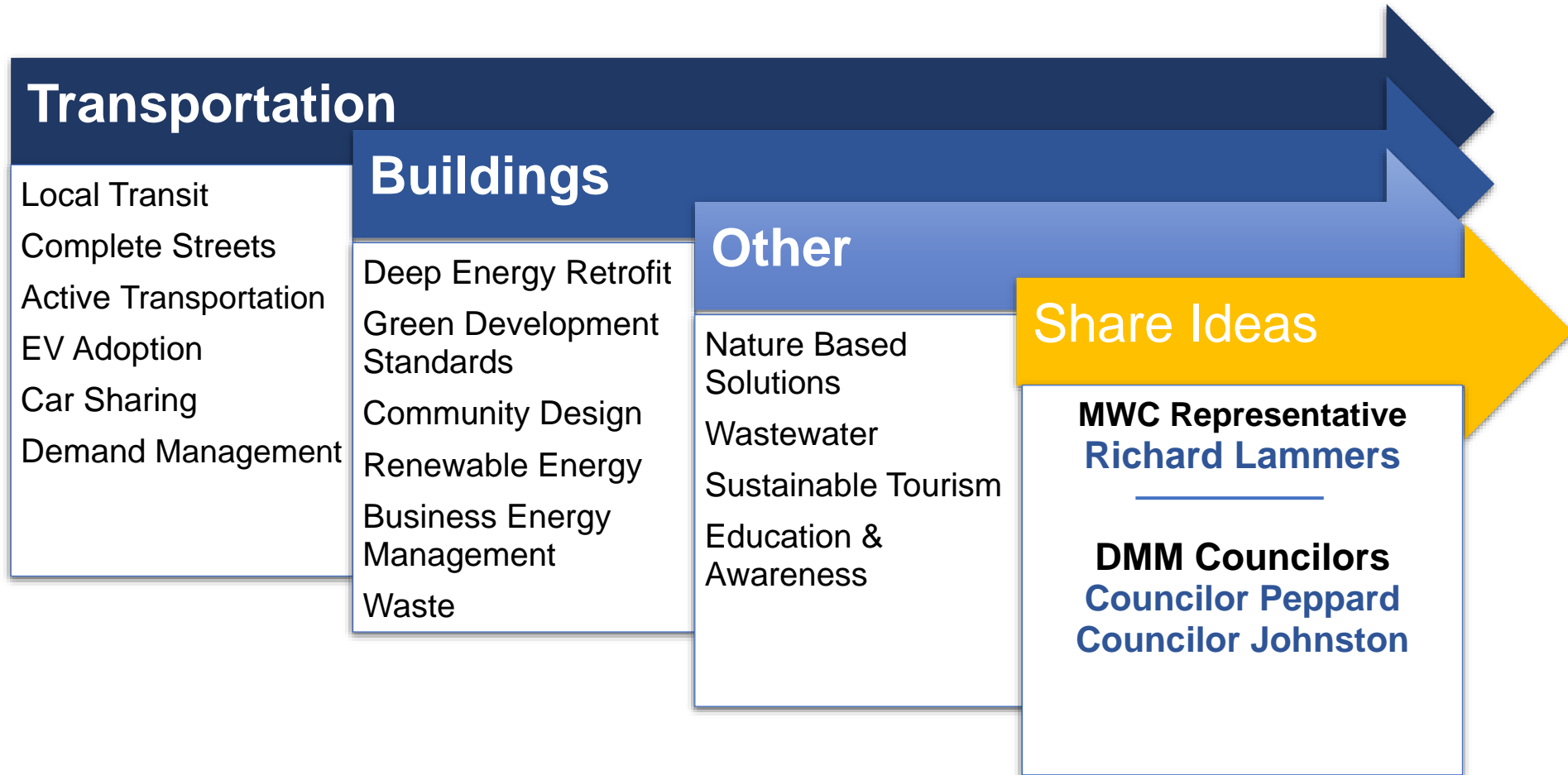


Community GHG Reduction Plan

- **Climate Change Mitigation Taskforce (CCMT)** = 6 area municipalities + 2 District Councilors + students from 3 local high schools + representatives in transportation, manufacturing, retail, tourism, healthcare, power providers + community organizations.
- **5 Workshops:** March, April, May, June and September
- **Purpose:**



CCMT – Areas for Action - Discussion



EnviroHub

Climate Corner

- Monthly Newsletter on Environmental Tips and Information.
- Low Salt Diet
- Reduce Cost for Heating Home
- Preparing for Flooding
- Planning your Garden

Climate Initiative Updates

- New Leaf Action Plan
- Area Municipality Adaption Plans
- GHG Inventory & Reduction Plans
- Climate Change Related Projects

Integrated Watershed Management

- 12 Technical Projects
- Enhance Watershed Health
- Advance IWM approach for Muskoka River Watershed
- Reports, Summary Factsheets and more....

Floodplain Mapping

- Floodplain Maps through the GeoHub
- Preparing for Flooding

GeoHub

- Search and Visualize GIS Data, Maps and Applications

Water Monitoring

- Water Strategy
- Lake Data Sheets
- Land Use Survey Data Sheets
- Biological Monitoring Data Sheets

muskoka.on.ca/en/environment/EnviroHub.aspx



Thank you! Questions?

muskoka.on.ca/en/environment/EnviroHub.aspx