



- **Good afternoon, my name is Mike Puddister**
- **I'm Deputy CAO and Director of Watershed Transformation at Credit Valley Conservation, but most importantly for today, I am Co-chair of EcoHealth Ontario and helping to coordinate this afternoons session**
- **We want to explore with you research, practical experience and leading programs and policies that build on the relationships between greenspace and our health and well-being – how can we collectively use the knowledge to shape a better future for our communities in the face of a changing climate.**

Adapting to Climate Change through the Provision of Greenspace: *What does this mean for Human Health and Wellbeing?*

AGENDA:

- Overview and Introductions
- Brief intro to EcoHealth Ontario
- Video: *How Greenspace can Boost your Health*
- Panel Presentations & Discussion
- Intro to Round Table – *Appreciative Inquiry*
- Break
- Group Discussions
- Call to Action



- The Video was produced for EHO by L' Université dans la Nature (University in Nature), a non-profit organization from Quebec
- Its goal is to promote reconnecting with nature by making **accessible**, **practical** scientific knowledge regarding the benefits of this connection

Beginnings of EcoHealth Ontario

- EHO was formally created in 2014 in response to a need expressed by a number of organizations working in the fields of public health, environment, forestry, conservation and planning
- Although there is growing evidence and awareness of the benefits that healthy ecosystems provide to the health and wellbeing of our communities:
 - We continue to see loss/degradation of greenspace, natural features/functions
 - **Climate change is intensifying pressures on human health & wellbeing**
 - There is increasing prevalence of physical & mental health issues
 - There is inequity in the availability and access to parks & other green spaces
 - Public policy to address these issues is fragmented
- Opportunity = collaboration to reverse these trends

EHO Steering Committee



Credit Valley
Conservation



FORESTS
ONTARIO



UNIVERSITY OF TORONTO
DALLA LANA SCHOOL OF PUBLIC HEALTH



Ontario
Professional
Planners
Institute



OPHA
Ontario Public Health Association
Association pour la santé publique de l'Ontario



TORONTO
Public Health



simcoe
muskoka
DISTRICT HEALTH UNIT



Toronto and Region
Conservation
for The Living City



- ✓ *Plus a growing network of professionals and groups who share our goals*
- ✓ *Supported by Ontario Trillium Foundation, Forests Ontario and our Steering Committee members*

Shared Agenda

*To bring about **policy and program changes** that foster **improved health and wellbeing** outcomes for Ontarians through the provision of **better ecosystem quality, increased green space and enhanced access to nature***





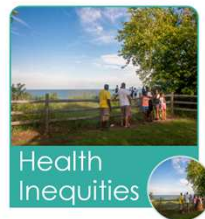
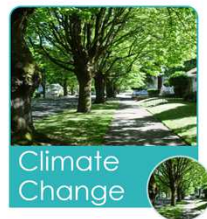
Greenspace includes:

Public spaces such as parks, conservation areas, greenways, trails, urban and rural forests, street trees, community gardens, school grounds, shorelines and ravines

Private and institutional spaces such as gardens, rooftops, cemeteries, golf courses, and outdoor spaces associated with businesses, hospitals, care homes and universities

**All of which have important roles to play
in climate change adaptation and mitigation**

Greenspace Supports Health in Many Ways



Credit: Toronto Public Health

- The first indication of the impact of green space on health came from a landmark 1984 study (Ulrich) that examined the relationship between green space and patient recovery in a Pennsylvania hospital. Patients recovering from surgery who had a view of the natural setting healed faster, had shorter hospital stays and took less pain medication.
- But we now know that greenspace has many links to our health and well-being:
 - Physical health
 - Mental health
 - Air quality
 - Climate change
 - Health Inequities

Our Work

- Research
- Policy
- Communications
- Professional Outreach



Our goal is to provide professionals with tools and resources so that they can influence policy and decision-making. They also use this information to undertake public outreach.

Three workgroups: Research, Policy and Communications

Professional outreach is done by everyone.



Through Literature Reviews, EHO Members have made critical contributions:

- Published in 2015 by David Suzuki Foundation *The Impact of Greenspace on Heat and Air Pollution in Urban Communities* analyzed 102 peer-reviewed studies published over the past five years that explored the role of urban green space in providing cooling effects and reducing air pollution.
- Also in 2015 Toronto Public Health published *Green City: Why Nature Matters to Health* focuses on the impact green space has on physical health, mental health and wellbeing, along with green space features which can benefit health.

(One of our panelists, Tara Zupancic was a principal author of both reports)

Biodiversity and Health: EHO is a workgroup of the Ontario Biodiversity Council. So our Research WG developed a discussion paper on Biodiversity and Health to help develop a shared understanding of the impacts of biodiversity on human health and wellbeing in Ontario and how this knowledge can be leveraged to protect and promote health.

Casebook: 10 topics ranging from street trees to mood walks to watershed management. This collection of case examples is designed as a tool to support educational programs to focus attention on a particular set of environment-health relationships while inspiring additional interest and research on the topic of green spaces and their connection to human health and well-being at a variety of spatial and temporal scales.

Zotero Resource Library: nearly 250 references organized in thematic folders. Can search with key words, author, title etc. Great resource for our steering committee and workgroup members.

Policy

- **Policy submissions by EHO committee members**
 - Coordinate efforts and share information
- **Greenspace and Ecohealth Toolkit: Improving Health and Wellbeing through Greenspace Provision, Design and Access**
 - Public health and municipal planning tools
 - Sixteen case studies
 - Playbook to advance ecohealth and greenspace using collective impact lens

Policy submissions: As a collaborative of government agencies and NGOs, we don't advocate as a group. But we coordinate efforts and share information for individual collaborative members to make policy submissions

- For example, in March Conservation Ontario, an EHO Steering Committee member, with input from other members, provided comments on the newly released Standards for Public Health Programs and Services in Ontario.

Toolkit: Focusses on policy opportunities for municipalities, public health units and conservation authorities. Worked with multi-sector Advisory Group. Input from Latornell and OPPI symposia in 2016 and from OPHA webinar in 2017.

Communications

- Communications strategy
- Postcard about EHO
- Poster for public health sector
- Generic poster & banner for all sectors
- Videos (#1 Premieres Today!, #2 in progress)
- Website, twitter & e-bulletins

Current focus is on **knowledge transfer to professionals** in various sectors and through them to decision-makers

Ecohealth

What's in a Green Space that makes us feel so good?

Features in Green Spaces: Trees, woodlands, meadows, lakes, rivers, streams, scenic views, plants, birds, ponds, gardens, and wildlife.
Types of Green Spaces: Urban and rural parks, conservation areas, community and home gardens, farmland, green roofs, cemeteries, multi-use trails, sportsfields, beaches, playgrounds, etc.

What is Ecohealth?

Ecohealth is the relationship between human and environmental health.



We rely on nature for multiple benefits for both a healthy environment and healthy people.

SOME CHALLENGES



Climate Change Affects Natural Environments and Human Health

- Expected human health impacts include:
- Vector-borne diseases (tick-borne virus and Lyme disease)
 - Extreme weather impacts (drought and stress due to flooding)
 - Temperature-related stress (heat stress, hypothermia)
 - Air quality effects (cardio-respiratory diseases, allergies)
 - Water and food contamination

Better Physical Health

Living Near Trees & Green Space Has Benefits:

People who live in neighbourhoods with a higher density of trees on their streets report significantly higher health perception and less cardio-metabolic conditions.

Trees help to improve air quality and combat climate change. Over 80 years, the average Canadian tree absorbs 200 kg of carbon dioxide - plus oxygen, carbon monoxide, nitrogen dioxide, fine particulate matter and sulphur dioxide.



Better Mental Health

Contact with nature (including trees, lakes, rivers, wildlife, blue skies) can provide stress relief, reduce brain fatigue, enhance the five senses, and improve memory, mood, positive thinking, decision-making ability, mental sharpness, creativity, and attention span.



Five Things You Can Do

- COLLABORATE** across sectors and disciplines (e.g. public health, planning, parks, watershed management, academics) to build awareness and influence the protection and enhancement of green space by highlighting the benefits to human health.
- ADVOCATE** for strengthened green space policies that support healthy communities (e.g. provision of shade, tree reduction, improved air quality, lower temperatures, biodiversity, conservation and access to green space).
- PROMOTE** equitable access to green space with a focus on increasing access to vulnerable populations (e.g. seniors, children and people living in the inner-city).
- INFLUENCE** official plans, watershed plans, strategies and other policies to protect and enhance green space.
- SHARE** information about health evidence for the protection and enhancement of green space.

Who is EcoHealth Ontario?

EcoHealth Ontario is a collaborative of public health, environmental, planning, parks & education sectors who:

- ✓ Raise awareness of the public health benefits of a healthy & sustainable environment
- ✓ Build a common vision around ecohealth
- ✓ Influence policy
- ✓ Develop and share ecohealth research, information, and outreach tools



Professional Outreach

- Realizing the Health Benefits of Green Spaces in a Changing World, March 2015
- Ontario Biodiversity Summit, May 2015
- OPPI Conference, Oct 2015
- Latornell Symposium, Nov 2015
- Parks and Recreation Ontario, April 2016
- OPPI Symposium, Oct 2016
- Latornell Symposium, Nov 2016
- Ecohealth Policy Toolkit Webinar, Jan 2017
- Forests Ontario AGM, Feb 2017
- The Ontario Public Health Convention, March 2017
- Grey to Green, May 2017
- **Ontario Climate Change Symposium, May 2017**

And finally outreach to professionals, such as yourselves, is critical if we want to see policy and program improvements on the ground

Five Year Strategic Plan

Collaboration

- Strengthen work with existing partners
- Develop relationships with new partners

Resources

- Ecohealth charter or declaration
- Business case for ecohealth and greenspace
- Ecohealth as a climate change adaptation

Policy & Design

- Municipal and Provincial
- Education; kids and nature
- Health care institutions

Knowledge Transfer

- Website & social media
- Online curated library
- Conferences, workshops, webinars

These four themes are obviously inter-connected.

The nature of the collaborative work will depend on the specific resources, policy and design tools we're working on.

Later on in this session we will be seeking your input to our Call to Action.



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ecohealth-ontario.ca
and
[@OnEcoHealth](https://twitter.com/OnEcoHealth)

Thank you!