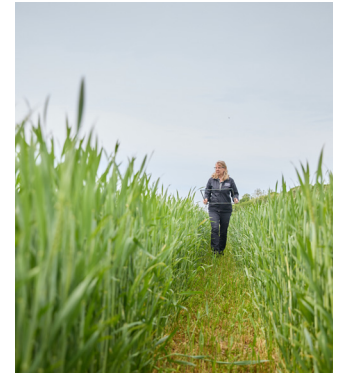


Healthy Soils, Sustainable Future

FARMLAND, LOCAL GOVERNMENTS, AND THE SDGs

When farmlands have healthy soils, they are a strategic and essential infrastructure for sustainable communities. Not only do they produce food, fuel, and fibre, they also manage water, regulate climate, and support biodiversity.

This document highlights the ways that healthy agricultural soils help municipalities align with the **Sustainable Development Goals (SDGs)** of the United Nations. It also highlights how farmers and municipalities are partners in meeting those goals for the benefit of the community as a whole.



STRATEGIC INFRASTRUCTURE



SDG 2: Zero Hunger

End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

Ontario has over half of Canada’s best “Class 1” farmland, supporting 48,346 farms that produce grains, vegetables, fruits, and flowers for our communities and economy. This vital land is disappearing at an alarming rate, highlighting the urgent need to protect it for the food security of future generations.



2.8 MILLION ACRES have been lost to development in **35 years**

That’s **18%** of Ontario’s farmland

Source: OntarioFarmlandTrust.ca/about/farmland-loss/

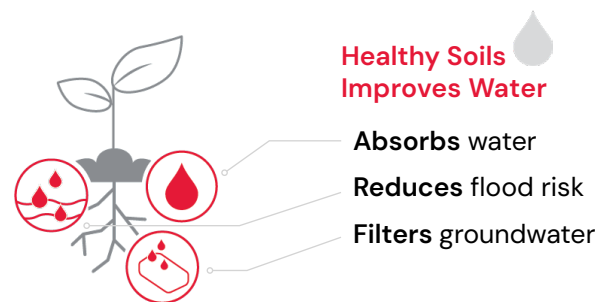
WATER MANAGEMENT



SDG 6: Clean Water and Sanitation

Ensure availability and sustainable management of water and sanitation for all.

When soil is healthy, it can resist erosion and stay out of waterways. Healthy soils are also better able to take-in water like a sponge, allowing water to be filtered before entering groundwater or waterways. This improves water quality and reduces the risk of flooding in high intensity storms.



Healthy Soils Improves Water

- Absorbs water**
- Reduces flood risk**
- Filters groundwater**

SHARED GOALS

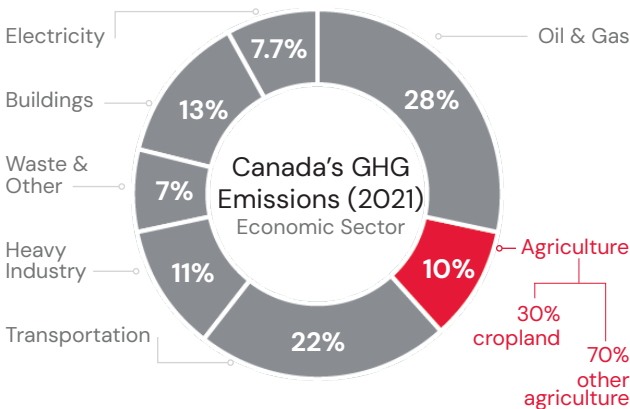
NATURE-BASED SOLUTIONS



SDG 13:
Climate Action

Take urgent action to combat climate change and its impacts.

Soil plays a vital role in climate action by storing carbon, reducing greenhouse gas (GHG) emissions, and helping food systems adapt to changing climate.



A **1%** increase of soil organic matter stores an additional **10 tonnes** of carbon per acre.



When municipalities support farmers' use of practices that also support climate action, it creates a triple win.

Practices include:

- Following the 4Rs of fertilizer use
- Use of cover crops
- Diverse crop rotations

Learn More from this Series:

- **Healthy Agricultural Soils:** A Conversation Guide
- **Healthy Soils, Strong Returns:** Including Soil Health in the Conversation
- **Healthy Soils, Healthy Waters:** How Farmers and Local Government are Partners in Water Management

Soils at Guelph: Advancing and mobilizing knowledge so soils are optimally managed in Ontario and beyond.

BIODIVERSITY



SDG 15:
Life on Land

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

A single teaspoon of healthy soil contains more living organisms than there are people on Earth.

Earthworms, fungi, bacteria, insects, and other microorganisms form a living ecosystem that drives nutrient cycling, breaks disease cycles, and creates an ideal environment for plant roots. This underground life powers all other soil functions, supporting crops, sequestering carbon, managing water, and ultimately sustaining human life.

Soil without biological activity is lifeless dirt.

WHAT'S NEXT? ▶ Local governments can:

- **Recognize soil as a living, dynamic ecosystem** that supports vital ecological functions and underpins the social and economic well-being of both rural and urban communities.
- Use **land-use planning** to protect healthy soils and safeguard our future food supply.
- **Invest in incentives** that reward farm operations for implementing management practices that build and sustain healthy soils.

DIG DEEPER
Visit our website for additional information