



December 22nd, 2017

Attn:

Agricultural Soil Health and Conservation Strategy
Ministry of Agriculture, Food and Rural Affairs
1 Stone Road West, 2nd floor
Guelph, ON N1G 4Y2

RE: Feedback on the **Draft Agricultural Soil Health and Conservation Strategy for Ontario**

From:

Soil Health Working Group
Ecological Farmers Association of Ontario

The Ecological Farmers Association of Ontario (EFAO) is an educational charity devoted to the practice and advancement of ecological agriculture. We are a membership organization with over 500 members across Ontario. Established in 1979, the EFAO was formed by a group of farmers around their shared commitment to sound farming practices such as cover cropping, crop rotations, composting, soil conservation, appropriate tillage and promoting biodiversity. For 35 years, EFAO has provided mentorship and training opportunities for new and established farmers across Ontario including workshops, farm tours, an advisory service, print newsletter and an annual conference. The EFAO also runs a Farmer-led Research Program which supports on-farm trials researching soil health and conservation strategies.

EFAO's Soil Health Working Group is an ad-hoc group of volunteer members with expertise and passion for soil health and conservation. The Working Group has put together the following submission to provide feedback on the draft **Soil Health and Conservation Strategy for Ontario**.

The original Goals and Objectives remain helpful; but recent Proposed Actions have been seriously weakened.

- This is the result of an inherent problem with consensus decision-making – solutions are politicized and simplified to the lowest common denominator.
- Clearly stating the seriousness of soil health problems is needed to engage readers. "82% of farmland has been losing SOM" and "54% of farmland is at serious risk of erosion" have been replaced with ambiguous language.
- The report should also state that increases in soil organic carbon come from atmospheric CO₂; farmers must become aware they can play an important role in combating climate change.
- Setting targets for 2030 is too far away to compel initiating change; there needs to be stepped interim targets to result in steady adoption of new methods.
- Linking Soil Health with its wide-ranging benefits is not emphasized in the most recent draft [i.e. reducing extreme weather soil degradation, increasing soil biodiversity, retaining farmland, reducing farm inputs, improving farm profitability, increasing food security, improving nutrient density, reducing food waste, and increasing water retention (and release)].

Must move away from outdated BMP's that rely on healthy soil (which is no longer the norm).

- Quickly eliminating bare winter soil is an easy-to-adopt first step.

- This will start the process of increasing soil biological activity.
- This will immediately reduce the risk of soil erosion.
- Growing winter crop crops is relatively easy for farmers to implement.
- Establish more aggressive targets for % bare winter soil, % SOM, and % topsoil loss.
 - To implement this, encourage farmers to develop their own multifaceted Systems Approach to reach these targets by:
 - Farmers self-determine the adaptive management (using farmer-led research) with cooperation from government researchers, universities and colleges, conservation authorities, and international partners.
 - Promoting and funding Peer-to-Peer communication to share experiences with various methods and practices.
 - Provide help with the design and testing of management impact on soil health and Costs of Production analysis that will instill confidence to farmers they are achieving positive results.
 - Helping to disseminate the systems and practices that farmers find best suited for their own sector and region.
 - Establish demonstration plots where local farmers can observe results.
 - Consider the efficient early First Nations' system of Savannah Agroforestry.
- Provide financial incentives [penalties] for reaching [failing] Soil Health improvement targets.
 - Governments need to take a lead in reversing long-term harmful trends.
 - Join with the International "4 per 1000 Initiative" to increase SOM by .4%.
 - EFAO members have been researching soil health for decades. They should be recognized for this expertise; and not be made ineligible for future financial supports.
 - SOM is an inexpensive, commonly used, and reliable indicator of Soil Health.
 - A formal measurement of SOM every 5-years could be a reliable incentive.
 - Rewards should be for measurable results; not for merely following BMP's.
 - Recognize that SOM primarily consists of soil creatures' dead bodies; not the green organic material which feeds them.
 - To encourage landowner participation, Farm Property Tax Rebates could be used.
 - However, municipalities should not incur any costs for these incentives.
 - Conduct research to confirm that Soil Health:
 - Enhances nutrient cycling which in turn reduces fertilizer requirements.
 - Increases water retention in dry years; and water release in wet years.

The Agriculture Community should not be responsible for the full cost for building Soil Health.

- Activities of agricultural non-profits, especially those that promote Peer-to-Peer networks, should be funded and their findings shared widely.
- Adding proactive links for Soil Health into existing EFP, FHC, FHIP, and CAP (GF2) programs.
- Report on Soil Health's wide-ranging benefits that serve all sectors of society.
- Publicize the benefits of Soil Health so that urban taxpayers are comfortable sharing the cost.
 - Groundwater is cleaner so that water purification costs can be reduced.
 - Greenhouse Gas commitments are supported by carbon sequestration into our soils.
 - Extreme weather event flooding and washouts are reduced by more resilient soil.
 - Draught and flooding damage are reduced by increased water retention by healthy soils.
 - Food Security is increased by more consistently successful local harvests.
 - Phosphorous and Nitrous Oxide pollution reduced by P and N retention in healthy soil.

- Waste Reduction enhanced with longer shelf-life from less reliance on N fertilizers.
- Nutrient Density with more trace minerals for vitamins, enzymes, and antioxidants.
- Public Health improves by choosing flavourful vegetables instead of “junk” food.
- Visually appealing farms will attract more urban and tourist visits.
- More consistently profitable farms will require fewer taxpayer supports.

Thank you for taking the above recommendations into consideration.

Sincerely,

Angie Koch

Board President, Ecological Farmers Association of Ontario
On behalf of EFAO's Soil Health Working Group