

MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS

Northern Livestock Pilot Action Plan

Table of Contents

- 1. A Message from the Honourable Jeff Leal
- 2. Stakeholder Messages
- 3. Introduction
- 4. Vision
- 5. Overarching Government Commitments
- 6. Guiding Principles
- 7. Study Area
- 8. Sustainability Objectives
- 9. Creating the Environment for Success
- 10. Guidance
- 11. Communication of Progress
- 12. For More Information
- 13. Appendices

A Message from the Honourable Jeff Leal

Expanding opportunities for agriculture in Northern Ontario and building up the Northern economy is a priority for our government. That is why I am very pleased to release the Northern Livestock Pilot Action Plan.

Over the past year and a half, my ministry has been working in partnership with the Beef Farmers of Ontario and northeastern Ontario municipalities to create an action plan that supports sustainable, meaningful economic development opportunities that will help diversify and expand the livestock sector in Northern Ontario.

I'm pleased that by working together we have developed a plan that will help us achieve our collective goal of expanding livestock farming in Northern Ontario in an environmentally, social and economically sustainable way. Our collective efforts focus on land assembly, research, and developing information resources and tools.

Livestock production represents a unique economic development opportunity for Northern Ontario, and I believe the region is well positioned to take advantage of this growth opportunity. The foundation for success of the Northern Livestock Pilot is grounded in our guiding principles: proponent driven and government-enabled; a whole-of-government approach; responsive to regional challenges and opportunities; outcome oriented; and a commitment to reconciliation with Indigenous peoples.

By 2050, our global population will rise to nine billion people and Ontario will be called upon to step up to the challenge of helping feed the world. In order to meet this challenge, we need to think boldly and ambitiously. Expanding opportunities for farming in Northern Ontario will help us step up to meet the challenge of providing food for a growing population, support food-related jobs and boost regional economic growth.

I look forward to continuing to work with our partners - Indigenous communities, municipal governments and the livestock sector - to continue to grow Northern Ontario's agri-food sector for the benefit of everyone.

Sincerely,

Jeff Leal

Minister of Agriculture, Food and Rural Affairs Minister Responsible for Small Business

Message from the Beef Farmers of Ontario

Beef Farmers of Ontario is committed to identifying ways to increase livestock production in the Great Clay Belt. Increased beef production in the province will not only benefit our farmers and industry, it will play a critical role in strengthening regional food systems and the sustainability of our environment and communities.

Beef farmers take their role as environmental stewards very seriously, because the pasture and forages they manage do more than produce beef. They support wildlife habitat, biodiversity, carbon sequestration, soil health, and moderation of nutrient run-off. Northern Ontario provides the ideal climate and landscape for grasslands. Land that is too rocky, cold or wet to grow crops or produce other food can support grazing livestock and contribute to healthy ecosystems and communities.

Expanding beef production in Northern Ontario makes sense if we're going to feed our communities in an environmentally responsible way, while also supporting local economies.

Message from the Northeast Community Network

The Northeast Community Network (NeCN) is committed to collaborative agri-food economic development in the Cochrane District by taking a leadership role to advise and take action on agri-food opportunities and issues. The NeCN and its municipal members understand the sector's potential and the need for a diversified agri-food production and transformation system for the sustainability of the sector. The Pilot will unite us all and create long lasting results benefiting multiple stakeholders in Northern Ontario for decades to come.

Introduction

The United Nations is projecting that by 2050 the world's population will reach 9.1 billion, 70 percent of which will live in urban areas benefitting from rising income levels. In their "How to Feed the World in 2050" report, the Food and Agricultural Organization of the United Nations has concluded that in order to feed this larger, richer, and more urban population, net food production must increase by 70 percent.

Northern Ontario is expanding and diversifying opportunities beyond natural resources, positioning itself to be a key player in the growth of strong local and regional food systems and a strategic place where food will be grown to feed the world in the years ahead. Northern Ontario's agriculture, aquaculture, and food processing sector provides over 4,000 jobs. Primary agriculture and aquaculture alone generate \$230 million in revenue. The government recognizes this unique opportunity to grow this sector in Northern Ontario, and wants to ensure that an action plan is in place to support future growth.

Building on the strategic framework of the <u>Growth Plan for Northern Ontario, 2011</u> https://www.placestogrow.ca/index.php?

option=com_content&task=view&id=53&Itemid=65&utm_source=shortlinks&utm_medium=web&utm_campaign=cuud>, and the Northern Ontario Agri-Food Strategy, the Northern Livestock Pilot in Ontario's Great Clay Belt aims to build strong, healthy and vibrant communities. The Pilot will establish partnerships to develop the livestock sector in Northern Ontario and utilize environmental and production practices that go above and beyond current best management guidelines.

In May 2017, the Minister of Agriculture, Food and Rural Affairs, the Honorable Jeff Leal, brought together industry members, northern municipalities, Indigenous leaders, local farmers, subject matter experts, researchers, and other members of the community to launch the Northern Livestock Pilot in Timmins, Ontario. This event included presentations by the Beef Farmers of Ontario, the Northeast Community Network representing the nine municipalities along the Highway 11 corridor, and the Ontario Ministry of Agriculture, Food and Rural Affairs to share a joint vision to expand the livestock sector in Northern Ontario. At the event, participants heard from Indigenous representatives, stakeholders, and partners about the importance of knowledge and education; youth engagement, networks and partnerships, research, and communication of progress. This input has been reflected throughout the Action Plan.

Ontario's Northern Livestock Pilot is an opportunity to test how livestock agriculture can be sustainably expanded in Northern Ontario. The Pilot sets the foundation for long-term success by learning from research, developing information resources and skills development, and building meaningful relationships with Indigenous communities.

Vision

Northern Ontario's Agri-Food Strategy was developed as part of the government's <u>Growth Plan for Northern Ontario, 2011</u> https://www.placestogrow.ca/index.php?option=com_content&task=view&id=368&Itemid=65. Building and diversifying the northern economy by expanding agricultural opportunities in the North is a priority for the government. Achieving success requires a proponent driven, government enabled approach. Key drivers include producers, agri-food businesses, Indigenous communities, and municipalities.

The Northern Livestock Pilot Action Plan is a partnership between the Beef Farmers of Ontario, municipalities, and the Ontario government, which aligns important initiatives led by project partners to achieve specific outcomes. Through collaboration, proponents and government will build healthy and vibrant communities, establish partnerships to sustain livestock sector development, and showcase and utilize environmental and production practices in Northern Ontario above and beyond current best management practices.

Overarching Government Commitments

The <u>Growth Plan for Northern Ontario https://www.placestogrow.ca/index.php?</u>
<a href="mailto:option=com_content&task=view&id=53<emid=65&lang=eng">option=com_content&task=view&id=53<emid=65&lang=eng, released in 2011, is Ontario's strategic framework that will guide decision-making and investment planning in Northern Ontario during a 25-year period, to 2036. The plan focuses on ways to leverage social, economic, and natural capital on approaches to attract a growing range of opportunities to the

North. It is a plan to stimulate growth by creating a diversified northern economy, stronger communities, a healthy environment and a skilled, adaptive and innovative workforce. Through the Northern Livestock Pilot, the government will build on the foundation of the Growth Plan for Northern Ontario by working with industry, Indigenous communities, and municipalities to unleash the full potential of the North.

The agriculture, aquaculture and food processing sector was identified as one of 11 existing and emerging priority economic sectors in the Growth Plan. The Northern Ontario Agri-Food Strategy's goal of strengthening the agriculture, aquaculture and Food sector revolves around facilitating development and growth for the sector in Northern Ontario in an environmentally, socially, and economically sustainable manner. It provides a framework to focus and align government support where it is needed by identifying and acting on opportunities. The Northern Livestock Pilot is an opportunity to lead by testing approaches that can be replicated across the North.

The Political Accord between First Nations and the Government of Ontario

https://news.ontario.ca/mirr/en/2015/08/political-accord-between-first-nations-and-the-government-of-ontario.html
creates a formal bilateral relationship framed by the recognition of the treaty relationship committing the parties to work together on issues of mutual interest. Additionally, the http://www.metisnation.org/programs/education-training/mno-youth-update/mno-supports/the-mno-ontario-framework-agreement/> established a collaborative relationship that reinforced the commitment of both parties to work together to improve the well-being of communities while building knowledge and understanding of Métis culture among all Ontarians. The Northern Livestock Pilot is committed to improving relationships with Indigenous communities.

Guiding Principles

The Northern Livestock Pilot will create sustainable, meaningful economic development and diversification opportunities in the North by following the four guiding principles outlined in the Northern Ontario Agri-Food Strategy.

First, the Northern Livestock Pilot will be **proponent-driven and government-enabled**. Communities, businesses, and industry groups are driving growth through early initiatives such as commissioning studies, planning, and identifying potential partners and resources. Government will enable proponents by providing supports such as advisory services, research, and information resources.

Second, the Pilot will be **responsive to regional challenges and opportunities** by ensuring that results and findings from research and other activities undertaken as part of the Northern Livestock Pilot are applicable across Northern Ontario to respond to the differing regional conditions, needs and priorities of this diverse landscape.

Third, the Pilot will be outcome-oriented by identifying and tracking progress towards tangible outcomes and timelines.

Fourth, the Pilot will be enabled by a **coordinated**, **collaborative whole-of-government approach** by Indigenous, municipal, and provincial governing bodies putting all forms of governance on equal ground in developing the livestock sector in the North.

The Province is **committed to Reconciliation with Indigenous Peoples**. Through the Northern Livestock Pilot, government is seeking to build meaningful relationships with Indigenous communities and explore their potential interest in this initiative.

Study Area

The Northern Livestock Pilot study area is located in Northern Ontario's Great Clay Belt along the Highway 11 corridor between Cochrane and Hearst, which has year-round accessibility. This area is well suited for low-density, forage and pasture-based livestock production and has a significant amount of land that was previously in agriculture. The region has large areas of potentially fertile soils which formed on sediments that were deposited in a series of glacial lakes around 8,000 years ago.

This area offers considerable potential for agricultural expansion, with increasing land productivity as a result of longer growing seasons and warmer temperatures. While the Pilot has a focused study area, lessons learned from the Pilot will be applicable across Northern Ontario.

Sustainability Objectives

The success of the Northern Livestock Pilot will be measured by the achievement of objectives that balance sustainable environmental, social, and economic priorities.

Environmental Sustainability

Ontario farmers are good stewards of the land, and Ontario has a strong framework in place to ensure the sustainable use of its ecosystems and resources. It is essential to understand how agriculture can thrive in the northern landscape in harmony with the environment, and how lessons learned in other parts of the province can inform people and communities that are new to farming in Northern Ontario. A priority for the Northern Livestock Pilot will be to identify and understand the opportunities and impacts from a Northern Ontario perspective which could lead to the development of best management practices specific to this region's conditions. Research activities in support of achieving environmental sustainability objectives are:

Greenhouse Gas (GHG) Lifecycle Analysis and Mitigation Research: This one-year, Growing Forward 2* funded research project, launched in January 2017 will model the GHG emissions from establishing a cow/calf beef operation in the Great Clay Belt and identify what practices or mitigations could reduce these GHG impacts. This project is being led by the University of Guelph.

*Growing Forward 2 is a federal-provincial-territorial initiative that encourages innovation, competitiveness, market development, adaptability and industry sustainability in Canada's agri-food and agri-products sectors.

Research on Baseline Soil and Water Data and How Dynamics Change Through Land Conversion: This research will advance the understanding of the physical, biological and chemical processes of soil, soil and water chemistry, and predictive water modelling resulting from land use changes in the Great Clay Belt. A call for proposals was issued in May 2017 through OMAFRA's New Directions program. Research activities will begin in early 2018 and take up to 36 months to complete.

Research on Changes in Soil Carbon and Greenhouse Gas Dynamics Through Land Conversion: This research will examine how soil carbon, nutrient dynamics and greenhouse gas emissions will change when land is converted from forest to agriculture along the Highway 11 North corridor. In addition, the soil types found in the Northern Ontario forests may shift in uncertain ways that should be explored. A call for proposals was issued in May 2017 through OMAFRA's New Directions program with proposals. Research will begin in early 2018 and take up to 36 months to complete.

Northeastern Ontario Soil Maps Updates: To further support agricultural development in Northern Ontario, OMAFRA is undertaking updates to select legacy soil maps in Northeastern Ontario. Updates are being completed through a combination of desk-top data review, standardization, and limited field surveys backed up by remote sensing, LiDAR, and other environmental data. To date 32 maps covering the Cochrane to Hearst corridor have been updated and released via Land Information Ontario. An additional 33 legacy soil maps covering Timmins to Temiskaming Shores are being updated and will be released in 2018. Additional soil sampling and testing is being carried out to develop baseline information for soil health. LiDAR data is also being captured for the Cochrane to Hearst corridor to further support soil map updates and other land use activities.

Pilot Sites: The purpose of establishing pilot sites is to support expansion of the sector in the north and provide opportunities for research and demonstration that can inform future development of the sector. The intent is that the pilot sites, if approved for disposition, be ultimately held privately for livestock farming. As part of the Pilot, eight proposed Crown land Pilot sites are being sought for livestock operations. Proposed Pilot sites would also provide an opportunity to showcase and utilize environmental and production practices in Northern Ontario above and beyond current best management guidelines.

Social Sustainability

Expanding the livestock sector in Northern Ontario will help to build strong communities and contribute to the quality of life for all its citizens by creating opportunities for Northern Ontario residents, Indigenous communities, and businesses to strengthen local food systems. This includes improving access to locally sourced meat products and opportunities for skills development and training throughout the value-chain.

Developing strong relationships between industry and communities will be critical to success. Feedback from all communities in the North is important to ensure that this approach is successful. As part of this consultative approach, the Ontario government will continue to engage with Indigenous communities to identify opportunities, relationships, and respect Indigenous rights through consultation and dialogue.

Key Pilot activities undertaken in support of social sustainability objectives will include:

Research on Barriers to Establishment of Livestock Farms in the Great Clay Belt: This research will identify the barriers which impede individuals from becoming involved in livestock production along the Highway 11 North corridor and how they can be addressed. A call for proposals was issued in May 2017 through OMAFRA's New Directions program. Research activities are expected to begin in early 2018 and will take up to 18 months to complete.

Guide for Crown Land Disposition for Agriculture: A guide will be developed to provide information to farmers or those interested in applying for Crown land to be used for agriculture. This guide is expected to be available in early 2018.

Beefnorth.com Website: Beef Farmers of Ontario has developed a website for promoting the opportunities for beef production and cow herd expansion in Northern Ontario. Beefnorth.com shares information, resources and tools with producers and other stakeholders, including videos, economic models, blogs, event listings, regional information, and more. This project was funded in part through Growing Forward 2 (GF2).

Beef North Video Series: Beef Farmers of Ontario created a series of on-line videos on beef farming in Northern Ontario that highlight the opportunity for agriculture in the region and share information on production in the North. Topics include: animal health and care; on-farm infrastructure; access to markets; communities; and lifestyle. This project was funded in part through Growing Forward 2 (GF2).

Bus Tours for Interested Producers and Students: Tours to northern communities and farms, led by Beef Farmers of Ontario, have promoted opportunities for beef production in the region. Students and new or expanding producers from outside Northern Ontario have participated in tours from 2016-2017. This project was funded in part through Growing Forward 2 (GF2).

Improving Relationships with Indigenous Communities: Expanding economic opportunities through agriculture represents an opportunity not only for municipalities in the North, but also for Indigenous communities. Municipalities' efforts may be bolstered by support from Indigenous communities in their regional approach. Indigenous groups have expressed interest in agricultural production.

Introduction to Beef Cattle Farming Training Program for First Nations: A hands-on training program in Kapuskasing for First Nations was developed by Collège Boréal and Beef Farmers of Ontario. The course offered an initiation into the key principles of beef production, giving participants skills that will help them work at beef operations or consider the possibility of starting their own farm. The course was first offered in the summer of 2017 with a second session beginning in January 2018. This project was funded in part through Growing Forward 2 (GF2).

Land Access and Crown Land Policy Research: Policy research on obstacles and opportunities for accessing Crown land for agricultural use in Ontario was conducted in 2017 by Beef Farmers of Ontario. The project included a jurisdictional scan of other policies in Canada. This project was funded in part through Growing Forward 2 (GF2).

Producer Outreach and Communications: Beef Farmers of Ontario has delivered various events, communication materials and presentations that highlight the opportunities for beef farming in Northern Ontario. Producer outreach has targeted interested and expanding producers, as well as the next generation of young producers. This activity included the development of mentors in Northern Ontario who can answer questions or support those who are new to farming in the region. This project was funded in part through Growing Forward 2 (GF2).

Pilot Sites: The purpose of establishing pilot sites is to support expansion of the sector in the north and provide opportunities for research and demonstration that can inform future development of the sector. The intent is that the pilot sites, if approved for disposition, be ultimately held privately for livestock farming. An important aspect of the Crown land application process for the Northern Livestock Pilot is engaging those who are directly impacted or have an interest in the pilot sites. Notifications and consultations are under way in accordance with the Ontario Ministry of Natural Resources and Forestry's Resource Stewardship and Facility Development Class Environmental Assessment (RSFD Class EA), the Crown's Duty to Consult (DTC). In addition, the proposed sites provide an opportunity for partnership and collaboration amongst a range of interested parties.

Economic Sustainability

Agriculture has the potential to contribute to a more stable and diversified northern economy. While the forestry, mining, manufacturing and tourism industries are important for Northern Ontario, research and experience in other parts of the province suggest that agriculture can not only successfully coexist with these sectors, but may also offer opportunities for additional growth through the region. The Northern Livestock Pilot aims to develop a model and set the foundation to create new economic opportunities by generating stable jobs to retain youth and attract new residents, expand related industry value chains, promote more efficient development and optimization of regional infrastructure, which in the long run will foster greater confidence to invest in Northern Ontario. Economic sustainability will be achieved through these actions:

Business Information Bundle (BIB) - How to start a farm in Northern Ontario: To complement the online training program on how to start a farm in Northern Ontario, this BIB groups information resources and is located on OMAFRA's website.

Dairy-Beef Recommendations for Northern Ontario: Beef Farmers of Ontario investigated a dairy-beef production and marketing model in Northern Ontario that could help diversify and strengthen farms in the North. Key findings and recommendations for best practices and economic considerations will be shared with producers. This work commenced in November 2016 and concluded in October 2017. This project was funded in part through Growing Forward 2 (GF2).

Demonstration Project: Bale Grazing and Windbreaks: An applied research project, conducted in 2017 under Beef Farmers of Ontario's leadership, demonstrated bale grazing and windbreak systems for beef cattle. Implications for labour, economics, efficiency, animal health, and production gains were observed and reported. Key findings and recommendations will be shared with producers for consideration on their own farms. This project was funded in part through Growing Forward 2 (GF2).

Demonstration Project: Lead-Follow Sheep and Heifer Grazing: An applied research project, conducted in 2017 under Beef Farmers of Ontario's leadership, demonstrated a lead-follow grazing system involving heifers and sheep in order to observe and report on implications for labour, economics, efficiency, animal health, and production gains. Key findings and recommendations will be shared with producers to assist in diversifying and strengthening farms in the North. This project was funded in part through Growing Forward 2 (GF2).

Economic and Production Planning Model for Establishing a Beef Farm in Northern Ontario: An interactive, fully integrated tool for calculating the economic potential of cow-calf and backgrounding operations in Northern Ontario was developed by Beef Farmers of Ontario in 2014. Producers can input basic information, such as size of cow-calf herd or backgrounding operation, and the model provides associated requirements based on acres and nutrition, plus related financial information. The model is available at www.beefnorth.com https://www.beefnorth.com and was reviewed in 2017. Updates will be completed in early 2018. This project was funded in part through Growing Forward 2 (GF2).

Northern Ontario and Quebec Cow/Calf Benchmarking Study: This research project aims to collect data for the development of key performance indicators for Northern Ontario and Northern Quebec beef operations. Results of the study,

which are expected in early 2018, will provide direction on what information should be disseminated through technology transfer workshops and areas of greatest opportunity to increase knowledge of beef farming. This study is being conducted in partnership with the Government of Ontario, the Government of Quebec and the Université du Québec en Abitibi-Témiscamingue (UQAT). This research is being jointly funded by UQAT, ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec and Ontario. Ontario's portion is funded under Growing Forward 2.

Online Training Program on Starting a Farm in Northern Ontario: In collaboration with OMAFRA, Beef Farmers of Ontario has produced a modular training program that can be taken online from anywhere. The program focuses on how to start a farm in Northern Ontario and covers topics like farm layout and design, extensive livestock farming, product marketing, and financial planning. This project was funded in part through Growing Forward 2 (GF2).

Building Agricultural Labour Capacity: In addition to the information, education, and agricultural skills resources currently being developed by industry and government, support from municipalities to promote farming and other careers in the agricultural and agri-food sectors will not only help municipalities retain more of their youth, but also foster economic development and diversification.

- One way municipalities are supporting their agricultural labour capacity is by identifying mentors in the community, agriculture champions, and developing strategies to build these skills in the community.
- There is also support for programs at Collège Boréal to include courses in introductory beef farming for Indigenous Peoples, culinary skills, and heavy equipment operation.
- · Workshops for farmers are also available to help develop new skills and knowledge on a wide range of topics.
- The Business Enterprise Centre (Timmins) offers entrepreneurship skills building resources to assist regional farmers and small business owners with business planning and accessing various government funding programs supporting small business.
- The Great Clay Belt Partnership published the Agricultural Workforce Development Study in late 2016.

Land Inventory: Having a land inventory of private land suitable for agriculture is a key to addressing the need for land in livestock expansion.

- Building on the land inventory projects studies conducted by Cochrane and the five municipalities of Opasatika, Val Rita-Harty, Kapuskasing, Moonbeam and Fauquier-Strickland, the NeCN is working to identify, promote, and develop private land suitable for agriculture.
- Other municipalities in the area are also conducting their own internal studies by following the models set out by the previous two studies.
- Another key project will be to amalgamate all available municipal land inventory data collected to date for developing a database with the ownership status, disposition availability, and management of agricultural land.
- Since there are currently no models for assembling private land specifically for agricultural use, the NeCN is working
 to develop a model which corresponds to the needs and vision for agricultural development and economic
 diversification.

Strategies to Address Agricultural Infrastructure Gaps: To support agricultural, agri-food, and economic diversification, infrastructure development will address gaps and form partnerships with other communities to collect an inventory of existing assets and determine how to optimize municipal and regional infrastructure and address gaps.

- For example, the Town of Cochrane is leading a multi-modal transportation study to identify gaps and potential
 opportunities such as the use of rail transportation. Funded through the Northern Ontario Heritage Fund Corporation
 (NOHFC), the Northeast Community Network (NeCN) administers a tile drainage and land clearing program to bring
 lands into agricultural production.
- Another example, the Municipality of Val Rita-Harty is leading a community transportation program study which will support the creation of a network of transportation services that would expand the Town of Kapuskasing transportation program, create a regional transportation hub, and conveniently connect other communities and transportation services in the region.

Pilot Sites: The purpose of establishing pilot sites is to support expansion of the sector in the north and provide opportunities for research and demonstration that can inform future development of the sector. The intent is that the pilot sites, if approved for disposition, be ultimately held privately for livestock farming. The purpose of these sites will be to boost livestock production in the area and create a close network of livestock operations which will strengthen and diversify the local economy.

Creating the Environment for Success

The success of the Northern Livestock Pilot will require building strong partnership and networks with Indigenous communities, municipalities and industry, to create a dynamic business climate in Northern Ontario through the sustainable use of Ontario's environment and resources.

Guidance

In order to implement the Action Plan successfully, it is essential that all those involved work together. It is critical to have a guidance structure that builds synergies, defines roles and responsibilities, monitors progress and fosters information sharing. To ensure this success, a steering committee will be created composed of representatives from Indigenous communities, the livestock sector, government, and Northeastern Ontario municipalities.

Communication of Progress

Openness and transparency are critical to the successful implementation of the Action Plan. That is why there will be regular progress updates on key activities contained in this Action Plan at the Northern Livestock Pilot webpage.

For More Information

Call OMAFRA's Agricultural Information Contact Centre: 1-877-424-1300 Visit: Ontario.ca/livestocknorth http://www.ontario.ca/livestocknorth

Appendix A: Northern Livestock Pilot Outcomes and Milestones

The Northern Livestock Pilot strives to achieve outcomes that will help build strong, healthy and vibrant Northern Ontario communities, establish partnerships to sustain livestock sector development in Northern Ontario, and showcase and utilize environmental and production practices in Northern Ontario above and beyond current best management guidelines.

Achievements to Date

Environmental Sustainability

- GHG lifecycle Analysis and Mitigation research initiated (Government)
- Research call completed Baseline Soil and Water Data and how Dynamics Change Through Land Conversion (Government)
- · Research call completed Changes in Soil Carbon and GHG Dynamics Through Land Conversion (Government)
- Northeastern Ontario soil maps updated and released (Government)

Social Sustainability

- · Research call completed Barriers to Establishment of Livestock Farms in the Great Clay Belt (Government)
- Beefnorth.com Website launched (Industry)
- · Beefnorth.com video series launched (Industry)
- · Collège Boréal Introduction to Beef Cattle Farming Training Program for Indigenous Peoples concluded (Industry)
- · Bus Tours for Interested Producers and Students completed (Industry)
- · Land Access and Crown Land Policy Research completed (Industry)

Economic Sustainability

- · Early research initiated Northern Ontario and Quebec cow/calf benchmarking study (Government)
- Business Information Bundle released (Government)
- Private land inventory studies completed (Municipal)
- Agriculture skills and labour capacity study completed (Municipal)
- Economic and Production Planning Model for Establishing a Beef Farm in Northern Ontario completed (Industry)
- · Demonstration Project: Bale Grazing and Windbreaks completed (Industry)
- Demonstration Project: Lead-Follow Sheep and Heifer Grazing completed (Industry)
- · Online training program: "How to Start a Farm in Northern Ontario" launched (Industry)
- · Dairy beef research completed (Industry)

Environmental, Social and Economic Sustainability

• Northern Livestock Pilot launched May 2017 (Government)

- Crown land application for 8 pilot sites and request for Crown Land Use Policy (CLUP) amendments submitted to MNRF (Government)
- · Engagement activities with Indigenous communities and stakeholders initiated (Government)

Winter 2018

Environmental Sustainability

- GHG lifecycle Analysis and Mitigation research completed (Government)
- · Baseline Soil and Water Data and how Dynamics Change Through Land Conversion started (Government)
- · Changes in Soil Carbon and GHG Dynamics Through Land Conversion research started (Government)
- BMPs and resources development completed (Industry)

Social Sustainability

- · Barriers to Establishment of Livestock Farms in the Great Clay Belt research started (Government)
- Second offering of Collège Boréal Introduction to Beef Cattle Farming Training Program for First Nations concluded (Industry)

Economic Sustainability

- Northern Ontario and Quebec cow/calf benchmarking study completed and results presented at Beef Production in the North research symposium (Government)
- Economic Model validated (Industry)
- · Strategies to address agricultural infrastructure and labour capacity gaps initiated (municipal)

Environmental, Social and Economic Sustainability

- · Public Consultations for Class EA and CLUP Amendments commenced (government)
- Stage 1 archeological assessment initiated (government)
- · Initial steering committee meeting (all partners)

Beyond Winter 2018

Environmental Sustainability

- · BMPs and mitigation measures informed by research results released (Government)
- · Soil and water land conversion research completed (Government)
- New BMP's resource collection disseminated (Industry)

Social Sustainability

- · Barriers to Establishment of Livestock Farms in the Great Clay Belt completed (Government)
- · Guide for Crown land disposition for agriculture released (Government)
- · Meaningful partnerships with Indigenous communities (Municipal)
- Cultural heritage/archeological study completed (Government)
- · Producer Outreach and Communications (Industry)

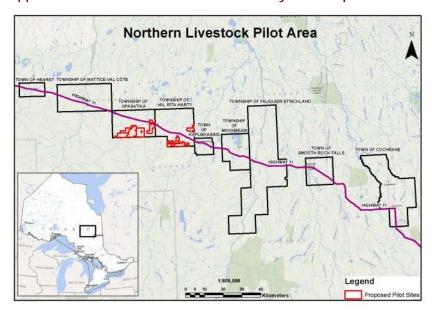
Economic Sustainability

- Tools and resources informed by benchmarking study results released (Government)
- Dairy-Beef Recommendations for Northern Ontario (Industry)
- Strategies to address agricultural infrastructure gaps implemented (Municipal)
- Strategies to develop private land for agriculture implemented (Municipal)
- · Other livestock commodities piloted (Industry)

Environmental, Social and Economic Sustainability

- Public consultations for Class EA and CLUP amendments continued, assessed and completed as necessary to inform disposition decision (Government)
- Undertake further studies as necessary (Government)
- Pilot sites established subject to outcome of Class EA and CLUP amendments (Government)
- End user selection process implemented (Government)

Appendix B: Northern Livestock Pilot Study Area Map



For more information: Toll Free: 1-877-424-1300

E-mail: ag.info.omafra@ontario.ca