November 9, 2021

Chairman Albert Witteveen Agriculture Policy Action Committee Region of Niagara

RE: OMAFRA OAFRI Proposal: Mobilizing Knowledge to enhance municipal capacity to promote support sustainable agriculture in the Niagara Region

Dear Dr. Lemay

The committee of the Agriculture Policy Action committee have reviewed the project proposal: Mobilizing Knowledge to enhance municipal capacity to promote and support sustainable agriculture in the Niagara Region submitted by the Niagara Community Observatory, Brock University. We support the project objectives.

The APAC committee is a committee of the Niagara Region which focusses on recommending policies to the Niagara Regional Council. The committee consists of a diverse group of Regional councillors and Agriculture representatives from the Region of Niagara.

The proposal aligns with the mandate of the APAC committee, we believe this project will lead to more effective municipal policy, planning and programming in support of Niagara's agriculture sector. We welcome the critical resources this project will provide to the municipalities of Niagara in enhancing their capacity to understand the priorities and challenges of Niagara's agriculture sector and to support a thriving, sustainable agriculture economy.

We appreciate the time and effort that has gone into creating this proposal and look forward in strengthening our partnership with Niagara Community Observatory in fulfilling their deliverables.

If you require further information please contact Albert Witteveen at albert.witteveen@niagararegion.ca or at 289-253-7739

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Sincerely,

OMAFRA – OAFRI Knowledge Translation and Transfer Proposal – October 2021 Brock University – Niagara Community Observatory Dr. Amy Lemay (mlemay@brocku.ca)

Mobilizing knowledge to enhance municipal capacity to promote and support sustainable production systems in the Niagara Region

Project Description

"A thriving agriculture industry depends on the knowledge and support provided by municipal governments" (Caldwell et al 2021, p.7).

The proposed knowledge translation and transfer (KTT) project will undertake a series of outreach and engagement activities that will enhance the uptake and use of existing knowledge and current research on best management practices (BMPs) by municipal staff and elected officials in the Niagara Region to support and inform their policy, planning and program decisions that impact sustainable agriculture production, in particular adoption of best management practices. Using targeted and customized KTT activities (e.g., BMP Briefing Notes & Infographics, Plain Language Research Summaries and farm tours), municipal staff and elected officials in the Niagara Region will build capacity for making evidence-informed decisions that respond effectively to emerging and evolving agriculture issues and capitalize on new opportunities to enhance the sustainability of the Niagara agriculture sector.

Objectives

The overall goal of the proposed project is to enhance the capacity of municipalities in Niagara to respond to and support the agriculture sector through evidence informed policy, planning and programs. Focusing on sustainable production practices, in particular the role of municipalities in supporting and promoting the adoption of best management practices (BMPs), the project will achieve this goal through three objectives:

- develop and disseminate a series of targeted, customized KTT activities designed to provide information and build awareness and understanding of sustainable production and BMPs in the context of municipal mandates related to agriculture
- establish an on-going agri-food K'I'I' community of practice among Niagara municipal staff, elected officials and Brock researchers for sharing knowledge and to support learning beyond the timeframe and scope of the project
- assess the usefulness and impact of the project in enhancing capacity and supporting evidenceinformed decision-making related to sustainable agriculture production

Primary Problem

According to a recent Greenbelt Foundation report, municipalities face capacity challenges in supporting their local agriculture sector (Caldwell et al 2021). The report found that municipalities in the Niagara Region had less than one full-time staff dedicated to agriculture issues. The report also found that less 5% of municipalities reached out to academic/research institutions for advice and information to inform and support decision-making related the agriculture issues and priorities.

Rational

We argue that outreach and engagement with municipal staff and elected officials using targeted KTT activities would be effective in addressing several of the opportunities for building capacity identified in the Greenbelt report:

- 4.1.1 Municipal collaboration: foster open dialogue across municipalities to promote a learning culture
- 4.1.2 Bridging academia and planning practice: create linkages between relevant academic and other research and the experiences of practicing planners
- 4.1.5 Professional development: provide a wider variety of resources and learning opportunities
- 4.1.6 Awareness beyond planning staff: foster understanding of the agriculture sector across municipal departments

Audience

There are many activities and decisions made by municipal staff and elected officials that directly impact the agriculture sector. It is important that they understand the needs, priorities of the agriculture and the implications of their decisions on the sector. For this KTT project, we are focusing on municipal governments in the Niagara Region. The Region has one upper tier and 12 lower tier municipal governments. Agriculture is an economically significant sector in Niagara. There are more than 1800 farms in Niagara, which in 2016 generated more than \$800m in total gross farm receipts (NRED, 2018). With 4.2% of the total farms in the province, but 5.5% of the total value of gross farm receipts, the Niagara agriculture sector, certainly punches above its weight in its economic contribution to the Region and the Province (NRED, 2018).

Anticipated Benefits

Through this project, municipal staff and elected officials will acquire the latest knowledge and information about sustainable production, more specifically - best management practices. They will build capacity in using knowledge and research to make evidence-informed decisions that support a sustainable agriculture industry in Niagara. Staff and elected officials will benefit from being part of a KTT community of practice and being connected to ongoing research at Brock University.

Measuring Benefit & Impact

The project includes an assessment component designed to track impacts at fours points during the project. The details are included in the methodology section.

Methodology

Over the 10 months of the project, we will engage municipal staff and elected officials in Niagara in a series of KTT activities designed to enhance their capacity to promote and support sustainable agriculture production through evidence-informed policies, planning and program. The challenges facing the agriculture sector, including but not limited to increasing expectations for sustainable production practices means that the best knowledge and information possible is needed to inform policy decisions at all levels of governance, if we are to protect biodiversity and sustainably manage valuable agri-ecosystems. "Ontario's agriculture sector has an important relationship with municipal governments...The ability and willingness of municipalities to effectively support the agriculture sector depends on their capacity to do so" (Caldwell et al 2021 p. 11).

Given the wide array of activities and decisions that municipalities are responsible for that influence the agriculture sector, it makes sense to develop targeted KTT activities that help municipalities apply an agriculture lens to their work. This proposed KTT project adopts a dual-KTT approach. Our first approach uses briefing notes, infographics and farm tours as means of synthesizing the

OMAFRA – OAFRI Knowledge Translation and Transfer Proposal – October 2021

Brock University – Niagara Community Observatory

Dr. Amy Lemay (mlemay@jbrocku.ca)

large body of knowledge about BMPs and adoption in the context of their importance to policy, planning and programming at the municipal level. This KTT approach focuses on effectively translating and transferring a broad area of knowledge that has been built up through years of research. The second approach will use plain language research summaries to introduce municipal staff and elected officials to sustainable agriculture research project currently underway at Brock University. This approach is intended to build closer connections between municipal staff, elected officials and Brock researchers.

Over the course of the 10-months of the project, we will:

- 1) Develop and distribute five BMP Briefing Notes and associated infographics. The briefing notes will be 2 4 pages and infographics will be one page. The first three will be on the following topics: Introduction to BMPs, integrated pest management and cover crops. In keeping with the coproduction priority of KTT, the topics for other two briefing notes/infographics will be decided by municipal staff and elected officials to reflect their needs and priorities.
- 2) Organize two farm tours where municipal staff and elected officials have the opportunity to see BMPs in action, engage with local farmers, learn about emerging, evolving opportunities and challenges facing the agriculture industry and the how municipal policies, planning and program decisions impact the industry. Each tour will visit two Niagara farms. Each tour will be able to accommodate up to 50 people.

 Develop and distribute three plain language summaries of sustainable agriculture research projects at Brock University, including:

Unique cover crops, rootstocks, and irrigation techniques for Canadian vineyards. Liette Vasseur & Andrew Reynolds. This project is funded by the Organic Science Cluster 3 through AAFC's AgriScience program

CLEan plAnt extraction SEquencing Diagnostics (CLEANSED) for Clean Grapevines in Canada. Sudarsana Poojari. This project is funded by Genome Canada, Ontario Genomics, Genome Quebec, and Genome

British Columbia

Mobilizing knowledge for the adoption of BMPs in Ontario's Horticulture Sector. Charles Conteh & Amy Lemay. This project is funded by OMAFRA (OAFRI-2020-101257)

4) Assess benefits and impact throughout the project. There will be four point during the project where the benefits and impact will be assessed. Please see the Project Work Plan below for details.

Project Work Plan - the project is comprise of four inter-connected parts.

- Project Design & Development (April June 2022)
 Hire and train part-time Project Coordinator. Set up project webpage on the NCO website.
- 2)Knowledge User Recruitment (April May 2022) Invite participation of municipal staff and elected officials of the 13 municipalities in Niagara (12 lower tier; 1 upper tier). We will send an email to the Chief Administrative Officers and Mayors of each municipality, explaining the project and asking them to brief staff/elected officials inviting

OMAFRA - OAFRI Knowledge Translation and Transfer Proposal - October 2021 Brock University - Niagara Community Observatory Dr. Amy Lemay (mlemay@brocku.ca) them to respond directly to Dr. Lemay expressing their interest in participating. A database with participating staff and elected officials contact information will be maintained in order to establish ongoing communication throughout the project. Welcome email will be sent to all participants in May 2022 explaining the project and describing the activities and timelines. Participants will be referred to the project website for updates on the project.

3) KTT Activities (June 2022 - January 2023)

BMP Briefing Note and Infographic #1 - Introduction to BMPs - July 2022

Plain Language Research Summary #1 - Unique cover crops, rootstocks, and irrigation techniques for Canadian vinevards - August 2022

Farm Tour #1 - August 2022

BMP Briefing Note and Infographic #2 - Integrated Pest Management - September 2022

Farm Tour #2 - September 2022

BMP Briefing Note and Infographic #3 - Cover Crops - October 2022

BMP Briefing Note and Infographic #4 - TDB - November 2022

Plain Language Research Summary #2 - CLEan plAnt extraction SEquencing Diagnostics

(CLEANSED) for Clean Grapevines in Canada - November 2022

BMP Briefing Note and Infographic #5 - TBD - December 2022

Plain Language Research Summary #3 - Mobilizing knowledge for the adoption of BMPs in Ontario's Horticulture Sector - January 2023

4) Evaluation - there will be four points of evaluation during the project Baseline (June 2022) - An online survey to assess participants general knowledge, understanding and awareness of the Niagara agriculture industry, its challenges and priorities and the role of municipalities in supporting the agriculture industry through policy, planning and programming decision, as well as their access to and use of information for agriculture-related decisions and their expectations of the project.

Mid-point (October 2022) - An online survey to assess participants satisfaction with the project and the usefulness of the KTT activities to date. We will ask participants to share feedback on how they have or have not used the information in the BMP Briefing Notes & Infographics, Plain Language Research Summaries and the Farm Tours. We will ask how/if the KTT activities have had any influence in their awareness and knowledge of agriculture issues and impacts on decisions.

End of Project (January 2023) - An online survey to assess the effectiveness and impact of the project in enhancing capacity and supporting evidence-informed decision-making related to sustainable agriculture production. We will ask for feedback on future KTT activities.

6-month Follow Up (June 2023) - An online survey to assess the long-term impacts of the project. We will ask participants if they are still using any of the resources and if/how the project has continued to shape their decisions.

Deliverables

The project will include the following deliverables:

BMP Briefing Notes & Infographics Series

- five briefing notes and related infographics synthesizing the most recent knowledge on selected BMPs (e.g. introduction to BMPs; integrated pest management, cover crops, others as identified by end-users)
- Brock Sustainable Agriculture Plain Language Research Summaries

 plain language summaries of 3 sustainable agriculture research projects at Brock University: cover crops in vineyards (Vassuer), genomic-based diagnostics for grape virus management (Poojari), supporting BMP adoption (Lemay)
- 3) Farm Tours
- 2 farm tours visiting four Niagara farm
- 4) Project Evaluations: pre-project, mid-project, end-project; 6-month follow up