



LONG-TERM THINKING FOR TODAY'S ISSUES

August 19, 2019

Hon. Ernie Hardeman, MPP
Ministry of Agriculture, Food and Rural Affairs
11th Floor, 77 Grenville Street
Toronto, ON M7A 1B3
Via email: minister.omafra@ontario.ca

Canadian GLEC Secretariat
Great Lakes Environment Office
Environment and Climate Change Canada
Via email: ec.aqegl-glwqa.ec@canada.ca

Re: Comments on the Draft Lake Erie 2019-2023 Lakewide Action & Management Plan (LAMP)

Dear Minister Hardeman and Members of the Canadian GLEC Secretariat,

The Christian Farmers Federation of Ontario (CFFO) is an Accredited Farm Organization representing the interests of over 4,000 farm families in Ontario who are called to the vocation of farming. CFFO policy promotes economically, socially, and environmentally sustainable farming.

With a significant CFFO farmer presence in the Lake Erie Basin, we have a serious interest in the management of the Basin and its ecosystem condition. Therefore, our comments are focused on contributing to optimal policy development that is both effective and least cost in achieving the best possible outcomes in recovering ecosystem health to Lake Erie.

We are directing our comments on the Draft Lake Erie 2019-2023 Lakewide Action & Management Plan (LAMP) to the Canadian GLEC Secretariat and also to you, Minister Hardeman, because of your control over agricultural policies affecting farmers in Ontario. Copies of this letter will go as well to the relevant federal and provincial ministers and Conservation Authorities.

The LAMP report provides an excellent history and description of impressive current and planned efforts into understanding the science of cause and effect of threats to water quality. Scientific programs are well established and seem to be well directed towards describing and monitoring the dynamics of the ecological impacts of the multitude of stressors to the Lake Erie system. All important issues of concern, strategies and actions are covered.

Decision Support Framework for Prioritizing Research and Actions

CFFO is concerned, however, that a significant gap persists in the LAMP planning model. What is missing is an overarching framework for assessing the net benefits of *alternative* strategies and actions for remediation of the Lake Erie system, including its watershed. Assessment of both the costs and the benefits of alternative remediation actions is essential in order to *prioritize* actions since *not all* actions can each be called “priorities”. Public and private funds for actions are not infinite, and therefore, alternative interventions must be assessed for their effectiveness in generating improvements in light

of their costs. This calls for a cost benefit analysis (CBA) framework for the whole set of potential remediation actions.

Delays in establishing a program for undertaking CBA means that we may be wasting time and money on some science research. Given finite funds, it is impossible to fund the infinite details of the whole of the Lake's ecosystem science. The science effort that needs to be prioritized would generate only the essential information required to assess the relative net benefits of alternative interventions. For example, we need to know how to prioritize timing and how much to spend on urban systems versus agricultural systems. This depends on comparing the benefits of efforts in each sector towards remediation to the cost of achieving the remediation benefits. It is not even possible to choose prudently which coastal wetland to focus remediation on without knowing the benefits of alternative sites in light of the costs of the remediation at each site. It is not sufficient to focus on sites that are least costly when costly ones may generate significantly greater benefits than other, less costly, sites. We must set our sights instead on achieving value for money, which requires cost-benefit assessment of alternatives in order to identify clearly which actions generate the greatest *net* benefits.

We acknowledge that not all costs and benefits can be expressed in dollar terms, which can constrain a quantitative measure of the net dollar value of alternatives. However, this is no reason to neglect a framework that systematically adds up benefits and compares them to costs of alternatives. And the CBA framework will be further complicated by the fact that the ecological system is complex, with multiple scales for intervention and feedbacks among the scales. For example, spending on urban versus agriculture is a question at one scale while the question of which wetland to restore is at a finer scale. But each of these scales interacts with the other, with wetland remediation reducing urban water treatment needs and reductions in agricultural nutrient intrusion reducing wetland remediation effort. Each of these layers needs to be researched within a *systematic framework* that informs the ultimate question of what are the most beneficial actions to be undertaken at each scale for least cost overall.

A cost-benefit framework is essential for not only prioritizing actions but also for guiding research in an orderly, cost-effective manner. Furthermore, a systematic CBA approach will identify the specific knowledge gaps in the understanding of non-market benefits of alternative actions. Non-market benefits are as important as market benefits in assessing net benefits to the whole of current and future society of alternative interventions. If we do not include non-market values, we seriously bias our prioritization of remediation sites. For example, the increase in the market value of recreation generated with cleaner water and beaches has been found by international research to be far smaller than the increase in associated non-market values. Non-market values in this case include the improvement in many aspects of visitor wellbeing, option values, existence values and bequeath values. There is an extensive international literature on how best to assess comprehensively the net social value of interventions that includes both market values and non-market values with one recent significant research paper devoted to Lake Erie.¹

¹ Smith, R. B. et al. (2019, June 24). Estimating the economic costs of algal blooms in the Canadian Lake Erie Basin. *Harmful Algae*, 87. doi: 10.1016/j.hal.2019.101624

Throughout, the LAMP report asserts the importance of including inherent natural, social, spiritual, and economic values in management decisions, but nowhere does the report document how these values will be tangibly included when options are to be assessed, tradeoffs considered, priorities ranked, or outcomes measured. A cost-benefit framework that identifies and quantifies, where possible, all these values in an enhanced triple-bottom line approach can inform the best possible decisions.

LAMP and Land Use Policy Development

Recent provincial policy has prioritized expansion of housing and limited Conservation Authorities' (CA) mandatory actions to flood protections while at the same time cutting CA funding in half. Both these policies are at odds with the LAMP priorities and actions, given that LAMP highlights the importance of management of the whole of the Lake Erie Basin. Will it be possible to deliver on LAMP green infrastructure and headwater management goals with reduced CA actions? What will be the net effect on Lake Erie water quality if more housing means there is more urban point-source pollution but lesser farming nutrient impact? This begs the question: Is Provincial land-use policy adequately coordinated with LAMP international commitments?

OMAFRA's Role

The LAMP report identifies the knowledge gap of farming's contribution to nutrient loading of the Lake along with the need for more research into Best Management Practices on farms about how best to reduce the impact. Environmental Farm Plans and Canadian Agricultural Partnership funding of research are the only two approaches identified in the report. However, EFPs have been in decline with reduced funding. CAP funding is limited and it is also time-limited and therefore not adequate, for example, for assessing long-run impacts. Legacy phosphorus effects provide one example. These are serious concerns given the responsibility placed on farming.

Furthermore, there needs to be research into the relative contribution of farming and urban wastewater treatment before further attribution of responsibility is assumed. Moreover, the contributions of American farming and American urban stressors need to be assessed in comparison to Ontario contributions before further policies are imposed. Assigning the same cutback goals for phosphorus in both jurisdictions is inequitable given unequal contributions. It imposes too high a cost for Ontario farmers compared to the harm they cause. The same cutback goals will also delay remediation if the main contributions are not curtailed sufficiently. A CBA would inform the decisions of how much each country and sector must do by clearly identifying the relative costs, benefits and tradeoffs of alternative international actions.

OMAFRA's focus should be on ensuring Ontario farmers are treated fairly with respect to their relative responsibilities as a sector and as Canadians.

Summary

Ontario has a responsibility to ensure farmers are treated fairly, and it is in Canada's own best interests to focus attention on the relative harm imposed by those north and south of the border by adopting an analytical CBA framework. A CBA framework can objectively support the best decisions for which actions should be undertaken, and by whom, to minimize the costs of recovery of Lake Erie. This is the best way to maximize benefits and to focus research.

Thank you for this opportunity to provide our frank comments. We appreciate your consideration of our perspective.

Sincerely,



Clarence Nywening, President
Christian Farmers Federation of Ontario

CN/bd

cc The Honourable Catherine McKenna, Minister of Environment and Climate Change Canada
 The Honourable Marie-Claude Bibeau, Minister of Agriculture and Agri-food Canada
 The Honourable Jonathan Wilkinson, Minister of Fisheries, Oceans and the Canadian Coast Guard
 The Honourable John Yakabuski, Ontario Minister of Natural Resources and Forestry
 The Honourable Jeff Yurek, Ontario Minister of the Environment, Conservation and Parks
 Mr. Richard Wyma, General Manager, Essex Region Conservation Authority
 Mr. Ian Wilcox, General Manager, Upper Thames River Conservation Authority