



March 26th, 2015

Kathy Hering
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Ministry of the Environment and Climate Change
Climate Change and Environmental Policy Division
Air Policy and Climate Change Branch
77 Wellesley Street West, Floor 10
Toronto, Ontario M7A 2T5

Re: Conservation Ontario's Comments on the "Climate Change Discussion Paper" (EBR# 012-3452)

Ms. Hering:

Thank you for the opportunity to provide comments on the Ministry of Environment and Climate Change's (MOECC) "Climate Change Discussion Paper". Conservation Ontario is the network of Ontario's 36 Conservation Authorities (CAs), local watershed management agencies that deliver services and programs that protect and manage water and other natural resources in partnership with government, landowners and other organizations. Organized on a watershed basis, Conservation Authorities promote an integrated watershed approach balancing human, environmental and economic needs.

The following comments are focused on business areas and priorities common to all Conservation Authorities and are organized to provide general comments on Leadership, Collaboration and Economic Growth; Mitigation and Adaptation; References to the province's previous Climate Ready Strategy; followed by comments on Climate Critical Actions: Actions in Key Sectors; Communities and Built Form; climate resilience and risk management; Emission Targets, Carbon Pricing and Market Based Mechanisms. Conservation Ontario is very supportive of the need for investment in the development of innovative Science and Technology initiatives and current and future opportunities for CAs to contribute is emphasized throughout this comment letter. Individual Conservation Authorities will also be submitting comments that will include identification of local watershed priorities.

Conservation Authorities are Leaders and Collaborate to Address Climate Change Challenges while supporting Economic Growth

As leaders in environmental protection in Ontario, Conservation Ontario applauds the Ontario government for recognizing that climate change is the critical issue of our time and in demonstrating climate change leadership. The collective vision for Ontario's Conservation Authorities in our 2011-15 Strategic Plan Vision is to be ***"The partner of choice for managing and adapting to climate change and growing the green economy"***.

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Conservation Authorities are uniquely positioned to assist the province in reaching its long term and short-term climate critical goals and actions. Through CAs' flood/hazard modeling, mapping and stormwater management expertise, Conservation Authorities are at the forefront of hazard management, which will allow them to identify and minimize risk to infrastructure, buildings and people, and to assess change over time. Equally the Province could assist CAs through supporting CAs to model floodplains based on climate change scenarios and increasing funding towards monitoring climate change indicators. Conservation Ontario's "**Business Case for Strategic Reinvestment in Flood Management Programs, Services and Structures**" acknowledges the shared partnership with the province, municipalities, federal government and others with the need for further investments in order to build resilience, adapt to more frequent flood events and reduce costs of flood events today. For further information, please see Conservation Ontario's "Phased-in Approach to Address Challenges Around Ontario's Aging Flood Management Programs, Services, and Structures" http://www.conservation-ontario.on.ca/documents/Phase-in%20Approach%20-%20Addendum%20to%20CO%20Flood%20Bz%20Case_Dec%2020202013%20FINAL.pdf

Moreover, Conservation Authorities' role in tree planting (afforestation), promoting agricultural best management practices (BMPs), and protecting and monitoring of natural heritage systems, allows CAs to identify opportunities to improve resiliency in a rapidly changing climate. Through CA planning and permitting processes, CAs protect people and property from locating in areas subject to flooding and or erosion, while maintaining the integrity of urban and rural communities. The integrated watershed management approach is an effective tool for developing the well-built, resilient communities which are promoted in the discussion paper. Therefore, CAs are ideal local implementation "*partners of choice*" for the Province to further their climate change objectives.

Conservation Ontario is supportive of creating an environment that fosters innovation and investments in activities, services, infrastructure and technologies that enable Ontario's economy to prosper while ensuring clean air, water, abundant green spaces and healthier more livable communities. A "Green Economy Roadmap for Conservation Authorities" has been developed; for further information, please see http://www.greeneconomyroadmap.com/docs/CO_GE_Roadmap_Mar-25-2013.pdf This initiative encouraged CAs to enhance their leadership role by identifying where they can effectively manage their internal operations for energy and water efficiency, consider their long standing business areas noted above, as well as future opportunities to advance and promote innovative technologies, programs and perspectives by partnering with citizens, all levels of government, non-government, the private and research sector to strategically develop and "*grow the Green Economy*".

Specific opportunities that were identified included fleet and facilities management and in some cases Leadership in Energy and Environmental Design (LEED) office buildings, green infrastructure and low impact development stormwater management technologies, carbon and water trading, renewable energy initiatives like waterpower, the advancement of measurement and monitoring technologies and platforms, as well as the development of conservation and water management clusters to integrate expertise and implementation.

Measurement, monitoring and data have increasingly been viewed by private sector interests as an opportunity for CAs. The Discussion Paper highlights how private sector and industry are working to develop and implement strategies for reducing their carbon and water footprints, local CA watershed monitoring and reporting has the potential to assist in tracking mitigation and adaptation efforts and progress by all sectors.

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Mitigation and Adaptation

Conservation Ontario feels strongly that this discussion paper should have included more detail on the urgent need for adaptation. The paper commences by recognizing that “Climate Change is already underway”, therefore adaptation to the changing climate will be necessary. The paper would benefit from a specific discussion around the Province’s plans for adaptation, especially in the areas of land use planning, infrastructure and water management and natural systems protection. The discussion paper alludes to assessing vulnerabilities and managing risks, but it has neglected to outline an adaptive framework, especially for municipalities.

Given the changing climate, there is a need for Provincial leadership in order for Ontario and Ontarians to adapt. The Province should look for “win-win” scenarios, providing multiple benefits for both our adaptation and mitigation needs. For example, the Province could strategically invest in our existing water control infrastructure to create waterpower opportunities and prevent downstream flooding. Conservation Authorities are prepared to assist.

Reference to “Climate Ready”

It is unclear what the relationship is between this Climate Change Discussion paper and the Province’s “*Climate Ready: Adaptation Strategy and Action Plan, 2011-2014*”. The 2015 Discussion Paper could be improved by drawing on some of the strengths of the Action Plan. That document provided a guide for the government on how to incorporate climate change adaptation into existing provincial policies and programs, and prioritize actions that have co-benefits between mitigation and adaptation. The 2015 Discussion Paper suggests that a new strategy would focus on reduction of emissions however there is much work still to be done on the Action Plan. In fact, a number of recommendations that Conservation Ontario made in response to “Climate Ready” are supported and referenced elsewhere in response to this Discussion Paper. Conservation Ontario’s complete comments on “Climate Ready” from June 2011 has been appended for your reference.

It is recommended that if a new Climate Change strategy is developed, it should build on “*Climate Ready*” to include the most recent thinking on achieving a low carbon/Green economy. Political leadership is needed to advance from discussions to action and continue the momentum. Policy leadership and fiscal support on the part of senior levels of government is essential.

Integration of Provincial Priorities

This Discussion Paper provides a good starting point for conversation about the need to shift our economy, eliminate our dependency upon fossil fuels and adapt to the changes that are already occurring. In order to achieve these goals, the Province will require strong leadership from the Ministry of the Environment and Climate Change as well as the integration of the Province’s collective knowledge and various priorities within the MOECC and across other Ministries.

For example, the Province has been and will be very active in updating their land use planning documents in the coming years. The 2014 Provincial Policy Statement did a good job of integrating climate change considerations however implementation support has yet to be produced, resulting in a wide and disparate range of implementation at the local level. The Province is currently consulting on potential amendments/updates to four provincial land use plans. This provincial review could provide an opportunity to incorporate climate change considerations.

The *Local Food Act* also provides another great opportunity for the Province to integrate provincial priorities. In addition to promoting good relationships between producers and consumers, the reduction in the distance between farm and market means that fewer emissions are produced through transportation. The application of farming BMPs can help the Province to further reduce its emissions; concentrating research and spurring innovation in this sector could result in Ontario being a world-wide leader. As an added benefit, local production also promotes food security.

Also the technical work undertaken to support the development of Source Water Protection Plans can be used to support climate change considerations. The *Great Lakes Protection Act*, and consideration of climate change within strategies and action efforts under the Canada Ontario Agreement should be included in a broader Provincial Climate Change Strategy.

Coordinating the climate change discussion to include all these plans and initiatives and vice versa would improve the awareness and understanding of the need to limit emissions and the equally important role of adaptation and resiliency in addressing climate change.

Climate Critical Actions:

Actions in Key Sectors

Conservation Ontario is supportive of the key sectors identified in the Discussion paper. Conservation Authorities manage watersheds where 90 percent of the population resides in Ontario and are actively engaged with many sectors and stakeholders to develop and implement strategies focused on watershed and community resilience. Conservation Ontario and Conservation Authorities look forward to working with the province to facilitate local opportunities for multi-stakeholder collaboration on climate change initiatives.

Communities and Built Form; climate resilience and risk management

There are many opportunities for Conservation Authorities in urban and rural areas to play a leadership role in helping their member municipalities develop adaptation strategies related to severe weather response (floods/wind/drought) and how to use natural infrastructure to build resiliency to the impact of too much and too little precipitation.

Relationship to Natural Systems and Green Infrastructure

Due to the Climate Change Discussion Paper's focus on mitigation and high-tech solutions for emissions reduction, it fails to recognize the important *low-tech* solutions that are already underway in the Province. The Discussion Paper would be improved by outlining the carbon sequestration opportunities presented by natural systems and other green infrastructure. Direct linkages could be made to protecting hard infrastructure through protecting green infrastructure and through the promotion of low impact development.

Next to reducing emissions, Ontario's natural heritage systems are an important tool for addressing climate change in Ontario. Natural heritage systems ensure protection of existing carbon sinks in the form of forests, wetlands, prairies and other natural features. Furthermore, natural heritage systems strategies that identify priority areas for creating habitat (such as those defined by some Conservation Authorities), identify opportunities to re-vegetate strategically, sequestering carbon and benefiting biodiversity. As the Province is aware, natural areas store carbon, clean and retain water on the landscape, and lessen temperature extremes; all important attributes in climate change resiliency.

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The capacity of communities, particularly rural, to assess vulnerability is limited. Many of our rural communities are reliant on natural systems and corresponding infrastructure which have developed over many decades, based on historic climate conditions. These natural systems are responding to more subtle changes in our climate which are not always understood, and will place these communities at risk.

Many Conservation Authorities are at the forefront of carbon sequestration due to their tree planting programs and natural heritage system management. There is a growing interest in afforestation as an offset tool. However, more clarity/guidance is required from the provincial government. The province could provide better tools and funding to ensure protection and enhancement of natural heritage systems, which are important carbon sinks. Various protocols, reports and technical documents have been written on that topic. The Ministry should review them and consider afforestation while deciding on offset activities. For example, Conservation Authorities have participated with the Ministry of Natural Resources and Forestry and Forests Ontario to understand the potential of afforestation to offset carbon in Ontario. See: http://www.treesontario.ca/news/index.php/alternative_afforestation
<http://www.creditvalleyca.ca/wp-content/uploads/2011/02/carbon-offsets-from-afforestation-and-potential-for-landowner-participation-in-ontario.pdf>

Ausable-Bayfield, Maitland Valley <http://www.footprintstoforests.com/> and Rideau Valley http://www.rvcf.ca/carbon_neutral/ Conservation Authorities are currently implementing voluntary “Carbon Neutral” programs within their watersheds that encourage citizens and businesses to calculate their Carbon Footprint and consider contributing to tree planting initiatives to compensate.

Conservation Authorities are also major partners with agriculture, municipal and provincial organizations in collaborating to provide technical support and programs for agricultural producers to implement practices that address water and soil health, prevent and manage invasive species, and maintain resiliency of biodiversity to climate change.

Conservation Authorities are also leaders in the promotion and implementation of low impact development technologies. The MOECC Showcasing Water Innovations Program was very helpful in enabling CAs to work with municipalities and stakeholders, including the private sector to promote and advance low impact development technologies. The MOECC is to be commended for recently releasing the Interpretation Bulletin on Low Impact Development to which Conservation Ontario and Conservation Authorities contributed expertise. Conservation Ontario also looks forward to participating in the development of the province’s low impact development stormwater management guidance document. The potential development of this document is being encouraged by many stakeholders including Green Infrastructure Ontario of which Conservation Ontario is a member.

Finally on the subject of assisting communities to adapt and build resilience to climate change, it is important to note that any future Provincial strategies or discussion papers would be ameliorated through improving access to recognized climate projections for particular regions of Ontario. It is appreciated that there is uncertainty in the nature of the projected changes however decision makers at regional and municipal levels need access to interpretation and support for the best available projections.

Research and Science to assist Communities in Building Resilience

As noted elsewhere, many Conservation Authorities are at the forefront of climate change research and could provide the Province with expert advice, and municipalities with implementation support. In fact,

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Conservation Ontario and Conservation Authorities participate at a number of provincial, federal and bi-national tables to provide their expertise and support, including the Ontario Climate Advisory Committee and the Great Lakes Water Quality Agreement Climate Annex Bi-National Sub-Committee and the Ontario Climate Consortium.

Emission Targets, Carbon Pricing and Market Based Mechanisms

It is recommended that targets for emission reductions be established for individual sectors. Such targets will help provide benchmarks for the sectors and should provide an evaluation mechanism to detail where more effort is needed to achieve the reduction goals. An economy which supports and rewards the transfer of new technology and ideas to other members of the sector will help in the overall effort to reduce emissions. In light of the information provided in our comments, Conservation Ontario and Conservation Authorities would like to be involved in further discussions with the province and other stakeholders regarding the potential implementation of carbon pricing mechanisms and development of market based instrument programs. For example, should the province implement a carbon tax or cap and trade initiatives, it is recommended that revenue be used to support climate change adaptation initiatives that support resilience for a stronger economy and environment. This would include investments in a strengthened flood management program in Ontario including flood and stormwater management infrastructure and targeting revenue towards initiatives and actions that provide multiple benefits like restoration and acquisition initiatives and support of green infrastructure.

Conclusions and Next Steps

Once again, thank you for the opportunity to provide comments on the Ministry of Environment and Climate Change's "Climate Change Discussion Paper". The intent of the Province of Ontario to provide leadership on climate change is commendable. As leaders in natural hazard management and environmental protection, Conservation Ontario urges the Province to equally consider mitigation and adaptation moving forward in their climate change efforts. The Province should integrate climate change considerations into all of their Provincial priorities, in order to establish and implement a comprehensive action plan for addressing climate change. Being at the forefront of research in and implementation of low impact development, as well as the protection and establishment of natural heritage systems, Conservation Authorities are uniquely positioned to assist the Province with their carbon sequestration efforts, in addition to adapting to the impacts of climate change.

Conservation Ontario looks forward to a more fulsome discussion with the Province regarding how the Conservation Authorities can assist, including through engagement with the Province's recently announced Climate Change Action Group. Should you have any questions about this letter, please contact Leslie Rich at extension 226 or myself at extension 224.

Sincerely,



Jo-Anne Rzadki MSc.
Watershed Stewardship Coordinator

Attachment: *Conservation Ontario's Response to Climate Ready: Adaptation Strategy and Action Plan 2011-2014 (June 2011)*

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