

Section III – Items for the Information of the Board

TO: Chair and Members of the Board of Directors
Meeting #2/19, Friday, February 22, 2019

FROM: Chandra Sharma, Director, Community Engagement and Outreach

RE: **TORONTO AND REGION CONSERVATION AUTHORITY RESPONSE TO ONTARIO'S CLIMATE CHANGE PLAN CONSULTATION**

KEY ISSUE

To provide the TRCA Board of Directors with a copy of staff comments on the *Made-in-Ontario Environment Plan*, released by the Province of Ontario which were submitted on January 28th, 2019 to meet the province's deadline for comment.

RECOMMENDATION

IT IS RECOMMENDED THAT the staff report, highlighting TRCA staff comments on Ontario's Made-in-Ontario Environment Plan, be received.

BACKGROUND

On November 29, 2019 the Province of Ontario released a proposed *Made-in-Ontario Environment Plan* with four areas of focus:

1. Protecting our Air, Lakes and Rivers
2. Addressing Climate Change
3. Reducing Litter and Waste in Our Communities & Keeping Our Land and Soil Clean
4. Conserving Land and Greenspace

This proposed plan was released following an initial online consultation process which was active between October 24, 2018 and November 16, 2018. TRCA staff submitted comments in response to this initial consultation, which were included in the [Board of Directors Meeting #9/18 agenda, held on November 30, 2018](#). At that meeting, Board of Directors requested that staff provide an update once the proposed *Environment Plan* had been released.

This report provides a copy of comments submitted by TRCA staff via the Ontario Environmental Registry on January 28th, 2019.

RATIONALE

SUMMARY OF TRCA COMMENTS AND RECOMMENDATIONS TO THE PROVINCE

1. General Comments

The proposed Environment Plan sets out areas of potential action related to many of the programs and services delivered by TRCA. In turn, TRCA and other CAs can play essential roles in supporting the Province in implementing many objectives and actions of the Plan. Through long-term partnerships with municipalities, numerous local community leaders and groups, TRCA and other CAs are uniquely positioned to enable local networks to engage in collaborative action.

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Recommendation 1.1: TRCA recommends that the MECP work with Conservation Ontario and other CAs to:

- **Take advantage of the success of Ontario’s CA program and close to 70 years of unique experience, technical expertise, and collaborative approach to engaging diverse stakeholders and communities in dealing with the most pressing issue of our times - climate change.**
- **Leverage the importance of watershed-based governance model that has enabled innovation to develop practical solutions to current and emerging issues (e.g., flood management, drinking water and Great Lakes water quality, climate change, rapid urbanization/growth); and**
- **Leverage CA programs to achieve multiple provincial priorities.**

In its current form, the Environment Plan is focused on the MECP. However, many other Ministries have responsibilities to ensure a healthy and sustainable environment. Many of the actions identified in the Environment Plan will require support from other Ministries for implementation success. While the Province has committed to make climate change a cross-government priority, we recommend that this approach be extended to all other areas identified in the Environment Plan. A whole-of-government approach is necessary to effectively address our pressing environmental challenges and move communities towards sustainability and long-term prosperity.

Recommendation 1.2: TRCA recommends that a cross-government approach be extended to all areas of the Environment Plan to bring environmental protection and climate change to the forefront of all government decisions and contribute to the effective implementation of the Plan.

2. Protecting our Air, Lakes, and Rivers

Great Lakes Health

The Great Lakes are the primary source of drinking water to millions of Ontarians. As indicated in the most recent Minister’s Annual Drinking Water Report, Ontario has a comprehensive Drinking Water Source Protection (DWSP) Program to protect municipal sources of drinking water, including the Great Lakes. Continued improvement to the initial technical work that was completed to prepare source protection plans will be necessary as more information becomes known about the impact of emerging influences such as blue-green algae and Cladophora, road salt, increased development, and flooding caused by severe weather events.

Through the DWSP, the Credit Valley – Toronto and Region – Central Lake Ontario (CTC) Source Protection Committee (SPC) investigated the impact of spills on municipal drinking water systems drawing water from Lake Ontario. A number of policies are set out in the Approved CTC Source Protection Plan (SPP), addressing spill prevention, contingency planning, and emergency response. The proposed online platform for reporting incidents, commitment to improve the complaint response system, and a goal to improve transparency between stakeholders will all lead to collaborative and consistent emergency response.

Recommendation 2.1: TRCA recommends that the MECP continue to support the Drinking Water Source Protection Program and continue to build on the technical studies and analyses completed for source protection planning to protect water quality and the Great Lakes ecosystem.

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As the lead for the Toronto and Region Remedial Action Plan (RAP), TRCA plays a key role in leading collaborations for Lake Ontario initiatives. The Toronto and Region RAP recognizes the influence of watersheds on nearshore lake health. Any updates to the Great Lakes Strategy will need to continue to recognize the significant influence local watersheds have on nearshore lake health. Integrated watershed management is critical to managing pollutant loads and protecting spawning habitats. A more explicit link between watershed planning and management and nearshore lake health should be established in the proposed Environment Plan.

Recommendation 2.2: TRCA recommends that the Environment Plan be strengthened to establish a stronger, more explicit connection between watershed planning and management and nearshore lake health.

TRCA is pleased to see the Province's continued commitment to restoring the Great Lakes. Executing on-the-ground restoration projects will be critical to mitigate and adapt to the impacts of climate change. In order to deliver on resiliency objectives and achieve measurable impact in a cost-effective manner, it is important to deliver restoration at a large scale and in strategic areas where multiple objectives can be realized (e.g., water quality, water quantity, erosion and sedimentation remediation, natural cover, and connectivity, etc.) to maximize the value on investment. For example, TRCA has completed a jurisdiction-wide Integrated Restoration Prioritization (IRP) process, which directs site selection to provide the maximum benefit to natural system function on a watershed basis.

Recommendation 2.3: TRCA strongly encourages that the MECP adopt a strategic approach to restoration and focus available resources on areas where multiple objectives can be achieved, based on the latest science and real monitoring data pertaining to ecosystem health and integration of climate resilience measures to address vulnerability and risk to ecosystems and communities.

Vulnerable Waterways and Inland Waters

TRCA agrees with the importance of protecting Ontario's water resources, which are essential to long-term sustainability of our environment, economy and communities. Monitoring the quality of our lakes, rivers, and aquifers is necessary to understand the impact of our everyday activities on these dynamic systems. Although we agree that increasing sodium and chloride from the application of road salt is a stressor to our source water, monitoring efforts should not be restricted to this activity. The Province must work with its stakeholders and partners to promote best management practices to reduce the impact of all land use activities on all sources of drinking water. Effective watershed management and continued water quality monitoring of lakes, rivers, and aquifers will allow us to evaluate the implementation success of initiatives such as source protection planning which employ best management practices. Conservation Authorities and municipalities can be essential partners in protecting additional vulnerable waterways and inland waters through effective implementation of the provincial planning and water policy framework (e.g., the Growth Plan for the Greater Golden Horseshoe, and *Clean Water Act*, etc.).

Recommendation 2.4: TRCA welcomes the MECP's commitment to supporting effective watershed management and recommends continued support for water quality and quantity monitoring of lakes, rivers, and aquifers conducted by Conservation Authorities and municipalities.

TRCA can also provide support in understanding vulnerabilities of waterways and inland waters based on a watershed perspective. TRCA has been piloting a "next generation" approach to watershed planning in the development of an updated watershed plan for Carruthers Creek in

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partnership with the Region of Durham. This “next generation” approach will help to better consider climate change vulnerabilities and ecological connectivity, and green infrastructure planning for improved community resilience, among other benefits. Watershed planning can bring a solid foundation of science to inform many key community planning issues such as: identifying and enhancing natural heritage systems; providing guidance to manage stormwater using green infrastructure and low-impact development (LID) techniques; managing the risk to property and infrastructure from natural hazards, and assessing the impact of potential future climate change, among others.

Recommendation 2.5: TRCA recommends that the MECP provide clear direction on how the goals of watershed and subwatershed planning should relate to existing provincial or other legislation, policies and guidelines for watershed and environmental protection.

Water Use, Conservation and Security

The understanding of how water cycles through watersheds in southern Ontario, obtained through the DWSP Program, was a strategic investment by the Province. This knowledge can inform water management decisions being made by the Province in the issuance of Permits-To-Take-Water and Environment Compliance Approvals. TRCA strongly supports the Province’s goal of ensuring that the knowledge gained through the DWSP Program is applied to other provincial program areas.

The proposed Environment Plan identifies the need to manage water takings to ensure we have sustainable water resources in the face of a changing climate and continued population growth. The premise of evaluating cumulative water takings in the context of overall water management is vital to ensuring that water resources are adequately protected and used sustainably. Therefore, TRCA supports the review of current water taking policies, programs and science tools. The extensive technical work which has been completed, peer-reviewed, and approved by the Minister of the Environment, Conservation and Parks through the DWSP Program will be invaluable in completing this review.

The tiered water budget studies completed under the *Clean Water Act* have identified current and projected future water takings in each watershed or subwatershed in Ontario in an effort to evaluate the vulnerability to municipal drinking water supplies. Where the potential for stress to a particular drinking water system was identified during these assessments, more elaborate drought and climate change scenarios were considered in an effort to ensure the sustainability of the water resource over the long-term. This technical work provides a solid foundation for identifying sustainable approaches to managing our water for the future, including the adoption of water conservation practices and technologies.

Effective water management requires strong coordination and collaboration across multiple stakeholders. Watershed Plans are prime examples of a collaborative process that brings together a comprehensive understanding of water (quantity, quality, uses, etc.) under present and future timeframes, as the basis for developing management strategies that may include allocation guidelines. It is important that the Province continues to support and enable these and other forms of collaborative water management.

Recommendation 2.6: TRCA recommends that the MECP establish a stronger, more explicit commitment to enabling collaboration across various agencies responsible for aspects of water management.

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Municipal Wastewater and Stormwater Management and Reporting

TRCA supports efforts to improve municipal wastewater and stormwater management and reporting, which if properly managed can significantly benefit the health of our watersheds. TRCA leads watershed hydrology studies and integrated watershed plans which provide the basis for effective stormwater management criteria and inform municipal decision-making regarding new development and priorities for urban retrofits. TRCA also plays a role in the implementation of these projects. With additional resources, we could assist in strategic planning and implementation of green infrastructure designed to reduce flood risk, improve stormwater management and achieve numerous social and economic co-benefits for communities. Policies established at the Provincial level are important to guide science-based wastewater and stormwater management at the municipal level, with priority given to LID and green infrastructure. Provincial support for incentive programs related to Stormwater innovation and infrastructure grants for green infrastructure could also be used to leverage municipal wastewater and stormwater management initiatives.

Recommendation 2.7: TRCA recommends that the MECP support incentive programs related to stormwater, implementation of LID and green infrastructure.

3. Addressing Climate Change

Understanding Climate Change Impacts

TRCA recognizes that adapting to climate change impacts is a critical natural resource management issue. Through the Ontario Climate Consortium (OCC), TRCA has developed expertise to respond to issues of climate adaptation and mitigation across both technical and policy fronts. OCC also commonly partners with municipalities in TRCA's jurisdiction on climate change initiatives such as vulnerability assessments, workshops on climate risks, and various research projects. TRCA offers a range of expertise in climate change mitigation and adaptation that could be used to help the Province develop and deliver policies and actions to achieve its goals in addressing climate change.

While TRCA supports the commitment to undertake a provincial climate change impact assessment, we suggest that any such impact assessment must inform local and regional decision-making. For example, balance between a high-level, broad-scale approach and a regional-scale assessment that considers spatial detail (e.g., the Great Lakes), local land use and sector interdependencies will be key to addressing local risks.

Further, while provincial and municipal scale sector-based vulnerability assessments are important, certain aspects of their implementation ultimately happens at the ground level by residents, businesses and other groups. TRCA's Sustainable Neighbourhood Action Program (SNAP) is piloting a neighbourhood-based vulnerability assessment and adaptation planning process in the City of Brampton, which is bringing different levels of information together with local knowledge to develop a shared action plan. The process is building capacity in local stakeholders to lead implementation actions that will address multiple urban renewal objectives and deliver greater impact. This model is expected to be transferable to other communities and could harness additional local resources for action.

Recommendation 3.1: TRCA recommends that the provincial-level climate change impact assessment must inform local or regional decision-making in the Greater Toronto Area, to inform Great Lakes concerns or sector-based risks. This can be achieved by scaling some systems or sectors down to a more local or regional level where more detailed research and engagement work is conducted;

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As the largest conservation authority in Ontario serving the most urbanized region, TRCA has played a critical role in addressing climate change risks and the impacts of rapid growth and urbanization within our area of jurisdiction, which supports the Province's and municipalities' efforts to address pressing environmental issues such as Lake Ontario water quality, flood and erosion hazard management, stormwater, natural heritage systems planning, and source water protection. An important component of this work has been collecting climate and other environmental data while undertaking various types of vulnerability and risk assessments, including:

- Hydrologic modeling (2D, LiDar) for enhanced riverine flood risk assessment and floodplain mapping delineation;
- Dual drainage modeling in case study areas to estimate and consider the interactions and extent of urban and riverine flooding;
- Stream erosion assessments and prioritization for erosion control works, monitoring and reporting through key performance indicators;
- Vulnerability and risk assessment of TRCA flood control infrastructure;
- Natural system vulnerability assessment to climate change in Peel Region.

Recommendation 3.2: TRCA recommends that the proposed provincial impact assessment incorporate existing information from CAs and other organizations at the local and regional scales; and include case studies of small, medium, and large municipalities where growth pressures are expected, under both greenfield and redevelopment / intensification scenarios, and may exacerbate climate change impacts.

Recommendation 3.3: TRCA recommends that where climate change vulnerabilities and risks are already well known, funding for adaptation actions should be applied in high priority areas regardless of province-wide impact assessment processes occurring in the coming years.

Government Policies Update

TRCA strongly agrees with the Province that a cross-government approach to addressing climate change is essential for Ontario to successfully respond to the all-encompassing nature of climate change. Coordination and partnership building are extremely important to managing climate change risks and developing policies, programs, and services. Municipalities, utilities and other broader public sector organizations need to be included in cross-governmental coordination efforts, particularly at the local and regional scale where expertise and resources can be shared to help build joint-capacity for effective decision-making. Conservation Authorities, as regional environmental agencies, can play a critical role in regional coordination and providing guidance to local government and other public agencies operating on-the-ground. CAs can also play a critical role in encouraging local environmental leadership through partnerships with community groups and business associations. As the Province moves forward with updating government policies to update policy direction on climate resilience, TRCA would welcome the opportunity to support the government with technical expertise and insights gathered through decades of climate change work at the local level.

Recommendation 3.4: TRCA recommends that the Province work with CAs to enhance regional coordination and provide guidance to municipalities on climate action, while also encouraging local leadership through partnerships with community groups and local businesses.

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Local Climate Resilience

TRCA is pleased to see the commitment to empower effective local leadership on climate change and improve local climate resilience. We know that left unaddressed, climate risks pose significant threats to population health and economic prosperity in the future. Community-led initiatives and programs, which use innovative means of engaging citizens in personalizing their connection with the future climate, are more effective in raising awareness and helping individuals determine the actions they need to take. TRCA has been very active in this area with sector specific on-the-ground mobilization through initiatives around climate change mitigation and adaptation such as our Sustainable Neighbourhood Action Program (SNAP), Ontario Climate Consortium (OCC), and Partners in Project Green (PPG): a Pearson Eco-Business Zone. TRCA will continue to support efforts by member municipalities and senior levels of government to respond to climate risks by helping to build infrastructure that is more resilient to flood and erosion hazards, providing expertise in predicting the effects of climate on watersheds and communities, and connecting stakeholders with the knowledge and technologies that they require.

Recommendation 3.5: TRCA recommends that the MECP identify the essential role of community-led actions, and role of regional organizations such as TRCA in providing the necessary support and guidance to local communities, business, and municipalities in building local climate resilience.

Green Infrastructure

Watershed planning assists municipalities and their partners and stakeholders in integrating greenspace and green infrastructure into new and existing communities. TRCA has supported initiatives such as retrofitting existing stormwater management ponds, terrestrial natural heritage system design, urban forest management and facilitating LID. TRCA has expertise in LID and urban forest strategies, and experience in engaging private and public landowners and municipalities in the planning, design and implementation of green infrastructure plans on public and private property. There are significant environmental benefits that accrue from this work, as well as numerous social and economic co-benefits. TRCA's integrated planning processes bring a multi-objective lens to the design of green infrastructure systems, which is necessary to optimize designs for greatest impact. These multi-objective projects are low-regret actions that offer the opportunity to leverage planned infrastructure renewal to achieve cost-sharing opportunities and the basis for innovative funding sources. This work should be a priority implementation program due to its multiple benefits. TRCA is well positioned with completed plans and established partnerships available to advance implementation quickly.

Recommendation 3.6: TRCA recommends that the MECP make multi-objective green infrastructure projects a priority implementation program of the Environment Plan.

4. Reduce Litter and Waste and Keep our Land and Soil Clean

Waste Reduction

TRCA supports the focus on food and organic waste, which represents 6% of Ontario's greenhouse gas emissions. TRCA also supports efforts to reduce plastic waste that ends up in our lakes and rivers, which support clean watersheds and conservation areas. Efforts to prevent waste from entering these areas is consistent with the mandate of CAs.

Since its inception, TRCA's Partners in Project Green has supported thousands of businesses and facilitated the completion of hundreds of green projects in Canada's two largest employment areas, the Pearson Eco-Business Zone and the City of Toronto. As an example, business in these employment areas diverted more than 4,000 tonnes of materials away from landfill using circular

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economy principles. TRCA commonly engages community members to participate in a variety of education, training and outreach initiatives such as cleanups, including shoreline cleanup events along Lake Ontario to raise awareness of the waste we generate, get people outside to appreciate nature, and save our wildlife.

Excess Soil Management and Brownfield Redevelopment

TRCA is a commenting agency under both the *Planning Act* and the *Environmental Assessment Act*, and a regulatory agency under the *CA Act*. We work to ensure that new development or redevelopment is not at risk from flooding or erosion, as well as encourage the conservation and restoration of natural resources. While we welcome the clean-up of contaminated lands in Ontario, we would like to be further engaged as the Province sets out to revise the brownfields regulation and record of site condition guide to ensure that proper protections are in place to facilitate brownfield redevelopment while protecting the public and the environment.

Recommendation 4.1: TRCA would like to recommend that MECP engage CA's to support the revision of brownfield regulations and the record of site condition to ensure that the environment and the public is protected while reducing barriers to the redevelopment of brownfield sites.

TRCA supports the Province's intention to set clear rules to support the beneficial reuse of safe soils and work with stakeholders to increase enforcement on illegal dumping of excess soil. TRCA has developed a number of guidelines to protect soils, including "Preserving and Restoring Healthy Soil: Best Practices for Urban Construction" (2012). TRCA could provide support to the Province in setting clear rules to allow industry to reuse excess soils.

Recommendation 4.2: TRCA would like to engage with the MECP to support the establishment of clear rules to support the beneficial reuse of safe soils and enable strong enforcement on illegal dumping.

Management of Hauled Sewage

TRCA supports the consideration of approaches for the management and spreading of hauled sewage. It is our understanding that the Source Protection Programs Branch is reviewing current circumstances under which this activity could be a significant drinking water threat to municipal sources of drinking water. We agree that there is still much to understand with respect to how these materials could impact the environment. Therefore, a more comprehensive understanding of their behaviour and management is warranted.

5. Conserving Land and Greenspace

Natural Ecosystems

Conservation Authorities play a central role in improving the resilience of natural ecosystems, which in turn help to increase the resilience of communities within the province to flooding, erosion, and climate change. For example, TRCA and partners developed the targeted terrestrial natural heritage system, which is necessary to support regional biodiversity and contributes significantly to water management as well as other social and economic co-benefits within the region. We also play a key role in restoring natural ecosystems (e.g. wetlands, woodlands, and streams) and supporting habitat quantity as well as quality. We welcome provincial support on the accelerated securement, protection and restoration of the natural heritage system. TRCA and

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other CAs can be essential partners in land and water conservation to preserve areas of significant environmental and ecological importance. Further, CAs are provincially mandated to be able to enter into agreements for land conservation.

Recommendation #5.1: TRCA recommends provincial investment to accelerate and scale-up the securement, protection and restoration of the natural heritage system.

Recommendation #5.1: TRCA recommends that the Province identify specific targets or thresholds for protecting and restoring natural ecosystems based on the latest science provided through watershed and subwatershed planning, to enhance the ability for municipalities and CAs to implement actions to meet ecological targets.

Conservation and Environmental Planning

TRCA appreciates the Province's support for conservation and environmental planning and the Province's intention to work with municipalities and stakeholders to improve the delivery of the mandate of CAs. As indicated above, TRCA delivers a broad range of programs and services in fulfilling our mandate under the *CA Act*, which contribute to many of the objectives and actions identified in the Plan. We would highly welcome the opportunity to remain engaged and work collaboratively with the Province and other stakeholders to continuously improve our programs and services, and ensure that an appropriate level of funding and resources is in place to sustain them moving forward.

TRCA would also like to be engaged as the Province looks to modernize Ontario's environmental assessment process as the review of environmental assessments is an integral part of our work at the TRCA.

Recommendation 5.3: TRCA would like to engage further to support the Province in delivering the mandate and objectives of CAs as set out in the *Conservation Authorities Act* and in modernizing Ontario's Environmental Assessment processes.

Parks and Forests

TRCA is improving and expanding trail systems across our area of jurisdiction. We have improved public access to greenspace by acquiring nearly 700 acres of new public greenspace and partnered with government agencies, municipalities and NGOs to formalize over 800 km of the regional trail system throughout our jurisdiction. In addition, TRCA has developed a Regional Trail Strategy to guide our work with partners to develop a 1,100-km network of regional trails that will create opportunities for people throughout the Greater Toronto region to explore and enjoy natural greenspace. In 2017, TRCA Parks and Culture facilities attracted over 1 million visitors to experience nature and cultural heritage. Conservation Authority operated recreation infrastructure adds immense economic (tourism) and public health value to the residents of Ontario. Currently with population growth in the Greater Golden Horseshoe, these important assets are facing pressures and challenges. Provincial investment in these assets is critical.

Recommendation 5.4: TRCA would like to work with the Province and other partners to explore innovative investment opportunities to support the continued growth of and enhanced access to the parks and trails infrastructure network in the Greater Golden Horseshoe Region;

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Species Protection

TRCA will soon complete our invasive species strategy to strategically address the growing threat of invasive species in urban and near-urban areas. A regionally coordinated approach to invasive species detection and management will be the most efficient and cost-effective way to achieve meaningful gains. Similarly, a coordinated approach to species-at-risk that includes a holistic view of the natural system will achieve greater benefits to ecological communities and wildlife, including species-at-risk. We would welcome the strengthening of this action area to include commitment to the timely completion of Species Recovery Plans.

Recommendation 5.5: TRCA recommends that this area of the Environment Plan be strengthened to include a commitment to the timely completion of Species Recovery Plans.

6. Next Steps Implementation

TRCA would like to be further engaged with the Province as the proposed Environment Plan is finalized and implemented. CAs already work in many areas of the Plan and are uniquely positioned to enable local networks to enrich the engagement and coordination of environmental protection and stewardship. Additionally, TRCA offers a range of climate change expertise which can be leveraged through the proposed advisory panel on climate change to support implementation and further development of climate change actions.

Relationship to Building the Living City, the TRCA 2013-2022 Strategic Plan

This report supports the following strategies set forth in the TRCA 2013-2022 Strategic Plan:

Strategy 2 – Manage our regional water resources for current and future generations

Strategy 8 – Gather and share the best sustainability knowledge

Strategy 12 – Facilitate a region-wide approach to sustainability

FINANCIAL DETAILS

Staff is engaged in this policy analysis work as per the normal course of their duties. No additional funding is proposed.

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