Attachment 12: TRCA Submission to ERO#19-1080

September 4, 2020

BY E-MAIL ONLY (Eugenia.Chalambalacis@ontario.ca)

Eugenia Chalambalacis
Ministry of Environment, Conservation and Parks
Client Services and Permissions Branch
135 St. Clair Ave W
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Dear Ms. Chalambalacis:

Re: Proposed changes to environmental approvals for municipal sewage collection works (ERO #019-1080)

Thank you for the opportunity to comment on the Ministry of Environment, Conservation and Parks (MECP) Environmental Registry (ERO) posting on proposed changes to environmental approvals for municipal sewage collection works. We understand the proposed changes are intended to modernize Ontario's environmental approval process for low-risk municipal sewage works by implementing a Consolidated Linear Infrastructure Permissions Approach.

The Toronto and Region Conservation Authority (TRCA) conducts itself in accordance with the objects, powers, roles and responsibilities set out for conservation authorities (CA) under the *Conservation Authorities Act* and the MNRF Procedural Manual chapter on CA policies and procedures for plan review and permitting activities, as follows:

- A public commenting body under the *Planning Act* and *Environmental Assessment Act*;
- An agency delegated the responsibility to represent the provincial interest on natural hazards under Section 3.1 of the Provincial Policy Statement;
- A regulatory authority under section 28 of the *Conservation Authorities Act*;
- A service provider to municipal partners and other public agencies;
- A Source Protection Authority under the *Clean Water Act*;
- A resource management agency; and
- A major landowner in the Greater Toronto Area.

In these roles, TRCA works in collaboration with municipalities and stakeholders to protect people and property from flooding and other natural hazards, and to conserve natural resources. TRCA provides technical support to its municipal partners, as a Source Protection Authority and through Memorandums of Understanding and Service Level Agreements in implementing the natural heritage, natural hazard and water resource policies of municipal and provincial plans. TRCA's own policy document, The Living City Policies, contains policies for stormwater management (SWM)

review and regulation that align with provincial and municipal policies for SWM, including meeting provincial criteria for flooding, water quality, erosion, and water balance. Meeting these criteria for the development and infrastructure in TRCA's jurisdiction is critical in assisting our provincial and municipal partners in preparing for the impacts of a changing climate.

Government Proposal

The ERO posting notes that Section 53 of the *Ontario Water Resources Act* (OWRA) requires municipalities and developers to obtain an Environmental Compliance Approval (ECA) to establish, alter, extend or replace sewage works. MECP is proposing to implement a Consolidated Linear Infrastructure Permissions Approach that has been modeled after the existing permissions framework for municipal drinking water systems, which was established in 2009.

Under the proposed approach, municipalities would need to prepare and submit to the ministry applications for consolidated linear infrastructure ECAs that will include a description of all existing municipally owned sanitary collection and stormwater works. A municipality would no longer need to submit individual pipe by pipe ECAs for future alterations provided that the future alterations are built in accordance with new design criteria and all other ECA conditions. Under certain circumstances, and only with municipal approval, other persons such as developers may be able to construct works under the municipality's consolidated linear infrastructure ECA. This is intended to eliminate the need for developers to prepare and submit individual ECAs for sewage works that eventually will be owned by the municipality.

The stated purpose of the Consolidated Linear Infrastructure Permissions Approach and proposed draft design criteria and ECA templates is to:

- reduce regulatory burden for municipalities and developers by streamlining the approval process by replacing existing individual pipe by pipe ECAs with one multi-media ECA for a municipality's wastewater sewage collection system, and one multi-media ECA for a municipality's stormwater collection, treatment and disposal system
- provide clear, transparent and consistent requirements through the new design criteria and conditions in the new ECAs that municipalities and developers can follow for future sewage work
- improve environmental protection and ensure quality and consistency of new sewage works through updating ECA terms and conditions to current standards
- consolidate and update ECA terms and conditions that will apply to each municipality's sewage collection system
- consolidate the ECAs for existing linear infrastructure to establish a holistic picture of all routine works owned by a municipality

General Comments

In TRCA's commenting and regulatory roles, we collaborate with municipalities and development proponents in facilitating the planning, design and construction of municipal sewage works affecting TRCA regulated areas. TRCA staff supports and can assist with the Province's streamlining efforts for sewage works requiring ECAs given current practice in which we offer multi-disciplinary expertise in water resources management. This work also contributes to meeting provincial policies for preparing

for the impacts of a changing climate through the planning and design of resilient infrastructure. For example, TRCA's Living City Policies and Stormwater Management Criteria documents are aligned with and build upon The Growth Plan for the Greater Golden Horseshoe policies, which require:

- municipalities to develop SWM master plans;
- that development be supported by SWM plans;
- that SWM plans be informed by watershed/sub-watershed planning;
- an integrated treatment train approach that incorporates green infrastructure; and
- stormwater retrofits where appropriate.

In TRCA's view, also significant to the currently proposed approval framework, is the Growth Plan policy for SWM plans to establish planning, design, and construction practices that minimize vegetation removal, grading and soil compaction, sediment erosion, and impervious surfaces; and align with the SWM master plan or equivalent for the settlement area, where applicable. These Growth Plan policies also align with the SWM policies in 1.6.6.7 of the Provincial Policy Statement 2020, including to: "minimize erosion and changes in water balance, and prepare for the impacts of a changing climate through the effective management of stormwater, including the use of green infrastructure."

Accordingly, while we agree that the proposed consolidated framework will help streamline review and approval processes, **we recommend that the Ministry's proposed draft design criteria be strengthened to ensure consistency with provincial policy direction for comprehensive, watershed-based infrastructure planning and design.**

Further to the above, in TRCA's experience, the current ECA process is such that municipalities and conservation authorities are engaged in the early planning stages, but MECP staff, as the final approval authority, are not at the table until the final stages of design. **It would be beneficial if provincial staff were engaged during the planning stages to consider such issues as siting and alignment of pipes and construction and maintenance access routes.** For example, the current proposal would require applicants to abide by design criteria but does not address siting and alignment for installation. Siting, installation and long-term maintenance of infrastructure are key components of review in order to ensure sustainable infrastructure planning and design that considers cumulative impacts and the long-term functioning of infrastructure.

TRCA also suggests that a coordinated, proactive approach be taken in engaging other provincial and federal agencies through the infrastructure planning and design process. MECP requirements through the *Endangered Species Act*, MNRF requirements through their various capacities, and Fisheries and Oceans Canada (DFO) through the federal *Fisheries Act* process should be incorporated as early in the process as is feasible. This will ensure sticking points and potentially conflicting requirements are addressed early, avoiding delay.

The following detailed comments are organized by the relevant ERO proposal document sections. The **bolded text** above and in the table indicates TRCA's main suggestions and recommendations for the Ministry's consideration.

Proposal Section	TRCA Comments
Proposed Consolidated Linear Infrastructure Permissions Approach	The current ECA process does not consider the cumulative impacts of multiple outlet sources on a single watercourse from an erosion or flooding perspective. For example, it should be a requirement of the new ECA approach to demonstrate that there will be no impacts to the receiving system. A good starting point for the assessment of cumulative impacts will be the currently proposed aspect of the approach that municipalities would need to submit a description of all existing sanitary collection and stormwater works within their boundaries. The comprehensive perspective of this new requirement should be set in the context of the watershed/sub-watershed level of study required in the Growth Plan infrastructure polices, as described in the general comments above. This approach could be leveraged to inform the determination of the cumulative impacts on the environment of new or expanded infrastructure. **Therefore, please consider incorporating a requirement for municipal cumulative impact assessment consistent with Growth Plan infrastructure and watershed planning policies.** Moreover, aligned with the streamlining objectives of the proposal would be the upfront recognition of studies and approvals required. For instance, the criteria for the proposed consolidated approach should emphasize the need to consider *Conservation Authorities Act* permits and requirements where applicable at the earliest possible stages of the planning and design process. This would ensure an integrated approach in which permitting and technical requirements to support all required approvals are scoped into supporting studies for projects as early as possible. TRCA has expedited approval processes applied where appropriate (e.g., minor works and emergency works permits). In addition, the application of conservation authority regulations is critical to ensuring natural hazard, natural heritage and water resource impacts are managed to protect the environment and the infrastructure. **Therefore, we recommend that the proposed ECA framework specifically reference conservation authority (CA) s. 28 permit requirements under the *Conservation Authorities Act* and to emphasize that CAs where they exist can act as a technical resource to assist municipalities and private proponents in meeting the criteria.**

Proposal Section	TRCA Comments
New design criteria for linear infrastructure sanitary and some storm management collection systems	TRCA supports consolidating sanitary and storm ECAs, however, specific to SWM systems, it is important for the criteria to direct a proactive, multi-disciplinary approach to determining the location and design of stormwater outlets. In TRCA's review roles, all relevant stakeholders and experts conduct field visits to collectively determine the best approach to design, effectively confirming that the design direction can be supported by TRCA through the permitting process. **Consideration should be given to embedding a proactive, multi-disciplinary approach to outlet siting and design within the provincial criteria.** Ecological and geotechnical concerns often drive the design of SWM outlets. This, in turn, can impact the design of the entire SWM system proposed. For example, a pond draining east to west is re-designed to drain west to east to avoid a steep, forested slope and outlet down a gently sloping meadow. In this way, both engineering criteria and ecological concerns are addressed early in the process, which contributes to a streamlined approach.
New Consolidated Linear Infrastructure ECA templates	**Please consider adding sections to the template for consistency with any corresponding municipal SWM master plan for the proposal and/or for the required SWM plan.** As these plans are required to be informed by watershed/sub-watershed scale studies, they should be able to confirm that the proposed infrastructure has been considered comprehensively in the context of watershed conditions and management recommendations. **In addition, the templates could require those proposed infrastructure projects that do not have an overarching SWM plan, to demonstrate how the proposal was considered in the watershed and/or sub-watershed context for cumulative impacts and how corresponding mitigation measures will address impacts.** Finally, the template could include a section that requires the proponent to **demonstrate how the proposal investigated the need and options for stormwater retrofit**, given the need to match current SWM standards, in accordance with the overarching plans; where plans do not exist, this could be a standalone requirement. An example of guidance that addresses all of these issues is section 7.4.1.1.1, Policies for Stormwater Management Infrastructure, on pages 85-86 of TRCA's **The Living City Policies**.

Draft Design Criteria - January 2020	
Proposal Section	**TRCA Comments**
Introduction	Design Considerations – 1.2.1 currently states, "All sanitary sewers, storm sewers, force mains, maintenance holes, and chambers, shall be designed considering all relevant soil and hydrogeological conditions as identified by the geotechnical professional." **We recommend changing "geotechnical professional" to "qualified professional" to reflect that a hydrogeologist or other qualified person may identify relevant soil and hydrogeological conditions to inform these designs. Overall, the criteria should identify the types of qualified professionals/disciplines required for the process of siting outfalls and that this occur at early planning stages (e.g., draft plan of subdivision).**
Design of Sanitary Sewers	TRCA staff are concerned that the design criteria for sanitary sewers do not encourage development of emergency overflow pathways that terminate in locations other than waterbodies, creeks or rivers (please see comments and recommendations below on the Draft ECA Template for a Municipal Sewage Collection System, Schedule B)
Storm Sewers	Within the context of current legislation, policies, and science relating to stormwater management (SWM), TRCA's **SWM Criteria document** provides guidance on specific water management strategies and programs, building on the principle that the establishment of appropriate, effective, and sustainable SWM practices requires a solid understanding of the form, function, and interrelation of the water resources and natural heritage systems. This document provides guidance in the planning and design of stormwater management infrastructure for developers, consultants, municipalities, and landowners, and outlines the processes and infrastructure needed to address flooding, water quality, erosion, water balance, and natural heritage. While this document addresses SWM throughout TRCA's jurisdiction, a review of site specific conditions is recommended to ensure that any necessary variations on these requirements are identified early in the planning and design process, through thorough consultation with all affected agencies and stakeholders, to maintain sound engineering and environmental practices. **This document could be used to inform the design criteria for infrastructure related**

Draft Design Criteria - January 2020	
Proposal Section	**TRCA Comments**
	to SWM, and as a resource for municipalities and consultants working under the Province's proposed consolidated approach.

Draft Stormwater Linear Infrastructure ECA Template July 2020	
Section	**Comments**
Schedule D: General	**Section 5.2.5** – Please note that the City of Toronto and TRCA are in the final stages of developing a calculation to provide an accurate total suspended solids (TSS) removal rate for oil/grit separator (OGS) units based on standardized soils gradation and performance testing conducted under the ISO 14024:2016 standard. Several OGS vendors have completed third party testing and verification under this standard. **TRCA recommends that MECP consider the following alternatives to capping the removal rate at 50%: incorporating a sizing calculation verified under standard ISO 14024 described above, or considering a cap with final rates determined through City/CA sizing tool. Cities that do not have a sizing tool should continue with a removal rate cap of 50%. TRCA staff would be pleased to provide further information on this initiative should the Ministry so desire.** TRCA's Sustainable Technological Evaluation Program is another excellent resource to consult for research and pilot studies with industry and stakeholders. **Section 5.3.1** – This section stipulates that the authorization for the SWM Facility alterations included in the consolidated approval does not include alterations that establish regional SWM end-of-pipe control facilities. While this is reasonable, **TRCA requests clarification on the considerations for regional SWM facilities. Will they require an ECA or special permit, or will establishing regional controls not be considered a significant change?** **Section 5.5.6** – Not all "Works" as defined in 5.5.1 need to be monitored. For instance, OGS have been third party tested and verified under a separate protocol. Several smaller LIDs (e.g. back yard soakaways) may require that only a representative subset be monitored to verify performance. Others may only require testing to verify function (e.g. bioretention) where

Draft Stormwater Linear Infrastructure ECA Template July 2020	
Section	**Comments**
	previous monitoring programs have adequately documented performance of similarly designed systems. **TRCA recommends adding wording to the template to recognize that monitoring and verification requirements may vary depending on the type of works, to avoid deterring owners from implementing effective decentralized stormwater works due to monitoring requirements.** **Section 7.0** – The requirements for outlets or outfall structures are not substantial enough given the effort required to properly site an outfall location to limit long term impacts to the outfall or caused by the outfall structure. **TRCA recommends that criteria be added for siting outlets, including locations on watercourses, ecological and fluvial considerations to minimize natural heritage and natural hazard impacts, and elevation above certain flood levels to ensure adequate discharge rates. Appendix E2 of the TRCA SWM Criteria (2012) document (as described and linked above) could be referenced in the provincial template as it provides an excellent resource for criteria that should be considered when siting an outfall structure, as well as erosion mitigation strategies to limit localized erosion and undercutting of outfall structures.**
Appendix A: Stormwater Management Criteria	Construction Erosion and Sediment Control: The criteria documents listed are not equivalent; the 2002 Canadian Council of Ministers of the Environment (CCME) Suspended Solids Guideline is a numerical target that is implicit within the other two references. The CSA Erosion and Sediment Control Inspection and Monitoring Standard, and in particular the TRCA Erosion and Sediment Control Guideline for Urban Construction, also outline how the target can be evaluated through a monitoring program. **TRCA recommends removing the reference to the CCME guideline as it is inherent within the other two options listed.**

Draft Sanitary Linear Infrastructure ECA Template July 2020	
Section	**Comments**
Schedule B: Municipal Sewage Collection System Description	Page 5 – Overflow – this section requires sanitary pumping stations to have emergency sanitary "overflow discharge locations and pathways to final receivers (waterbody/creek/river)." **Alternative pathways that direct emergency overflows to SWM ponds, for example, (where feasible given the size of the area being serviced), should be promoted in the design criteria.** For example, during the review of Mayfield West Phase 1, Caledon, a pumping station was located directly adjacent to a SWM pond, so that all stakeholders agreed to direct the overflow to the SWM pond. It would be helpful if the updated provincial criteria could encourage this practical direction where feasible. **Regarding pumping station overflow location and pathway to the natural environment, the criteria should require a step to consider design opportunities to avoid or mitigate impacts on the environment.** For small pumping stations, often there are opportunities to design an intermediate holding area as part of the overflow system. A stormwater management pond or parkland could be designed in a way that provides temporary holding of flows. This would mitigate the impact of a direct overflow into a watercourse or valley. **An exploratory step, considering design options for this, should be embedded in the design and approval process for smaller pumping stations.**
Schedule C: All documents issued as Schedule C to this ECA which authorize alterations to the System	We note that combined sewer overflows (CSOs) are discussed in Schedule C, not Schedule B. With regard to overflow requirements for CSOs, there is no discussion on investigating the potential impacts to the natural environment or investigating mitigation strategies to reduce impacts. While it is understood that the document prohibits increased volume or occurrences of overflows, the document still only discusses that overflows should proceed to the nearest watercourse/lake. Portraying natural features as simply "a receiver" is outdated and not consistent with the Ministry's more modern approach with respect to stormwater. **There needs to be greater emphasis on reducing the number of overflows or understanding and mitigating the natural heritage impact as much as possible through multi-disciplinary investigation and design.**

Thank you once again for the opportunity to provide comments on the proposed changes to environmental approvals for municipal sewage collection works. Should you have any questions, require clarification on any of the above, or wish to meet to discuss our remarks, please contact the undersigned at 416.667.6290 or at john.mackenzie@trca.ca.

Sincerely,

<Original signed by>

John MacKenzie, M.Sc.(Pl), MCIP, RPP
Chief Executive Officer

BY E-MAIL

cc:
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