

Item 8.1

Ministry of the Environment,
Conservation and Parks

Ministère de l'Environnement,
de la Protection de la nature et des
Parcs



Office of the Minister

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357-2024-2364

November 8, 2024

Mr. Keith Taylor
Source Protection Program Coordinator
Lower Trent Region Conservation Authority
Email: keith.taylor@ltc.on.ca

Dear Mr. Taylor:

Thank you for your submission of the updates to the Trent and Ganaraska Source Protection Plans (SPPs) under Section 36 of the *Clean Water Act, 2006* (CWA) for minister approval on January 2, 2024. My staff have been undertaking a comprehensive review and analysis of the submission to ensure all requirements for SPP updates have been met, and to identify and address issues as appropriate.

Through this review, it has been identified that your submission proposes updates to previously approved policies, as well as new policies, that would require the Ministry of the Environment, Conservation and Parks (MECP) to include source protection-related information and emergency and spills response information in prescribed instruments that address issues for waste disposal sites, sewage works, pesticides, non-agricultural source material (NASM) and snow storage. If approved as currently written, these policies would apply to new and amended instruments, as well as previously issued instruments for activities identified as a significant drinking water threat under the CWA.

We have noted the following with regard to policies S-2(1) (Sewage works), O-1(4) (Storage of snow), W-1 (Waste disposal sites), A-3 (Application of pesticide to land) and N-1(1) (Application, handling, or storage of non-agricultural source material) as they appear in both SPPs:

Item 1: Proposed prescribed instrument policy to include vulnerable area information in previously issued prescribed instruments for significant drinking water threat activities

As part of the MECP's permissions application process, the MECP already has processes in place for screening activities governed by a MECP permission (for example: waste disposal sites) for the purpose of identifying which ones are significant drinking water threats. Any identified risks are managed through terms and conditions in the prescribed instrument to ensure that the health of the public and the environment are protected.

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Mr. Keith Taylor
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Item 2: Proposed prescribed instrument policy to include protocols for emergency and spills response in prescribed instruments for significant drinking water threat activities:

All prescribed instruments, including those issued for significant drinking water threat activities, already contain standard terms and conditions requiring emergency/spills response plans to be prepared and to be made available and accessible. Moreover, standard conditions include requirements for the MECP's Spills Action Centre (SAC) to be notified in case of a spill, and SAC standard operating procedures include checks against vulnerable area mapping and requirements for notifying drinking water system operators. Moreover, the proposed text to be included in prescribed instruments issued to municipal proponents to require them to notify the drinking water system operator in the event of a spill could create unnecessary confusion and undermine existing emergency response requirements.

As a result of the rationale noted above and as per the powers granted to me by section 29(1) of the CWA, I am requiring the LTRCA to do the following:

1. Update the proposed amended and new prescribed instrument policies under their section 36 SPP update, to only require the MECP to consider including vulnerable area information in new/amended prescribed instruments issued for significant threat activities within one year of policies being approved. For greater clarity, I am requiring that you remove the proposed prescribed instrument policies discussed in Items 1 and 2 above.
2. Re-submit the section 36 SPP update with the above noted changes no later than December 9, 2024.

Please note that in accordance with Section 29 of the CWA, if the SPP is not resubmitted by the date noted above, or if the resubmitted SPP is not updated in accordance with the requirements noted above, I have the option of approving the SPP update with such additional amendments as I consider appropriate.

If you have any questions or concerns, please contact Kirsten Service, Director, Conservation and Source Protection Branch, 705-987-5144 or by email at Kirsten.service@ontario.ca.

As always, I thank you for your ongoing local leadership and continued contribution and dedication to clean and safe drinking water.

Sincerely,



Todd McCarthy
Acting Minister of the Environment, Conservation and Parks

c: Kirsten Service, Director, Conservation and Source Protection Branch, MECP
Heather Malcolmson, Director, Client Services and Permissions Branch, MECP
Bahar Aminvaziri, Director, Environmental Permissions Branch, MECP
Katharine Faaren, Assistant Director (A), Eastern Region, MECP

Item 8.2



Reema Kureishy
Ministry of the Environment, Conservation and Parks
Environmental Policy Branch
40 St. Clair Avenue West, 10th Floor
Toronto, Ontario
M4V 1M2

November 21, 2024

Re: Conservation Ontario's comments on "Enabling greater beneficial reuse of excess soil" (ERO#019-9196)

Thank you for the opportunity to comment on "Enabling greater beneficial reuse of excess soil" (ERO#019-9196). Conservation Ontario (CO) represents Ontario's 36 Conservation Authorities (CAs), whose mandatory programs and services include natural hazard management and drinking water source protection.

As the Ministry considers further amendments to *O. Reg. 406/19: On-Site and Excess Soil Management* and the Rules for Soil Management as well as the Excess Soil Quality Standards ("Soil Rules"), consideration must be provided to maintain appropriate safeguards to protect sources of drinking water and avoid impacts to natural hazards.

Protection of Drinking Water Sources and Application of Source Protection Plans

The current proposal carries forward proposed amendments from ERO#019-7636 related to removing requirements for waste Environmental Compliance Approvals (ECAs) for third-party storage and processing of excess soil at aggregate reuse sites, as well as small liquid soil processing sites. In lieu of the requirement for a waste ECA, exempt activities would be accompanied by regulatory rules.

Further to our November 30, 2023, comments on ERO#019-7636, Conservation Ontario is not supportive of the amended proposal. The current framework under the *Clean Water Act, 2006* allows the specified activities to be managed through Prescribed Instrument policies as provided in Source Protection Plans. The proposed exemption would remove the ability for Source Protection policies to effectively manage these activities. Appropriate

consideration must be applied to ensure rules and requirements for excess soil management appropriately engage with the *Clean Water Act* and its requirements.

Conservation Ontario strongly recommends an amendment to the proposal to ensure that exemptions do not apply to excess soil management operations where the activities are identified as significant drinking water threats under the *Clean Water Act*.

Natural Hazard Considerations

As part of the proposed exemption from obtaining a waste ECA for specified excess soil management sites, facilities would be required to provide written notice to a Ministry Director (rather than file on the Excess Soil Registry) as well as the applicable local municipality. Many of these facilities may be located in Conservation Authority regulated areas (e.g., adjacent to watercourses, wetlands, etc.) and may require a permit from the local CA for the temporary or permanent placing, dumping or removal of any excess soil material.

In addition to providing notice to the MECP and the local municipality, Conservation Ontario requests that notice be provided to the local Conservation Authority (as applicable). Wherever possible, the Ministry is encouraged to promote coordination amongst applicable regulatory authorities (including CAs) to ensure effective and appropriate reuse of excess soil that does not negatively impact natural hazards or public safety, and is managed in conformity with Source Protection Plans.

Thank you for the opportunity to provide comments on “Enabling greater beneficial reuse of excess soil” (ERO#019-9196). Please contact the undersigned should this letter require any clarification.

Sincerely,

Nicholas Fischer

Nicholas Fischer
Policy and Planning Liaison

c.c: All Conservation Authority CAOs/GMs

Conservation Ontario
120 Bayview Parkway, Newmarket ON L3Y 3W3
www.conservationontario.ca

Item 8.3



January 9, 2025

Ministry of Natural Resources
300 Water Street
Peterborough, ON
K9J 8M5
resources.development@ontario.ca

Re: Conservation Ontario's comments on "Enabling the Development of Commercial- Scale Geological Carbon Storage in Ontario: The Geological Carbon Storage Act" (ERO# 019-9299)

Thank you for the opportunity to comment on "Enabling the Development of Commercial-Scale Geological Carbon Storage in Ontario: The Geological Carbon Storage Act" (ERO#019-9299). Conservation Ontario (CO) represents Ontario's 36 Conservation Authorities (CAs), whose mandatory programs and services include drinking water source protection. CAs operate as Source Protection Authorities (SPAs) under the *Clean Water Act*, 2006.

The Ministry of Natural Resources (MNR) is currently seeking feedback on the proposed *Geological Carbon Storage Act* which would enable the regulation of commercial-scale geological carbon storage in Ontario. Previously, the MNR has consulted on this topic using a discussion paper and via amendments to the *Oil, Gas and Salt Resources Act* to enable special projects to pilot the new technologies under a Special Projects regulation.

Conservation Ontario notes that wells can function as transport pathways. Transport pathways are human-made passages which can increase the speed that water can flow to a drinking water intake or well, which may result in faster or more widespread distribution of contaminants in water. Due to this potential risk, it is imperative that the Ministry maintain the requirement for the applicant to give notice to a Source Protection Authority and any local or upper-tier Municipality of the application in future regulation. This approach would be consistent with O. Reg. 425/23: Special Projects filed under the *Oil, Gas and Salt Resources Act* (see 13 (1)). Comments received through this process must be duly considered to prevent the contamination of sources of drinking water.

Thank you for the opportunity to provide comments on “Enabling the Development of Commercial-Scale Geological Carbon Storage in Ontario: The Geological Carbon Storage Act”. Please contact the undersigned should this letter require any clarification.

Sincerely,

Leslie Rich

Leslie Rich
Source Water Protection Manager

c.c: All Conservation Authority CAOs/GMs
Source Protection Project Managers

Item 8.4

Chief Executive Officer



January 9, 2025

POL-2025-00026

BY E-MAIL ONLY

resources.development@ontario.ca

Ministry of Natural Resources
Development and Hazard Policy Branch
300 Water Street
Peterborough, ON K9J 8M5

Re: Enabling the Development of Commercial-Scale Geological Carbon Storage in Ontario: The Geological Carbon Storage Act (ERO 019-9299)

Thank you for the opportunity to provide comments on the “Enabling the Development of Commercial-Scale Geological Carbon Storage in Ontario: The Geologic Carbon Storage Act” posted on the Environmental Registry of Ontario (ERO) by the Ministry of Natural Resources (the Ministry).

Toronto and Region Conservation Authority (TRCA) has an interest in how the proposed Act may affect drinking water sources as a source protection authority under the Clean Water Act, as set out in the Mandatory Programs and Services regulation (Ontario Regulation 686/21) for conservation authorities. Further, our comments are informed by TRCA staff’s technical expertise in groundwater (hydrogeology).

Government Proposal

We understand that the Ministry is consulting on the Geologic Carbon Storage Act, enacted by part of Schedule 2 of Bill 228 Resource Management and Safety Act, 2024. Previously, the Ministry consulted on developing a regulation to allow proponents to seek approval for special projects, including carbon storage. Ontario Regulation 425/23 – Special Projects made under the Oil, Gas and Salt Resources Act took effect on January 1, 2024. Feedback on a discussion paper was requested, through the Environmental and Regulatory Registries later in 2024, on the design of a new framework for commercial-scale carbon storage.

The proposed Geological Carbon Storage Act enables the regulation of commercial-scale geologic carbon storage in Ontario. The Act would define and regulate research and evaluation activities, and carbon storage activities associated with the permanent storage of carbon dioxide in underground geologic formations. The Act would also prohibit undertaking activities unless they are carried out in accordance with a permit and are within areas and storage repositories prescribed by the regulations.

The posting further states that developing a comprehensive framework that regulates the carbon storage process would help ensure that measures are in place to safeguard people and the environment. The proposed framework is also intended to manage any associated risks, including minimizing the potential for leaks to the surface or drinking water sources, induced seismicity, or interactions with other resource activities.

TRCA Comments

TRCA staff have reviewed the ERO posting and the supporting materials and provide the following detailed comments and recommendation for the Ministry's consideration.

Although the proposed target geologic formations for commercial scale carbon storage are outside the TRCA jurisdiction, TRCA staff are concerned about some of the unknowns associated with this technology and the potential impacts to potable water supply wells and drinking water quality.

From the background mapping provided, it appears that the target repository for commercial scale geologic carbon storage in Ontario will be the Cambrian sandstones along the north shore of Lake Erie and the south shore of Lake Huron. These formations have not been extensively studied in terms of their porosity and permeability. However, it is known that injection of CO₂ into these rocks will result in significant pressure increases within the formation(s) and that these pressures will extend well beyond the area of CO₂ injection.

These pressures could stress seals on poorly abandoned legacy wells, resulting in upward movement of saline waters, methane, or hydrogen sulfide into overlying freshwater aquifers. Such legacy wells are a known concern in Southwestern Ontario, highlighted by the 2021 explosion in downtown Wheatley, which resulted in injuries to residents and extensive damage to buildings

(<https://www.cbc.ca/news/canada/windsor/wheatley-explosion-gas-wells-1.6161023>).

TRCA recommends prior to implementation of geologic carbon storage in southern Ontario, that the Province implement studies to improve both the local and regional understanding of the potential carbon storage reservoirs involved as well as the potential implications to the overlying freshwater aquifers and potable water wells.

This work should build upon the following resources and recent efforts by the Geologic Survey of Canada and the Ontario Oil, Gas and Salt Resources Library to develop a 3-Dimensional Paleozoic bedrock geologic model for Southern Ontario (Carter, T., Brunton, F. R., Clark, J., Fortner, L., Logan, C. E., Russell, H. A. J., Somers, M. & Yeung, K. (2019). A 3-D geologic model of the Paleozoic bedrock of southern Ontario. Geological Survey of Canada, Open File, 8528.

<https://doi.org/10.4095/313560>).

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.(PI) MCIP, RPP
Chief Executive Officer

Cc: Laurie Nelson, Director, Policy Planning
Sameer Dhalla, Director, Development and Engineering Services



January 17, 2025

Ministry of the Environment, Conservation and Parks
Great Lakes Office
40 St. Clair Avenue West, Floor 10
Toronto, ON
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RE: Conservation Ontario's Comments on the "2016-2020 Cumulative Impact Assessment under the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement" (ERO#019-9455)

Thank you for the opportunity to comment on the "2016-2020 Cumulative Impact Assessment under the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement". Conservation Ontario is the network of Ontario's 36 Conservation Authorities (CAs). These comments do not limit the consideration of comments shared individually by CAs.

Thirty-five Conservation Authorities' watersheds drain into the Great Lakes and the St. Lawrence River (GLSLR) and are part of the GLSLR Basin. As watershed management agencies, CAs undertake numerous programs and services to manage and protect water resources in the GLSLR basin ("the Basin"), in partnership with watershed residents, municipalities, and the provincial and federal governments. These include, but are not limited to, agricultural best management practices to improve water quality, drinking water source protection to promote water budgets and drinking water risk management, watershed monitoring to track local conditions and identify water quality concerns, and watershed and coastal resiliency planning and actions. The 2016-2020 Cumulative Impact Assessment Report ("the Report") is of interest to the CA network to inform current understanding of water budgets and impacts to water resources within the GLSLR Basin.

The Report highlights "significant uncertainty" with estimates for components of the GLSLR Basin water budget, including runoff, evaporation and precipitation estimates. Many factors influence this level of uncertainty, such as inconsistent coverage of monitoring networks (streamflow and precipitation gauges) and varied application of the Consumptive Use coefficients. To address uncertainties, the University of Michigan developed the Large Lake Statistical Water Balance Model (L2SWBM). Conservation Ontario supports the use of data from the L2SWBM to inform future assessments, as noted in the "Future Work" section of

the Report. Use of this model is expected to improve Basin water budget data and reduce uncertainty, particularly when assessing the impacts of climate change on water balance components.

In addition to use of the L2SWBM, Conservation Ontario offers the following recommendations to reduce uncertainties and support comprehensive future assessments:

- **Consideration of Groundwater Inputs:** The Report notes that groundwater seepage into the Basin's lakes and rivers has not been included as part of the assessment for several reasons, including limited data and modelling. Conservation Ontario recommends inclusion of all available data for a fulsome understanding of inputs and diversions when calculating water balances in the GLSLR Basin. As noted in the Report, the current approach regarding groundwater data may be reconsidered "as data and information improve."
- **Climate Change Assessments:** The Report states that, while the future long-term average water levels on the Great Lakes are unlikely to be significantly higher or lower than the historical long-term average, it is possible that water level variability over shorter periods could be exacerbated. It is recommended that future work be undertaken to better understand shorter-term variations, as they may have greater impacts on water availability and use, as well as ecosystem functions.
- **Additional Intrabasin Data Considerations:** The Report notes that "some Great Lakes have intrabasin diversions" and that "only the intrabasin Diversion at the Welland Canal from Lake Erie to Lake Ontario is considered in this report." As noted in "An Overview of Great Lakes Diversions"¹, intrabasin diversions into the Lake Superior watershed include the Long Lac and Ogoki diversions. Additionally, intrabasin diversions out of the Lake Michigan watershed include the "Chicago diversion". Both of these intrabasin diversions should be considered in future reports to ensure a comprehensive assessment of all relevant diversions impacting water balances in the GLSLR Basin.
- **Consideration of "small hydrologic effects":** The Report notes "a small hydrologic effect, however, does not necessarily mean that there are no cumulative impacts...[and]...may still lead to significant impacts on ecosystems or other water uses depending on the scale or type of impacts being evaluated." CAs witness this on the ground both with regard to coastal wetland areas they own and manage, and coastal natural hazards. In future assessments, additional analysis is encouraged on these "small hydrologic effects" and their impact on both the resilience of the coastal ecosystem and risk to properties and infrastructure.

Thank you for the opportunity to review and provide comments on the "2016-2020 Cumulative Impact Assessment under the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement". As noted above, the information provided through the Report informs CA understanding of water budgets within the GLSLR Basin. To ensure this information is comprehensively shared with the CA network, Conservation Ontario would be pleased to assist the Ministry with coordinating a webinar to present the findings of the

¹ "An Overview of Great Lakes Diversions". International Joint Commission. Last Updated 2020.
<https://ijc.org/en/lsbc/watershed/great-lakes-diversions>

Report for CA staff.

Should you have any questions regarding the content of this letter, please contact the undersigned.

Sincerely,

Nicholas Fischer

Nicholas Fischer
Policy and Planning Liaison

c.c. Conservation Authority CAOs / GMs