



VISION 2016 – 2020

Conservation Ontario will be the leader in engaging Conservation Authorities in matters of common interest and in shaping effective policy related to Conservation Authorities

Conservation Ontario Council Report

From: Leslie Rich, Policy and Planning Officer (CO)
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Date: November 23, 2016

Subject: Conservation Ontario's comments on the "*Guide: Consideration of Climate Change in Environmental Assessment in Ontario*" (EBR# 012-5806)

Summary

Conservation Ontario submitted the attached comments on the "*Guide: Consideration of Climate Change in Environmental Assessment in Ontario*" on October 26, 2016. CO is supportive of the Guide's recommendation of including climate change mitigation and adaptation considerations in environmental assessment projects in Ontario. The comments also highlighted the need for more direction on considering a project's effects on the resilience to climate change of the surrounding environment, infrastructure and communities.

Recommendation

THAT the comments on the "Guide: Consideration of Climate Change in Environmental Assessment in Ontario" (EBR# 012-5806) submitted to the Ministry of the Environment and Climate Change on October 26, 2016 be endorsed

Background

On September 12, 2016, the Ministry of the Environment and Climate Change (MOECC) posted a draft "*Guide: Consideration of Climate Change in Environmental Assessment in Ontario*" to the Environmental Registry for public review and comment by September 27, 2016. The purpose of the Guide is to broaden the understanding of proponents and the public about MOECC's expectations for considering the effects of climate change in environmental assessment studies and processes. The Guide provides approaches to characterizing a project's greenhouse gas impacts and its resilience in relation to a changing climate.

On September 14, 2016, Conservation Ontario (CO) staff circulated a request for comments on the draft "*Guide: Consideration of Climate Change in Environmental Assessment in Ontario*" to the CA Class EA

Contacts, CO Class EA Working Group, CO Climate Change Working Group and CA Climate Change Contacts.

Current Status

Comments on the draft *“Guide: Consideration of Climate Change in Environmental Assessment in Ontario”* were received from Lake Simcoe Region and Toronto and Region Conservation Authorities. The comments were incorporated into a letter of comment that was submitted to the Province on October 26, 2016.

CO commended the Province in recognizing three venues of addressing climate change in environmental assessments but recommended that greater detail be provided on how to consider a project’s effect on the resilience to climate change of the surrounding environment, infrastructure and communities. CO’s letter is also supportive of the Ministry conducting reviews and evaluations to ensure proponents are including climate change considerations in planning and environmental assessment processes. However, the Province was further encouraged to conduct a second evaluation of the extent to which proponents address and implement climate change considerations throughout the planning and design life of the project.

CO’s letter supported the creation of the Guide but included the following recommendations: that the Guide be revised to ensure its focus is on “climate change effects” vs. “climate effects”; that there be a requirement for all environmental assessment projects to refer to and comply with the directions provided in the Guide; and that the Province provide more clarity on considerations of climate change mitigation and adaptation measures, as well as climate change scenarios.

CO’s letter concludes by indicating support for including climate change considerations in environmental assessment projects in Ontario but greater clarification is needed to allow for effective implementation of the Guide. It was also recommended that the Province encourage proponents to undertake projects using a net-zero carbon approach.

Conclusion

CO staff submitted the attached letter of comment on the *“Guide: Consideration of Climate Change in Environmental Assessment in Ontario”* to MOECC on October 26, 2016. The draft Guide was also used to inform proposed amendments to CO’s Class EA (see December report to Council for further details). CO staff will continue to monitor opportunities for CAs to participate in future related postings.



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October 26, 2016

Dear Mr. Jenish:

Re: Conservation Ontario's Comments on "*Guide: Consideration of Climate Change in Environmental Assessment in Ontario*" (EBR #: 012-5806)

Thank you for the opportunity to provide comments on the draft *Guide: Consideration of Climate Change in Environmental Assessment in Ontario*. Conservation Ontario is the network of Ontario's 36 Conservation Authorities (CAs). These comments are being provided to you as a result of consultation with CA staff who have extensive experience working with Individual Environmental Assessments (IEA) and Class Environmental Assessments (Class EAs), including Conservation Ontario's Class Environmental Assessment for Remedial Flood and Erosion Control Projects. These comments are not intended to limit consideration of comments shared individually by Conservation Authorities.

General Comments

Addressing Climate Change Effects

Conservation Ontario commends the Province on its creation of the draft *Guide: Consideration of Climate Change in Environmental Assessment in Ontario*. Conservation Ontario recommends that the Province revises the Guide to ensure the focus of the document is on "climate change effects" and not "climate effects", as it is frequently referred to in the document. This correction should be made throughout the Guide to provide clarity that consideration should be made for climate change effects and not climate effects in environmental assessments.

Conservation Ontario is supportive of the Province's suggestions of including climate change mitigation and adaptation measures in environmental assessments. However, greater clarity is needed in the Guide to ensure proponents are aware that both mitigation and adaptation measures should be included. For

instance, on page 3 it should state “The outcome of a climate consideration is an undertaking or project: that has taken into account alternative methods to reduce its greenhouse gas emissions and negative effects on carbon sinks; *and* that is more resilient to future changes in climate and helps maintain the ecological integrity of the local environment through an assessment of present and future environmental effects in the face of a changing climate.” This clarification will ensure proponents include consideration for both mitigation measures as well as adaptation measures in environmental assessments.

While it is recognized that this Guide “does not limit a proponent in terms of the choices of methodologies, approaches and modelling information used in a climate change consideration”, it should be identified at the outset that resources are available as described in Appendix C. While the creation of this Guide is supported by Conservation Ontario, the lack of clear direction from the Province on climate change scenarios will once again result in a variety of disparate approaches being undertaken. This is particularly concerning when it comes to infrastructure decisions which may have an impact on public safety. As it is acknowledged that climate change science and modeling is constantly being updated, the Guide may wish to direct proponents to look both at the ‘best case’ and ‘worst case’ scenarios when considering the effects of climate change on a project.

Addressing a Project’s Effect on Environmental Resilience to Climate Change

The Guide introduces three ways of considering climate change in environmental assessments. Firstly, a project should consider how it contributes to climate change through its greenhouse gas emissions or its effect on the natural landscape. Secondly, a project should consider how it will be affected by climate change effects and increase its resilience to climate change. Thirdly, a project should consider how it affects the ability of ecosystems and species to adapt to climate change, with efforts to increase the local environment’s resilience to climate change. Conservation Ontario commends the Province in recognizing these three venues of addressing climate change in environmental assessments. However, the Guide only provides direction on the first two considerations. Therefore, Conservation Ontario recommends that the Province revises the Guide to include direction on how to consider a project’s effect on the surrounding environment’s resilience to climate change in environmental assessments. For example, a new section titled “A Project’s Effects on Environmental Resilience to Climate Change” should be added after the section on “Effects of Climate Change on a Project” on page 9. This new section can address how a project has considered the protection of vulnerable natural features, such as groundwater recharge and discharge sites, or how the project has retained or restored landscape connectivity to allow the potential migration of species as the effects of climate change worsen. The Province is advised to include an equivalent amount of direction on considering a project’s effects on the surrounding ecosystem’s resilience to climate change as its consideration of how a project contributes to climate change and how it will be impacted by climate change.

When assessing how a project contributes to the surrounding ecosystem’s resilience to climate change effects, Conservation Ontario recommends that the Province also ensures proponents take into consideration a project’s effect on the vulnerability or resilience of the surrounding infrastructure and communities to climate change effects. By also considering the surrounding infrastructure and communities, proponents will be able to ensure the risk to human life and property due to climate change effects is not exacerbated. For example, proponents should be considering whether their project’s alteration of local drainage patterns will exacerbate the impacts of flooding projected to occur with climate change to the surrounding infrastructure and communities.

Ministry's Review of Considerations on Climate Change Effects

Conservation Ontario is supportive of the Ministry conducting reviews and evaluations to ensure proponents are including climate change considerations in the planning and environmental assessment processes. Conservation Ontario advises the Province to reiterate this point in the Introduction of the Guide to reinforce the importance of practitioners undertaking the exercise of incorporating climate change in environmental assessments. The Province is further encouraged to conduct an evaluation of the extent to which these climate change considerations are addressed and implemented throughout the planning and design life of the project, such as in construction, operation, maintenance and monitoring. This second evaluation will ensure that proponents will implement their plans of a project undertaking a climate-focused approach. The conclusions drawn from this evaluation and lessons learned should be used to inform future climate change guidance to EA practitioners.

Furthermore, when the Ministry is conducting reviews and evaluations to ensure proponents are including climate change considerations in the planning and environmental assessment processes, it is important to consider local source protection plans developed under the *Clean Water Act*, which contains both legally and non-legally binding policies to protect municipal sources of drinking water.

Comments on Specific Sections of the Guide

Policies Related to Climate Change Effects in Ontario

Conservation Ontario is supportive of the applicable policies in the 2014 Provincial Policy Statement (PPS) that address climate change effects. In addition to the list presented in the draft Guide, Conservation Ontario suggests that policies 1.6.1 and 1.7.1 in the PPS be added because they ensure infrastructure shall consider the impacts from climate change. The Province is also reminded that implementation support material for climate change considerations in the PPS is still required. As there is currently no Provincially-approved guidance available, there is a great discrepancy in the application of the climate change policies found within the PPS.

Some environmental assessment projects also have *Planning Act* requirements that must be met. However, as the definition of development found within the PPS excludes “activities that create or maintain *infrastructure* authorized under an environmental assessment process”, Conservation Ontario encourages the Province to recognize in this document, and in their implementation framework, that not all projects are subject to these requirements and thus the policies listed would not apply.

In addition, there are other policies which environmental assessment projects should be mindful of. For example, the proposed amendment 4.2.10.2a) for the *Growth Plan for the Greater Golden Horseshoe* addresses how municipalities are encouraged to develop strategies to reduce greenhouse gas emissions and to improve resilience to climate change through land use planning, planning for infrastructure, including transit and energy. Conservation Ontario recommends the Province to include this policy in the Guide because section 14.1 of the *Places to Grow Act* states that a decision related to a growth plan area shall conform with a growth plan that applies to that growth plan area. Thus, the Province is encouraged to ensure the Guide supports the proposed amendments in the *Growth Plan for the Greater Golden Horseshoe*.

Using This Guide

Conservation Ontario is supportive of the Province's recognition that the draft Guide should be consulted for IEAs, Class EAs, and the renewal or amendments of approved Class EAs. However, Conservation Ontario recommends the Province to require all environmental assessment projects to refer to and comply with directions provided in the Guide. It is essential for proponents to consider climate mitigation measures that can help reduce their greenhouse gas emissions as well as implement climate change adaptation measures that will ensure the project's resiliency to predicted climate change effects. Additionally, by requiring all environmental assessments to make climate change mitigation and adaptation considerations, Table 1 would then become redundant and can be omitted from the Guide.

The draft Guide states "...the proponent should provide a rationale where possible in the environmental assessment documentation as to why the consideration of climate change could not be completed or is not applicable." As stated above, Conservation Ontario encourages the Province to make climate change considerations in environmental assessments a requirement but if a climate change consideration cannot be carried out or is not applicable due to the undertaking being sufficiently minor in scale and short in lifespan, it should be required to provide justification in the environmental assessment documentation. Therefore, Conservation Ontario recommends that "where possible" be removed from the sentence as it should be a requirement that a justification be provided if climate change considerations are not undertaken.

Considering the Project's Effect on Climate Change

Conservation Ontario supports the Province in recognizing that environmental assessments should consider how a project may contribute to climate change through its greenhouse gas emissions or its effects on the natural landscape. Conservation Ontario recommends that the Guide also includes consideration of a project's effects on the local water management system. With climate change projections predicting increased occurrences of extreme storm events, it is important to consider a project's effects on the local hydrology, including the management system for flood waters, stormwater, groundwater, and surface water. The Province is encouraged to revise the Guide to ensure environmental assessment projects consider their effect on the local water management system to reduce the risk or mitigate the effects of flooding or extreme storm events predicted from climate change.

Conservation Ontario is supportive of the four questions listed in the Guide to begin assessing a project's effect on climate change. However, consistent language could be applied and the wording of the questions could be improved to provide more clarity. The first question should be reworded to make reference to the terms "carbon sink" and "carbon stock" to describe a project's influence on the local carbon dioxide in the atmosphere. To stay consistent with the other questions, the second question should be written in the future perspective, for example "To what extent *will* the project's effects on the atmosphere be taken into account in the project planning?" The third question could also be improved by asking, "Are there alternative methods to implement the project that would *reduce* any adverse contributions to a changing climate?" This suggested wording is more direct and clearly addresses the goal of reducing a project's climate change contributions. There are no proposed revisions for the fourth question.

Conservation Ontario is supportive of the Guide's approach to considering climate change effects by comparing a project's business-as-usual approach with a more climate-focused approach. However, the Guide needs to provide clarification on how to determine when to undertake a quantitative consideration rather than the qualitative consideration or if both are required. This additional clarification will prevent proponents from undertaking a qualitative analysis when a quantitative analysis would be more appropriate and vice versa. The Province is also advised to provide more direction on the standard methodology for quantifying emission calculations, emission estimation factors and the global warming potential of various greenhouse gases when proponents are undertaking a quantitative consideration of climate change effects. By providing guidance on how to quantify these elements, the Province will be able to ensure all proponents are aware of the standard procedure for quantifying these elements. Conservation Ontario also recommends that the Guide encourages projects to develop a net-zero carbon approach. By encouraging a net-zero carbon approach as a first step, future projects can implement climate change mitigation measures such as using renewable energy sources, and increasing energy efficiency and insulation.

When discussing climate mitigation measures on page 12 of the Guide, more clarity is needed when making the reference to "alternative energy". Conservation Ontario recommends that the Guide be revised to provide examples of "alternative energy", such as using low carbon and/or renewable energy sources or for the term to be added to the Glossary.

The first paragraph on page 13 of the Guide is awkwardly worded with "avoided" repeated twice in the sentence. To improve clarity, Conservation Ontario suggests that one of the repeated "avoided" be removed from the sentence.

Documenting Climate Effects in Environmental Assessments – Additional Considerations

Conservation Ontario commends the Province in providing guidance to proponents about where additional climate change considerations can be found. However, as previously stated, the Province is advised to issue implementation support material for the climate change considerations found within the PPS to encourage consistency across the Province, including in regional government plans and master plans. As illustrated throughout the Guide, climate change needs to be considered early in the process for environmental assessments and equally for master plans to address climate change effects and ensure they are implemented throughout the planning and design life of the project, including the planning, design, construction, operations, maintenance, monitoring, and decommissioning of the project.

Appendix C: Availability and Use of Climate Model Results

Conservation Ontario is appreciative of the list of sources to attain climate model results. It is recommended that the Province adds to the list provided in Appendix C the Climate Data Online (CDO) website which provides free access to the National Climate Data Center (NCDC)'s archive of global historical weather and climate data, and the website to the Canadian Climate Data and Scenarios.

Glossary

In addition to the comment above, Conservation Ontario recommends the addition of “direct greenhouse gas emissions” and “indirect greenhouse gas emissions” to the Guide’s glossary to provide clarification to proponents needing to consider their project’s contribution to climate change effects.

Finally, Conservation Ontario also recommends amending the title of the document to “Addressing Climate Change in Environmental Assessment in Ontario”. This new title would be better suited to the information included in the Guide.

Thank you for the opportunity to provide comments on the draft *Guide: Consideration of Climate Change in Environmental Assessment in Ontario*. Conservation Authorities play an important role in addressing today’s environmental and resource management challenges, including the impacts of a changing climate, which enables Conservation Ontario to be uniquely positioned to provide valuable input into this review process. Conservation Ontario is strongly supportive of including climate change considerations in environmental assessments in Ontario but greater clarification is needed in the Guide to allow for effective implementation of climate change considerations in environmental assessment projects. Should you have any questions about this letter, please contact Leslie Rich at extension 226 or Jessica Chan at extension 227.

Sincerely,



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c.c. All Conservation Authorities’ CAOs
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