



Callum Squires, Golder Associates Ltd.
141 Adelaide Street West, Suite 910
Toronto, Ontario, Canada
M5H 3L5

18 December 2017

RE: Wataynikaneyap Power L.P. Draft Environmental Assessment Report: Phase 1 New Transmission Line to Pickle Lake (Project Reference Number 13025)

Dear Mr. Squires,

Thank you for the opportunity to comment on the Phase 1 draft environmental assessment (EA) report prepared by Golder Associates Ltd. for Wataynikaneyap Power L.P. I am submitting this letter in my capacity as a Wildlife Conservation Society (WCS) Canada scientist. A national organization, WCS Canada's research and conservation priorities in Ontario are largely focused on Ontario's Far North.

Our scientists specialize in fish and wildlife ecology, conservation biology, the cumulative effects on caribou, wolverine, moose, and freshwater fish, and landscape ecology in northern Ontario. WCS Canada scientists have been engaged in environmental assessments at both the provincial and federal level (e.g., Chetkiewicz and Lintner 2014)¹ and provide commentary and critique on Ontario's proposals where they affect the environment, particularly the Far North. WCS Canada provided comments on the Terms of Reference for this Project in July 2013.

Our significant concerns in the draft EA report relate to the lack of assessment of the project with respect to climate change, particularly given guidance developed by the Ontario Ministry of the Environment and Climate Change (MOECC) and the limitations of cumulative effects assessment within project-level environment assessment.

Below, we present a number of key issues and provide recommendations to address these issues.

Issue 1. Assessing the impacts of climate change on the Project and the contribution to climate change by the Project

Climate change is a significant threat to the ecological, social, and economic systems in Ontario. Climate change, unlike most environmental impacts, is a challenge to incorporate into project-level environmental impact assessment (EIA) due to three key characteristics:

- The effects of climate change are felt at many scales including globally.
- They are cumulative and generally not well addressed in typical cumulative effects assessment.
- The effects generally cannot be traced back directly to individual projects.

Those affected by the greenhouse gases (GHG) emissions of projects proposed in Ontario (and Canada) include Indigenous peoples with Treaty and Aboriginal rights as well as citizens in Ontario and around the world as well as future generations.

¹ https://canada.wcs.org/Portals/96/Documents/RSEA_Report_WCSCanada_Ecojustice_FINAL.pdf

Section 5.4 of the draft EA report describes the approach taken by the proponent to address climate change following the Guide. The report focuses on the contribution of the project to climate change, specifically based on GHG emissions. It does not seem to address how the climate will affect the project which seems highly relevant given the size, permanency, and expense of this undertaking as well as the known issues with climate change in northern Ontario.

Temperature changes are predicted to be the greatest in northern Ontario where the project is occurring, with increases as high as 10°C above 1971–2000 baseline levels by the 2080s (McDermid et al. 2015). Many of the remote First Nation communities, primarily engaged in Phase 2, are already experiencing the impacts of climate change, as warmer temperatures compromise winter roads used to connect communities in the winter with each other and the province and bring in diesel fuel, food, and building materials, and extreme wildfires and flooding result in more frequent emergency evacuations². In Ontario, evidence is accumulating that both aquatic (e.g., Dove-Thompson et al. 2011, Shuter et al. 2002) and terrestrial (e.g., Nitutch and Bowman 2014, Varrin et al. 2007) wildlife are being impacted by the changing climate.

Recommendation 1: Proponent should assess how the current and future climate will impact construction and operation and maintenance of Phase 1 of the Project.

Recommendation 2: Proponent should explicitly consider how current and future fire regimes will impact construction and operation and maintenance of Phase 1 of the Project.

Integrating climate change into EIA requires consideration of mitigation, adaptation, and the impacts not prevented through effective mitigation and adaptation efforts which includes loss and damage, or impacts and vulnerability assessment. MOECC developed guidance (the Guide) in 2016 to provide direction to proponents to assess: how the potential changes in climate will affect the project; and, how the project contributes to climate change.

While the Guide is an important first step for proponents who want to address climate change in their proposed projects, it is not consistent with the Government of Ontario's goal of reducing GHG emissions, addressing adaptation approaches to climate change, and considering impacts that cannot be addressed through adaptation and mitigation. The Guide is also unenforceable, has limited application and content, and ignores the limitations of the Ontario *Environmental Assessment Act* (EAA) and current EA practice in Ontario.

Despite these limitations, the assessment of GHG emissions from the Project is limited to construction activities in Phase 1. It is unclear to us why the assessment does not include the operation and maintenance stage of Phase 1 as well.

Recommendation 3: Proponent should address GHG emissions for operation and maintenance stage of Phase 1.

² Ministry of Transportation and Northern Development and Mines. 2016. Northern Ontario Multimodal Transportation Strategy. The northern Ontario context: implications and considerations for strategy development. Available online at <https://nomts.ca/resources/reports/>

We remain concerned with the statement in Section 5.4 that the “it is important to put the Project in greater context when considering the impact of the Project on climate change” (e.g., Phase 2). The main thrust of this argument is that current impacts associated with construction and operation and maintenance in Phase 1 should be weighed against the anticipated benefit (e.g., reduction in GHG emissions) when remote communities are electrified. This logic implies that Phase 2 will proceed. In addition, it seems to us that this appeal to a broader context should be used more consistently in the assessment. For example, the inclusion of Phase 2 impacts seems highly relevant to the cumulative effects assessment for other valued ecosystem components such as wildlife, freshwater, and wetlands.

Recommendation 4: Proponent should clarify why they expect consideration of Phase 2 outcomes for climate change assessment, but do not address this context for other valued ecosystem components.

We also caution that while the proponent focuses on the purported benefit of GHG outcomes with electrification of remote communities in Phase 2, various mining and northern infrastructure scenarios including the Ring of Fire, identify this Project as a potential source of cheaper power to facilitate and support new exploration and mining. We suspect any purported offset due to Phase 2 would be negated by GHG emissions associated with new mines, roads, and smelters associated with the Ring of Fire. In general, we suggest the appropriate starting place for assessing GHG emissions, is that the emissions from this Project are additional to the baseline condition. The default conclusion would be that the life cycle direct emissions from a proposed activity are solely attributable to the proposed activity as a negative environmental effect. This should require an assessment of how the Project will offset emissions under likely alternative scenarios as well as a no project alternative.

We suggest the proponent consider more explicitly how the Project contributes to actions identified in MOECC’s Climate Change Action Plan since key questions for MOECC in decision making on approvals should include:

- Is this project helping or hindering Ontario’s ability to meet its climate commitments?
- What is the scale at which it is helping or hindering?
- By approving the project, is MOECC downloading the negative impacts elsewhere?

Recommendation 5: Decision making on the Project approvals must include a transparent and publicly available assessment of how the project either moves Ontario towards or away from meeting its provincial climate goals and commitments.

Issue 2: The Project does not consider upstream climate change impacts.

The report does not identify or evaluate upstream climate change implications of the Project. We support the approach in the report taken by the proponent to assess the climate change impacts directly (e.g., releasing GHGs by removing and burning biomass during construction), but contend that it is a significant oversight to think the climate change impacts are limited to the footprint of the project, pieces of a project, or just the construction of the Project.

Addressing the upstream climate change impacts would also align provincial practice with federal measures. The Government of Canada recently addressed the issue of direct and upstream impacts by establishing “interim” climate change measures for certain projects (e.g., mines, pipelines, oilsands developments, etc.) being assessed under the *Canadian Environmental Assessment Act, 2012* (CEAA

2012)³. Specifically, Principle 5 of these measures requires an assessment of the direct and upstream GHG emissions linked to the project.

In reality, each new project and activity approved by MOECC through EIA contributes to the impacts of climate change in a cumulative way; for example, climate change can exacerbate impacts already arising from cumulative effects of current land uses, while these impacts negatively affect the ability of natural systems to respond and adapt to climate change.

Recommendation 6: The proponent should consider the direct and upstream climate change impacts of the Project and its activities.

Issue 3: Caribou and wolverine impacts are challenging to assess within the scope of the Project

The information provided in the wildlife section regarding Indigenous and stakeholder concerns, information sources, and criteria and indicators seem well-researched and supported by the peer-review literature and MNRF reports. Similarly, the attention to spatial scales in the assessment of species (described in Table 6.3-4) is also appropriate and well-supported for caribou.

We suggest the proponent consider more explicitly how the Project supports Ontario's Cervid Ecological Framework which provides the broader ecological context for management of deer, moose, and caribou across the various spatial scales being considered by the Project.

In terms of spatial boundary for wolverines, I recommend some attention to the wolverine recovery zones in the Wolverine Recovery Strategy (2013). Although MNRF did not support these in their Government Response Statement they have some ecological basis. It seems these zones are more relevant than Wildlife Management Units since wolverine are not subject to the same management objectives as other furbearers and wildlife.

Occupancy models developed for wolverine based data collected through aerial surveys over a 10-year period (2003-2012) within a 574,287 km² study area do not include much of the Project and only become useful when considering the area near Pickle Lake (Ray et al., submitted).

Section 6.3.7.1.1.2 Impact Management Measures

In general, many of the actions proposed follow the best management practices developed by MNRF for caribou. Rather than list these actions are presented here, we suggest the Proponent reformat this section more explicitly to indicate what activities address the following conservation principles for caribou:

- Minimize the disturbance footprint and its overall contribution to cumulative disturbance within each range
- Minimize the loss of habitat within each range
- Minimize habitat changes and fragmentation to maintain function and connectivity of sub-range habitat features
- Minimize the density of linear features to avoid increases in predator efficiency
- Minimize habitat disturbance and sensory disturbance near High Use Areas
- Reduce the risk of caribou mortality (i.e., collisions, hunting)

³ <http://news.gc.ca/web/article-en.do?nid=1029999>

These should be grouped into categories of best management practice including:

- Avoidance (e.g., using current information for planning, avoid known High Use Areas, etc.).
- Minimization
- Rehabilitation

This suggested reformatting helps identify how the current list of activities is actually addressing the direct and indirect threats to caribou ranges associated with the construction, operation, and maintenance phases of the Project.

Section 6.3.7.3.1.2 Impact Management Measures

As with caribou, we suggest the Proponent reformat this section to help identify how the current list of activities is actually addressing the direct and indirect threats to wolverine associated with the construction, operation, and maintenance phases of the Project.

Please indicate what activities during construction and operation and maintenance periods of Phase 1 will be undertaken to address the following conservation principles for wolverine:

- Minimize the disturbance footprint and its overall contribution to cumulative disturbance
- Minimize the loss of habitat
- Minimize habitat changes and fragmentation
- Minimize the density of linear features
- Minimize habitat disturbance and sensory disturbance in the winter near dens and kills
- Reduce the risk of wolverine mortality (i.e., collisions, hunting, wildlife-human conflicts)

These should be grouped into categories of best management practice including:

- Minimization
- Avoidance
- Rehabilitation

Issue 4. Cumulative effects assessment in Ontario remains limited under the EAA

We remain concerned that the current approach to assessing the cumulative effects of this project on biodiversity falls short. This is due, in part, because of limitations in Ontario's *Environmental Assessment Act* (EAA) which does not mention cumulative effects (Lindgren and Dunn 2010). Nor has MOECC provided meaningful guidance cumulative effects in Ontario's EIA and it remains unclear to the public how it addresses cumulative effects in its decision making particularly in light of climate change commitments at the provincial and national level (e.g., Koehl 2010).

In general, there are a number of important reviews of the practice and theory of cumulative effects assessment and implementation (see Sinclair et al. 2017, Duinker et al. 2013). These suggest:

- Cumulative effects assessment should be focused at the regional-level rather than project-level and on valued components rather than human activities.
- All impacts should be presumed to be cumulative.
- Assessments take a long-term and wide-ranging view that includes looking backward at historic evidence to determine existing accumulations of effects, trajectories and directions, to the

present-day at multiple and integrating stressors, and forward by projecting, testing and, where necessary, adjusting alternative future scenarios.

- Cumulative effects assessment focuses on achieving sustainability-enhancing outcomes and well-being through the application of a sustainability decision-making framework (e.g., Gibson et al. 2016).

We encourage the proponent and MOECC to shift the mindset and practice of cumulative effects assessment in Ontario from one of minimizing, mitigating or reducing adverse impacts to one of achieving net benefits and of positive contributions on biodiversity and ecosystem services, particularly in light of climate change.

Overall, we suggest that the appropriate process for assessing the impacts of this Project on climate change, cumulative effects, caribou and wolverine conservation, and freshwater ecosystems are through a strategic and regional environmental assessment. We recommend this part because of the lack of regional-scale planning by the Government of Ontario and the inability of current planning processes whether under Ontario's EAA or Ontario's *Far North Act, 2010* to address issues such as wide-ranging species at risk (e.g., caribou, wolverine, lake sturgeon), cumulative effects, and climate change. The Government of Ontario has also shown a lack of commitment to wetland protection in Ontario's draft Wetlands Conservation Strategy⁴.

As always, we would be pleased to engage in any discussions regarding our recommendations and comments and you may contact Cheryl Chetkiewicz at 807-285-9125 (office), 807-472-1440 (cell), or cchetkiewicz@wcs.org to do so. Thank you for this opportunity to provide feedback.

Yours sincerely,



Cheryl Chetkiewicz, Ph.D.
Conservation Scientist/Landscape Lead

⁴ Ministry of Natural Resources and Forestry. 2016. Draft: A Wetland Conservation Strategy for Ontario 2016-2030. Available online at <http://apps.mnr.gov.on.ca/public/files/er/wetland-conservation-strategy.pdf>

References

- Dove-Thompson, D., C. Lewis, P. A. Gray, C. Chu, and W. I. Dunlop. 2011. A Summary of the Effects of Climate Change on Ontario's Aquatic Ecosystems. Climate Change Research Report CCRR-11, Ontario Ministry of Natural Resources, Ontario.
- Duinker, P. N., E. L. Burbidge, S. R. Boardley, and L. A. Greig. 2013. Scientific dimensions of cumulative effects assessment: toward improvements in guidance for practice. *Environmental Reviews* **21**:40-52.
- Gibson, R. B., M. Doelle, and A. J. Sinclair. 2016. Fulfilling the Promise: Basic Components of Next Generation Environmental Assessment. *Journal of Environmental Law and Practice* **29**:257-283.
- Koehl, A. 2010. EA and climate change mitigation. *Journal of Environmental Law and Practice* **21**:181-218.
- McDermid, J., S. Fera, and A. Hogg. 2015. Climate change projections for Ontario: An updated synthesis for policymakers and planners. Climate Change Research Report CCRR-44, Ontario Ministry of Natural Resources and Forestry, Science and Research Branch, Peterborough, ON.
- Nituch, L. A. and J. Bowman. 2013. Community-level effects of climate change on Ontario's terrestrial biodiversity. Climate Change Research Report CCRR-36, Ontario Ministry of Natural Resources and Forestry, Peterborough, ON.
- Ray, J. C., L. G. Poley, A. J. Magoun, C.-L. B. Chetkiewicz, F. M. Southee, F. N. Dawson, and C. Chenier. *Submitted*. Modeling broad-scale wolverine occupancy in a remote boreal region using multi-year aerial survey data. *Journal of Biogeography*.
- Shuter, B. J., C. K. Minns, and N. P. Lester. 2002. Climate change, freshwater fish, and fisheries: case studies from Ontario and their use in assessing potential impacts. Pages 77-87 in N. A. McGinn, editor. *Fisheries in a Changing Climate*. American Fisheries Society 32, Bethesda, Maryland.
- Sinclair, A. J., M. Doelle, and P. N. Duinker. 2017. Looking up, down, sideways: Reconceiving cumulative effects assessment as a mindset. *Environmental Impact Assessment Review* **62**:183-194.
- Varrin, R., J. Bowman, and P. A. Gray. 2007. The Known and Potential Effects of Climate Change on Biodiversity in Ontario's Terrestrial Ecosystems: Case Studies and Recommendations for Adaptation. Climate Change Research Report CCRR-09, Queen's Printer for Ontario.