379 Ronka Road
Worthington, ON P0M3H0
LindaH@OntarioRiversAlliance.ca
OntarioRiversAlliance.ca

14 April 2026

Regional Assessment in the Ring of Fire Area
Impact Assessment Agency of Canada
160 Elgin Street, 22nd floor
Ottawa, Ontario
K8A 0H3
Filed Online

Re: Interim Regional Assessment for the Ring of Fire (Kawana 'Bi' Kag)
Reference No. 80468

Dear IAAC Team:

The Ontario Rivers Alliance (ORA) is a not-for-profit grassroots organization with a mission to protect, conserve, and restore Ontario rivers. ORA advocates for effective policy and legislation to ensure that development affecting Ontario rivers is environmentally and socially sustainable.

Executive Summary:

The Ring of Fire Regional Assessment (Regional Assessment) is fundamentally undermined by a critical flaw: it has no binding authority over project approvals. At the same time, the federal government has already declined to conduct an Impact Assessment for a major mining project in the region, demonstrating that development is proceeding ahead of the science.

The report itself confirms that baseline environmental data are insufficient and must be established before development. Yet there is no requirement to pause approvals until this work is complete. This is a known failure in environmental assessment practice—projects proceed, impacts occur, and baseline conditions are never properly understood.

While an online public information session was held on March 11, 2026, the process still relies on centralized in-person sessions and does not clearly guarantee accessible virtual participation at every key stage. Meaningful consultation in a region of this scale and remoteness must be consistently accessible, not occasional.

The Ring of Fire sits within one of the largest intact peatland systems on Earth—a globally significant carbon store. Disturbance in this region is not local—it is permanent and globally consequential.

Without enforceable thresholds, full infrastructure assessment, climate integration, and legally binding outcomes, this Regional Assessment risks documenting impacts while allowing irreversible damage to proceed.

Critical Deficiencies of the Regional Assessment for the Ring of Fire:

The Regional Assessment represents a significant and long-overdue step toward addressing the cumulative environmental, cultural, and socio-economic risks associated with large-scale industrial development in one of Canada's most ecologically sensitive regions. The co-led structure with First Nations, the integration of Indigenous knowledge systems, and the explicit recognition of cumulative effects are important and necessary foundations. However, in its current form, the Regional Assessment framework is fundamentally undermined by critical structural deficiencies that, if left unaddressed, will render the process ineffective in preventing irreversible environmental harm and in upholding Indigenous rights.

At its core, the Regional Assessment is explicitly framed as a non-decision-making tool intended to "inform" future processes rather than guide or constrain them.[1] This limitation is not a minor procedural detail—it is the central weakness that threatens the integrity of the entire exercise. A regional assessment that identifies cumulative effects, ecological risks, and governance gaps, yet lacks binding authority over project approvals, cannot achieve its stated purpose of avoiding adverse outcomes. Instead, it risks becoming a parallel process that documents impacts while development proceeds independently through project-specific approvals.

Public materials describing the Regional Assessment reinforce this limitation, describing regional assessments as a planning tool that provides broader analysis "*to help inform future impact assessment decisions and other decision-making processes,*"[2] rather than a framework with binding force over approvals.

This concern is no longer theoretical. The recent federal decision to decline to designate the Eagle's Nest Mine, a Ring of Fire mining project,[3] for a federal Impact Assessment, despite the ongoing Regional Assessment and requests from First Nations, demonstrates a clear disconnect between federal policy commitments and actual decision-making practice. By determining that the project's impacts could be addressed through "other means," the federal government has effectively deferred oversight to provincial processes that are widely recognized as missing in action ("Priority Project" status), particularly with respect to cumulative effects, climate risk, and Indigenous rights. This decision establishes a precedent that undermines the Regional Assessment before it is complete, signalling that project approvals may proceed irrespective of regional findings.

A Globally Significant Carbon Sink is at Risk:

The implications are profound. The Ring of Fire is not a typical development area; it is situated within the Hudson Bay–James Bay Lowlands, one of the largest intact peatland complexes in the world and a globally significant carbon sink. As one of the most comprehensive global syntheses on inland water and carbon dynamics explains, "*inland waters play a disproportionately large role in the global carbon cycle relative to their surface area*,"[4] and disturbances to these systems can rapidly shift them from carbon sinks to sources. Peatland systems are even more critical. In fact, northern peatlands contain "*approximately one-third of the world's soil carbon pool,*"[5] underscoring the global climate implications of disturbance in this region.

Baseline Data Gap and Failure to Require Precaution:

The Interim Report acknowledges that baseline environmental data are insufficient, noting that existing monitoring programs are "*sparse, short-term and underfunded*" and that comprehensive,

community-driven baseline data must be established before development proceeds.[1] This is a critical and scientifically sound conclusion. However, the report fails to translate this finding into an enforceable requirement. Without a clear condition that development must not proceed until robust baseline data are established, this acknowledgement becomes procedural rather than protective. The well-documented consequence of such an approach is that development advances without baseline conditions, rendering subsequent impact assessments speculative and undermining the ability to attribute or mitigate environmental change. Fisheries and Oceans Canada has emphasized that cumulative effects must be assessed "*in a manner that accounts for interactions among stressors over time and space,*"[6] a standard that cannot be met without baseline data.

Infrastructure is the Primary Driver of Impact and Cumulative Effects:

Equally concerning is the treatment of infrastructure within the Regional Assessment. While the report recognizes that the assessment area includes "*associated infrastructure and induced development,*"[1] it does not operationalize this recognition in a meaningful way. In northern development contexts, infrastructure is not ancillary; it is the primary driver of long-term ecological change. Roads, transmission corridors, and hydrological alterations fragment intact landscapes and fundamentally alter watershed processes. Environment and Climate Change Canada has warned that "climate-driven changes to freshwater systems will interact with existing stressors, amplifying risks to water quality and ecosystem health,"[7] meaning that infrastructure impacts cannot be assessed in isolation from broader system dynamics.

The omission of enforceable ecological thresholds further compounds this problem. The report commits to evaluating cumulative effects and development scenarios, yet does not establish limits on disturbance, fragmentation, or carbon release. Without defined thresholds, cumulative effects assessment lacks a decision-making endpoint. This is inconsistent with best practice. As Cormier et al. note, cumulative effects frameworks must include "*clear thresholds or limits beyond which unacceptable change is anticipated,*"[8] otherwise assessment becomes descriptive rather than preventative.

Recent scenario mapping work prepared for the Regional Assessment Working Group further underscores this concern. While the scenarios provide a structured and useful representation of how development and infrastructure may expand across the region over time, they explicitly do not assess the environmental, cultural, or climate impacts of those development pathways, and currently exclude ecological, climate, and Indigenous Knowledge datasets from the modelling framework. As a result, the scenarios illustrate where development may occur, but do not establish whether such development is environmentally sustainable, culturally acceptable, or within ecological limits. Without integrating ecological thresholds, climate risk, and Indigenous land use values into scenario outcomes, this work risks becoming a descriptive exercise rather than a decision-making tool capable of preventing cumulative harm.[9]

Failure to Integrate Climate Change:

Climate change, while acknowledged in the report, is not meaningfully integrated into the analytical framework. The recognition that climate change is already altering environmental conditions is not accompanied by requirements to incorporate forward-looking projections into scenario modelling or infrastructure planning. This omission is particularly problematic in a region where peatland drying, permafrost degradation, and wildfire risk are expected to increase.

Disturbance of peatland and wetland systems is well-established as a source of multiple greenhouse gases, including carbon dioxide (CO_2) from peat oxidation, methane (CH_4) from anaerobic decomposition, and nitrous oxide (N_2O) from nutrient-enriched waters. As demonstrated by Wang et al., human disturbance of aquatic and wetland systems is already accelerating greenhouse gas emissions, concluding that "*anthropogenic nutrient inputs and environmental changes are enhancing N_2O emissions from inland waters globally.*"[10] These processes are not independent; they interact and compound over time, particularly in northern peatland systems where stored carbon has accumulated over millennia. Failure to integrate these emissions pathways into scenario modelling and decision-making significantly underestimates the climate impact and long-term liability associated with development in the Ring of Fire region. Once disturbed, these systems can shift from long-term carbon sinks to sustained sources of greenhouse gases, with emissions persisting for decades to centuries. These interactions must be explicitly incorporated into any credible assessment framework.

This omission is particularly concerning given that Ontario completed a comprehensive Provincial Climate Change Impact Assessment in 2023, which documents the increasing frequency and severity of climate-driven impacts across the province, including northern regions. The assessment identifies rising temperatures, changing precipitation patterns, increased risk of extreme weather events, and heightened vulnerability of freshwater and wetland systems.[11] These findings are directly relevant to the Ring of Fire region, where hydrological integrity, peatland stability, and ecosystem resilience are highly sensitive to climate change. Despite this, there is no clear evidence that the Regional Assessment framework or associated scenario modelling has incorporated these forward-looking climate projections into its analysis or decision-making structure.

This gap is further compounded by the Province's ongoing push to expand hydroelectric generation in northern Ontario to support mining and industrial development. Hydropower is being positioned as enabling infrastructure for the Ring of Fire, yet there is no clear indication that new or expanded hydroelectric facilities are being assessed within the Regional Assessment as part of the same cumulative effects framework.

This is a significant omission. Hydroelectric development fundamentally alters river systems, disrupts natural flow regimes, and fragments aquatic habitat, while also generating lifecycle greenhouse gas emissions—including carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O)—through the flooding and ongoing decomposition of organic matter in reservoirs and affected waterways. These emissions are not one-time releases but can persist for decades, and in many cases for the operational life of the facility, as reservoirs continue to accumulate and decompose organic matter, particularly in carbon-rich northern systems.[12,13]

This concern is further reinforced by the Independent Electricity System Operator (IESO), which has identified hydropower as an "*energy-limited resource*" that relies on water availability as its primary fuel source.[14] In northern Ontario, this dependency introduces inherent variability and uncertainty, particularly under changing climate conditions where altered precipitation patterns, reduced snowpack, drought, and extreme weather events are expected to affect water availability and seasonal flows. Despite this, there is no clear evidence that the Province has meaningfully incorporated these constraints into its procurement strategies or planning assumptions for hydropower expansion in support of mining development.

In northern peatland regions, where vast stores of carbon have accumulated over millennia, these emissions pathways are particularly significant and effectively irreversible on human timescales.

When combined with mining, roads, and transmission infrastructure, these impacts are not additive—they are cumulative, interactive, and, in some cases, amplifying. Failing to assess hydropower alongside other development pathways risks systematically underestimating the full environmental footprint, climate impact, and long-term liability associated with regional development.

Proceeding with long-term infrastructure and resource development planning without this analysis introduces significant environmental, financial, and liability risks, including infrastructure failure, stranded assets, and irreversible ecological damage.

Failure to Provide Meaningful Indigenous and Public Participation:

The report is commendably transparent in its discussion of capacity limitations faced by First Nations, including inadequate infrastructure, staffing constraints, and the burden of participating in multiple concurrent regulatory and negotiation processes. However, these realities are not matched by enforceable mechanisms to ensure equitable participation. Meaningful consultation requires not only opportunity but capacity. Without guaranteed resources, independent technical support, and sufficient time, participation risks becoming procedural rather than substantive. The Impact Assessment Act itself is grounded in the principle that participation must be meaningful, yet this standard cannot be met where structural inequities remain unaddressed.

This concern is reinforced by the broader design of the engagement process. While recent efforts have included virtual participation options, the process continues to rely in part on centralized in-person sessions in locations such as Timmins and Thunder Bay, and does not clearly guarantee accessible virtual participation at every key engagement stage. In a region defined by remoteness, cost, and uneven access to travel, meaningful participation must be consistently accessible and not dependent on physical attendance. All future engagement, including the draft final report stage, should therefore include guaranteed virtual access, clear advance notice, and accessible public posting of materials.

Shortcomings of the Regional Assessment Process:

Taken together, these issues reveal a broader structural problem: the Regional Assessment process is being advanced in parallel with, rather than integrated into, decision-making processes. Projects are proceeding, infrastructure planning is advancing, and participation is constrained, all while the Regional Assessment remains advisory. This sequencing reverses the intended purpose of regional assessment, which is to establish the environmental and governance framework for development decisions.

To address these deficiencies, the Regional Assessment must be strengthened in several fundamental ways. Its findings must be given binding effect within federal decision-making, such that projects inconsistent with identified thresholds or cumulative limits cannot proceed. Baseline data collection must be completed prior to any approvals, supported by sustained investment in Indigenous-led monitoring. Infrastructure must be assessed comprehensively at the regional scale, with explicit recognition of its role in driving cumulative effects. Climate change projections and cumulative effects must be integrated into all aspects of scenario modelling and planning. Finally, public and Indigenous participation remain insufficiently guaranteed and overly reliant on centralized in-person attendance.

The Regional Assessment process indicates that the Working Group is finalizing 16 development scenarios reflecting different levels of development and governance structures. That work may be useful, but scenario-building alone does not protect the region unless it is tied to clear ecological thresholds, binding constraints, and decision rules that prevent unacceptable outcomes.

Conclusion: Risk of Procedural Failure:

The Ring of Fire represents a defining test of Canada's commitment to evidence-based decision-making, climate responsibility, and reconciliation. A Regional Assessment that identifies risks without the authority to prevent them will not meet that test. Without substantive reform, the current process risks facilitating the very outcomes it seeks to understand—incremental, uncoordinated development leading to cumulative and irreversible ecological and cultural loss.

The current approach risks allowing development decisions to proceed in advance of the very regional framework intended to guide them, effectively reversing the purpose of the Regional Assessment.

A credible path forward requires alignment between assessment and decision-making, between recognition and enforcement, and between consultation and capacity. Anything less will leave one of the most important intact ecosystems in the world exposed to a level of risk that cannot be justified, reversed, or responsibly managed.

Respectfully,

Linda Heron
Chair, Ontario Rivers Alliance
(705) 866-1677

---

[1] *Regional Assessment Working Group. Aabitaad • Megwaad • Pitamah Interim Report for the Regional Assessment in the Ring of Fire Area. Impact Assessment Agency of Canada, 2026.*
[2] *March 11, 2026, IAAC - Online Information Session: Regional Assessment for the Ring of Fire. https://iaac-aeic.gc.ca/050/evaluations/document/165539*
[3] *IAAC: Decision on Request for Designation: Eagle's Nest Mine Project (Wyloo Metals), 2026. https://iaac-aeic.gc.ca/050/evaluations/proj/90033*
[4] *Raymond, P.A., et al. "Global Carbon Dioxide Emissions from Inland Waters." Nature 503 (2013): 355–359. https://doi.org/10.1038/nature12760*
[5] *Tarnocai, C., et al. "Soil Organic Carbon Pools in the Northern Circumpolar Permafrost Region." Global Biogeochemical Cycles 23 (2009). https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2008GB003327*
[6] *Murray, C., Hannah, L., and Locke, A. A Review of Cumulative Effects Research and Assessment in Fisheries and Oceans Canada. Fisheries and Oceans Canada, 2020. https://waves-vagues.dfo-mpo.gc.ca/Library/40851576.pdf*
[7] *Environment and Climate Change Canada. Synthesis of Freshwater Science in Canada. Government of Canada. https://www.canada.ca/en/environment-climate-change/services/water-overview/protecting-freshwater/national-freshwater-science-agenda/synthesis-freshwater-science-overview/synthesis.html*
[8] *Cormier, R., et al. Cumulative Effects Considerations for Integrated Planning in Fisheries and Oceans Canada. DFO Canadian Science Advisory Secretariat, 2022. https://publications.gc.ca/collections/collection_2023/mpo-dfo/fs70-5/Fs70-5-2022-079-eng.pdf*

[9] *Regional Assessment in the Ring of Fire Area—Development Scenario Mapping Final Report, by Firelight. https://registrydocumentsprd.blob.core.windows.net/commentsblob/project-80468/comment-66115/Ring%20of%20Fire%20RA%20Development%20Scenario%20Mapping%20Final%20Report.pdf*

[10] *Wang, R., et al. "Inland Waters Increasingly Produce and Emit Nitrous Oxide." Environmental Science & Technology 57, no. 36 (2023). https://pubs.acs.org/doi/10.1021/acs.est.3c04230*

[11] *Ontario Ministry of the Environment, Conservation and Parks. 2023. Ontario Provincial Climate Change Impact Assessment (OCCIA 2023). Government of Ontario. https://www.ontario.ca/files/2023-11/mecp-ontario-provincial-climate-change-impact-assessment-en-2023-11-21.pdf*

[12] *DelSontro, Tonya, McGinnis, Daniel F., Sobek, Sebastian, Ostrovsky, Ilia, Wehrli, Bernhard, 2010, Extreme Methane Emissions from a Swiss Hydropower Reservoir: Contribution from Bubbling Sediments. Online: https://pubs.acs.org/doi/full/10.1021/es9031369*

[13] *Soued, C., Harrison, J.A., Mercier-Blais, S. et al. Reservoir CO_2 and CH_4 emissions and their climate impact over the period 1900–2060. Nat. Geosci. **15**, 700–705 (2022). https://doi.org/10.1038/s41561-022-01004-2*

[14] *IESO: North of Dryden Integrated Regional Resource Plan – January 27, 2015, by OPA/IESO. P-124/158 Online: http://www.noma.on.ca/upload/documents/north-of-dryden-report-2015-01-27.pdf*