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Re: Bill 197, COVID-19 Economic Recovery Act
ERO-019-2051 – Proposed Environmental Assessment Act (EAA): Amendments in the COVID 19- Economic Recovery Act
ERO-019-1712 – Environmental Assessment modernization: Amendment proposals for Class Environmental Assessments
Class EA for Waterpower Projects, Proposed Major Amendments – Reference: 02139

Dear Sir/Madam:

The Ontario Rivers Alliance (ORA) is a not-for-profit grassroots organization working to protect, conserve and restore healthy riverine ecosystems.

All underlining is for ORA's emphasis only.

The ORA strongly objects to the Ontario government's fast-tracking of Omnibus Bill 197, COVID-19 Economic Recovery Act, and its passing without any public consultation or full parliamentary debate. This massive Bill made numerous changes to several key pieces of legislation, such as the *Environmental Assessment Act*, the *Planning Act*, the *Drainage Act*, and many others that will impact negatively on communities and the environment.

Ramming Bill 197 through the legislature so quickly was an opportunistic move on the part of this government, when Ontarians were struggling to deal with a global pandemic. These hugely significant amendments should have been opened up for public consultation and comments for at least the required 30-day consultation period as provided for in the *Environmental Bill of Rights*.

ERO 019-2051, is a Bulletin proposing sweeping amendments to the Environmental Assessment Act (EAA) in the COVID 19-*Economic Recovery Act*. This Bulletin was submitted strictly for "public awareness" allowing for no public consultation "*to ensure the proposed changes can be*

implemented expeditiously to support recovery, the proposed amendments include a provision making them not subject to the minimum 30-day posting requirement under the Environmental Bill of Rights". These proposed amendments mean that an Environmental Assessment will no longer be automatic on a proposed project and will be subject to the Minister's discretion.

Additionally, ERO-019-1712 lists eight different Class Environmental Assessments (Class EAs) with proposed streamlining amendments in the middle of a COVID-19 Emergency, in the middle of summer, with only 45 days to provide comments. The purported reason for the proposed amendments to the Class EA is to help "*refocus efforts on projects that have potential to impact the environment by:*

- *Exempting low impact projects*
- *Aligning study requirements with the potential for impacts*"

ORA objects to the misleading way in which this proposed amendment is framed in the Bulletin Summary. For example, it states, "*we are modernizing the environmental assessment program by working with proponents of Class Environment Assessments (Class EA) to propose changes that would ensure strong environmental oversight, while aligning assessment requirements with environmental impact…*". This statement couldn't be further from the truth. Instead, a whole category of what are suggested to be "low risk" projects will only require the proponent to do a self-assessment of the potential impacts, rather than undergoing the full Class EA process (more details below). These proposed amendments will eliminate a broad swath of risky projects from the Class EA process. The Ontario government lacks transparency and erodes public trust and confidence when it makes such misleading and preposterous claims.

ORA is concerned that the bulk of these changes are designed to speed up development at the expense of the environment, remove legal accountability and public participation, and place new and broad discretionary powers in the hands of proponents and individual Ministers. As noted above, many projects will not be required to undergo an environmental assessment, and the public's ability to request a "bump-up" to a more rigorous Environmental Assessment on a contentious project will be constrained. This is unacceptable!

This gutting of key legislation only weakens environmental integrity and resilience, and the economy. The environment, the economy and our health all go hand in hand. In order to recover and protect the economy the government must ensure real and strong protections for our environment, which in turn helps protect the health and well-being of Ontarians.

We only have to look at the probable origins and consequences of the COVID-19 pandemic to understand that the environment and public health are closely linked with our economy in these very pivotal and dangerous times.

The above measures weaken numerous environmental and public health protections in Ontario and undoes important policy and legislation that reflects over 50 years of hard lessons learned. The actions of this government through these amendments will undoubtedly do great harm to the environment and consequently to the people of Ontario.

The ORA submits that these measures are unwise, and the government is failing in its duty to act in the public's best interests.

ORA recommends that any protections, accountability and oversight that the Class EAs currently provide to the environment and communities is fully covered within the EAA and any new regulations.

Proposed Major Amendment to the Class EA for Waterpower - Reference: 02139

The ORA would have preferred to comment on several of the Class EAs with proposed amendments; however, due to the short comment period we are only commenting on the Class EA for Waterpower (Class EAW).

Again, the posting for this proposed major amendment to the Class EAW makes the misleading statement that "*Ontario is taking the next steps to update its almost 50-year old environmental assessment program to support strong environmental oversight and a strong economy, as committed to in our Made-in Ontario Environment Plan*". For the same reasons noted above, the ORA objects to this false and misleading statement.

The Made-in Ontario Environment Plan is purported to be "*a roadmap to preserve and protect our environment for future generations*". The Minister's Message in this document specifically recognizes "*the importance of a clean environment to our health, our wellbeing and our economic prosperity for future generations*". Yet, this same government has placed our freshwater resources in jeopardy with its continued gutting of our protective environmental policy and legislation.

The Ontario Waterpower Association (OWA) has proposed a major amendment to the Class EAW, which sets out the planning process for small to medium scale waterpower projects for new facilities under 200 MW in capacity and most expansion projects. The proposed amendment would *"create a screening process to exempt projects that are anticipated to be low impact from the full class environmental assessment process*. *This category includes waterpower projects that are expansions, modifications or redevelopments and are proposed at, near or around existing facilities or water management infrastructure*."

"Projects that meet the following criteria would be eligible to go through the screening process:

- *expansion or change to an existing generation facility by less than 25% with an initial nameplate capacity:*
  - *less than 200 megawatts (MW) and resultant nameplate capacity of 200 MW or more*
  - *greater than 200 MW*
- *associated with existing water management infrastructure, such as a dam, a weir, or a lock*
- *limit any increase in the footprint of the water management infrastructure to 25% or less*

Projects that meet the above criteria would be required to notify the public, Indigenous communities and government agencies and perform a self-assessment on potential environmental effects in key areas."

Details are very lacking in this proposed amendment, and any details provided are confusing and extremely concerning. For instance, who or what agency will ensure the "self-assessment on potential environmental effects" is accurate and has science/evidence-based efficacy and rigour; and in what "key areas"? Will the Agency have the power to require the project to go through a full Class EAW process? See more questions and concerns about the Redline document below:

Questions about the Redline Document:

I reached out by email to the contact people suggested in the posting back on the 13th of July, asking for clarity on the following questions but received no response. I followed up by telephone on the 20th of August and was told they would follow-up with answers, but no answers were forthcoming.

The major amendment as proposed in the Redline document leaves a multitude of important questions unanswered, such as:

1. Section 3.1.1, Page 1
   "This category includes waterpower projects that are expansions, modifications or redevelopments and are proposed at, near or around existing facilities or water management infrastructure."
   - What is the definition of "near or around" – how many meters, kilometers does "near or around" include?

2. Section 3.1.1, Page 2
   The preamble suggests that "it is reasonable to expect that water management regimes are already established, either as expressed through a formal WMP or through the identification of relevant social and environmental values and interests. Projects within the category that involve significant changes in water management regimes are likely to be more complex than those that do not.

   Table 2, Page 5, states "*Change the water management regime, including (but not limited to) significant change to water flow, inundated area or, historical mean monthly maximum water level?"*
   - Please explain - how much is "*significant*"?
   - Please define - what is a "*significant change to water flow*".
   - Please define - what is a "*significant change to inundated area*"?
   - Please explain - what is the "*historical mean monthly maximum water level*"?
   - What about negative effects on aquatic species in general - not just Endangered Species?
   - Please define "*considerable sedimentation or erosion*" - how much is considerable?

3. Section 3.1.1, Page 2
   "*Expansion or change to an existing generation facility by less than 25% with an initial nameplate capacity of less than 200 MW and resultant nameplate capacity of 200 MW or more…"*
   - This underlined segment above has been added as part of the amendment, but it makes no sense. It reads like the resulting nameplate capacity must be over 200 MW or more, but it seems unlikely. We need clarity on exactly what it means, and why it was changed from just "*The resultant capacity is under 200 MW*".

4. Section 3.1.1, Page 3:
   "*Limit any increase in the footprint of the water management infrastructure to 25% or less*"
   - Does the footprint of the water management infrastructure include the headpond and/or zone of influence?
   - Would the proponent also be obliged to issue a Notice of Project Screening to other interested parties that are not local – such as the ORA?

The Credibility of a Proponent's Self-Assessment:

The waterpower industry is profit-driven and largely prone to biased and short-sighted self-interests. The repercussions of this major amendment are ripe for abuse and environmental disaster. It is questionable whether a profit-driven proponent could be relied upon to provide a fair and objective self-assessment of all the potential environmental effects. This proposed amendment by the OWA, as well as their pursuit of the waterpower exemption to the permit to take water last fall sufficiently demonstrates this point – they are looking out for their own self-interests while placing water quality, fisheries and communities at risk.

ORA has had extensive experience in commenting on Class EAW projects and Environmental Reports over the last 10 years. It has been our experience that the current Class EAW already falls far short of anything close to adequate, or anything that instills public/stakeholder confidence. Proponents typically act in their own best interests, and not in the best interests of stakeholders, communities or the environment.

This approach does not reflect the "*strong environmental oversight*" the government promises in the Bulletin. This is exactly the type of scenario that governments have a responsibility and a duty to protect its citizens and the environment from.

ORA strongly objects to this entire amendment and requests it be rejected.

Existing Water Management Infrastructure:

This proposed amendment is not just about routine repair and maintenance projects, but the exemption would also include converting existing water management infrastructure, that was never designed, engineered assessed to generate power, such as a dam or a weir or a lock.

Of all the proposed amendments in this posting, converting an existing water management dam or weir or lock into a hydroelectric project is the riskiest to public safety and the environment.

The dam could be anything from a newer water control structure to a 150-year old millpond dam. Inserting even a small run-of-river hydroelectric turbine into an existing dam must be safe and environmentally responsible. There is a broad range of scenarios that could occur with an existing dam, and there is no detail on how they would be handled in this posting. Many of these older dams are just earthen dams that are already being tested by the extremes of climate change, and many have failed during the increasingly frequent extreme rain and flood events. How would a hydroelectric dam inserted into any older dam stand up to extreme rain events?

Communities must be assured that adding a turbine would not place them or the environment at risk.

This suggestion is totally irresponsible and must be rejected.

ORA recommends any exemption for existing water management infrastructure be fully withdrawn from the proposed amendment.

"Low Impact" Projects:

The OWA wrongly proposes that projects associated with existing infrastructure or that increases the efficiency of an existing waterpower facility are "*low impact*" and "*less likely to involve new significant effects*" and will involve "*localized direct effects*". However, existing water management regimes can provide great latitude for operators to increase power generation output through upgrading or increasing the number of turbines, redirecting flow, changing operating strategies, and/or increasing headpond size and capacity and still stay within their mean monthly high-water level and seasonal operating band. A great deal of environmental damage can be and is done while operating within their operating band.

There are many key considerations when expanding, modifying or redeveloping existing water management infrastructure. Each waterpower facility has its own unique circumstances and considerations that make it impossible to create a cookie cutter environmental assessment, let alone an exemption. It is sufficient to say that the considerations are complex and too many to list here.

Even minor or small changes in efficiencies or capacity or flow or velocity can have severe impacts on the environment and communities for many kilometers beyond the immediate zone of influence – both upstream and downstream. Unintended environmental impacts can and do occur at hydroelectric facilities; therefore, all projects must have careful consideration and be required to follow a thorough environmental assessment process, including full public and Indigenous consultation.

Say no to Exempting Waterpower Expansions, Modifications or Redevelopments:

Waterpower facilities harm the environment[1], fragment habitat and when headponds or reservoirs are flooded can produce carbon dioxide and methane for decades, and possibly centuries.[2,3]

> *In contrast to the widespread assumption (e.g., in Intergovernmental Panel on Climate Change scenarios) that GHGs emitted from reservoirs are negligible, measurements made in boreal and tropical regions indicate they can be substantial [4,5,6].*

Finding the right balance is key, and balance means finding ways of sustainably realizing the benefits of all resource values within a watershed. Balance is not a simple trade-off that maximizes one resource value (waterpower), while diminishing or eliminating the benefits from others such as fisheries, aquatic biodiversity, clean water, recreation, natural heritage, etc.

Such trade-offs must be identified and addressed if we are to maintain a healthy and sustainable fishery and watershed. The public and Indigenous communities must be properly consulted and involved in all decisions regarding expansions, upgrades and retrofits that will impact on their communities and way of life.

For instance, *"The province's inland and Great Lakes fish communities provide a diverse range of year-round recreational, commercial and First Nations and Métis fisheries. Together, these activities and their supporting industries are estimated to contribute more than $2.5 billion annually to Ontario's economy*"[7]. Why place this important and fragile Ontario commodity at risk?

The collateral environmental damage caused by dams and waterpower facilities have been well documented for decades[8], including the loss or serious decline in migratory fish species (waterpower facilities are key factors in the listing of some iconic fish species as species at risk in Ontario and elsewhere); declining biodiversity[9,10,11,12,13], impaired water quality (including elevation of mercury concentrations in fish tissue); and are key threats to imperiled aquatic species.[14,15] Significant ecological damage from waterpower has been ongoing for many decades in Ontario[16,17,18] and in other locations throughout the world.[19] In the past, attempts to effectively mitigate many of these impacts have been sporadic to non-existent in Ontario.

One of the most famous cases in North America involves the devastating cumulative impacts of waterpower on Pacific Salmon in the Columbia and Snake Rivers.[20] Similar examples occur here in Ontario where dams are considered to be a major factor in the extirpation of Ontario's Atlantic Salmon stock[21], one of the important causes of significant anthropogenic mortalities and decline of Ontario's American Eel[22], and a key threat to Ontario's declining Lake Sturgeon populations.[23,24,25]

It is no longer acceptable to trade-off valued ecosystem resources such as clean water, fisheries, wetlands and healthy rivers for power generation without effective mitigation, and without clear and transparent public and Indigenous consultation on what these trade-offs would entail. A simple trade-off of valued ecosystem components for the benefits of waterpower is no longer appropriate if broader biodiversity, ecological, cultural and societal benefits are to be protected.[26]

One of the most significant reasons for the decline in many iconic species of fish in Ontario is the almost total lack of fish passage at most hydroelectric and water control dams. Without the provision of safe and suitable passage, fish are unable to move upstream in order to access critical habit and spawning beds; and during downstream migrations many fish pass through the turbines and are killed or maimed.

Even today, a basic mitigation technique such as the installation of fish ladders at waterpower installations is rarely a requirement. Despite known impacts on several migratory fish species in Ontario, only 3 fish ladders have been installed at the approximately 223 existing waterpower facilities in the province. As a matter of fact, the perfect time to install fish passage at an existing facility is when expansions, modifications or redevelopments are being considered.

History has shown that there has been a clear reluctance by industry to provide adequate mitigation of some of the more common impacts of dams, such as impaired water quality, reduced flows, habitat fragmentation, isolation of species, interrupting the exchange of nutrients between ecosystems, and turbine mortality.

So, with this track record, why would we trust a proponent to accurately self-assess and mitigate any environmental impacts?

ORA recommends this proposed amendment to the Class EAW be wholly rejected.

Table of Proposed OWA Class EA Amendments:

The Table of Proposed OWA Class EA Amendments notes that this schedule of projects is anticipated to include projects that involve very minimal, short term and localized effects that can be addressed through other legislative mechanisms such as the Lakes and Rivers Improvement Act, Fisheries Act, etc. It is important to note that there is no public consultation requirement for these pieces of legislation.

The document also states that the footprint of the water management infrastructure would be limited to 25% or less; maintain the existing water management regime; and does not have any significant new inundation area. So, again, what is significant? What all does the water management infrastructure include?

Using the word “significant” provides too much latitude and leaves questions and uncertainty. Defining the maximum headpond increase is a crucial consideration. Increasing the size of a headpond could result in an increase in mercury accumulation in fish tissue, and impact negatively on wetlands and habitat.

ORA recommends that the maximum allowable headpond increase be precisely defined.

ORA recommends that in the event the MECP approves any part of this proposed amendment that the exemption qualification criteria also place a 25% nameplate capacity increase on any expansion, modification or redevelopment.

Dam Removal Creates Resilience to a Changing Climate:

The most powerful way to improve riverine ecosystem health is to remove dams, not convert them to hydroelectric facilities. Dams fragment rivers and habitats, isolate species, disrupt the exchange of nutrients between ecosystems and cut off spawning and migration routes. Dams reduce water

quality and sediment flows to downstream habitats and increase vulnerability to a warming climate.

Our rapidly changing climate is a compelling reason to remove dams to increase the resiliency of our freshwater systems and the protection and safety of our communities. It is important to mitigate and adapt to the extremes of climate change as Paul Beckwith, who works on climatology in the Department of Geography at the University of Ottawa said, *"We're getting a lot more extreme weather events around the planet, whether that be torrential rains leading to flooding, or really hot and dry temperatures leading to drought. These extreme weather events are much more severe, much more intense, they last longer, they're happening more frequently, and they're happening in areas where they didn't happen before.*"[27]

"Climate will interact with overexploitation, dams and diversions, habitat destruction, non-native species and pollution to destroy native freshwater fisheries."[28] "*Climate warming will adversely affect water quality and water quantity, as well as the magnitude and timing of river flows, lake levels and water renewal times."* [29]

Drought conditions will also exacerbate warming and can result in toxic blue-green algae, placing upstream and downstream communities at risk. Reservoirs interrupt sediment transport and encourage deposition behind the dam, effectively starving the downstream of its sediment supply. As water impounded by a reservoir is necessarily held longer than water flowing in a stream, modifications to water quality and flow regimes will occur. The period of storage will, to some degree, modify temperature, dissolved gases and suspended solids in the water.

Removing dams and naturalizing riverine ecosystems would improve the health and resilience of Ontario lakes and rivers, its fisheries and the economy, and help the Ontario government achieve its goals as set out in its Made-in Ontario Environment Plan.

In fact, hydroelectric facility owners should be required to contribute a portion of their profits into a fund that would be available to the public as grants towards dam removal, fish passage and habitat improvement projects.

Conclusion:

If the Ontario government truly intends to provide **"***strong environmental oversight and a strong economy*" and protect its lucrative freshwater resources**,** it can only be accomplished through rigorous environmental assessment, monitoring and compliance laws and regulations.

Healthy rivers and wetlands are key to successful adaptation to the extremes of climate change and are major determinants to water quality in the Great Lakes. "*The scientific literature unequivocally demonstrates that streams, regardless of their size or frequency of flow, are connected to downstream waters and strongly influence their function*."[30]

Therefore, it is essential that we ensure sustainable forms of power generation in order to conserve biodiversity, and our life-giving freshwater resources. The waterpower industry must be held to account, to effectively mitigate any potential negative environmental effects that could result from any expansions, modifications or redevelopments.

"*Since 2001 the Ontario Waterpower Association has been representing the common and collective interests of the waterpower industry in Ontario*."[31] Why is the Ontario government undermining Ontario's key environmental protection legislation that is meant to protect the interests of Ontarians and instead, trusting and supporting the interests of an industry lobbyist group whose actions are only in the best interests of the waterpower industry?

Last fall this government exempted waterpower from the Permit to Take Water, which was a wrong move and Ontario rivers and its citizens will pay dearly for it. Now the OWA has proposed this major amendment which is also moving in the absolute wrong direction.

Our environmental safeguards are being gutted at a time when swift action is required to build climate resilience into lakes and rivers to protect freshwater biodiversity. Our health, food and security depend on biodiversity – from medical treatments to food production. Freshwater habitats such as lakes, rivers and wetlands are the source of life for all humans, yet they are also the most threatened.

Freshwater species have lost approximately 83% of their populations since 1970 and are declining at twice the rate of land and marine species.[32] Free-flowing rivers are the safety net that support our existence.

Instead of exemptions or a more streamlined Class EAW, the OWA should be proposing amendments to provide for a much more rigorous and accountable process that ensures fish friendly turbines, effective and safe fish passage, a more rigorous cumulative effects assessment, and a more comprehensive and meaningful consultation process. We should be making our rivers more resilient in the face of climate change – not exempting waterpower projects from the Class EAW. Instead, the OWA and the Ontario government are placing our environment and communities at risk.

Considering a blanket exemption for a whole category of waterpower projects from the requirements of the Class EAW and only requiring a self-assessment is not in alignment with "*ensuring strong environmental oversight*".

"*It is critically important that this government protect and preserve our lakes and rivers for people to enjoy for generations to come*," **said Mike Harris, Parliamentary Assistant to the Minister of Natural Resources and Forestry**.[33]

So, walk the talk!! The public interest, which is the protection of the environment, must take precedence over private business interests.

ORA urges the MECP to reject all aspects of this proposed major amendment to the Class EA for Waterpower, on the grounds that waterpower is far too complex and site-specific to assume that waterpower expansions, modifications or redevelopments would be less likely to involve new environmental effects or impact on communities.

This proposed amendment is absolutely wrong thinking if the government really means to ensure "*strong environmental oversight and a strong economy*" and instill confidence.

Thank you for this opportunity to comment!

Respectfully,

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