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ALLIANCE**

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The Honourable Catherine McKenna
Minister of Environment and Climate Change
House of Commons
Parliament Buildings
Ottawa, ON
K1A 0H6

By email: Catherine.McKenna@parl.gc.ca

Re: Project List and Information Requirements and Time Management Regulations

Dear Minister McKenna:

The Ontario Rivers Alliance (ORA) is a Not-for-Profit grassroots organization acting as a voice for several associations, individual and First Nation members, who have come together to protect, conserve and restore riverine ecosystems.

ORA has fully participated in the Canadian Environmental Assessment Process review and was very hopeful with this government's promise to "*rebuild public trust, protect the environment, advance reconciliation with Indigenous peoples, and ensure good projects get built...*" While there are some encouraging components, such as requiring the Minister and Cabinet to provide reasons for environmental approvals and creating a single agency to conduct assessments, it is extremely disappointing that the proposed Impact Assessment Act (IAA) further undermines credibility and trust as well as its ability to protect the environment. It is a very flawed process when after going through years of application review and examination of science-based evidence, that the Minister could make a purely political decision and prioritize economic considerations over meeting climate commitments – as it is doing now with the Trans Mountain Pipeline.

The Project List:

For instance,

- The Project List would "*focus federal impact assessment on projects that would have the most potential for adverse environmental effects in areas of federal jurisdiction*". So only the major projects would be subject to a federal Impact Assessment, while most smaller projects would go unassessed, even though on design and scale a smaller project could be more harmful to the local environment. It is unacceptable that many potentially harmful projects with adverse environmental impacts could/would bypass the IAA process.

The Minister would have the power to designate projects that are not on the list if they will result in adverse impacts or where there is public concern; however, even for "designated" projects, there is no requirement to conduct an assessment. The Agency has the discretion to decide whether an assessment is required following the early planning phase.



This means that even more environmentally harmful projects could go unassessed and contribute to significant cumulative environmental damage.

For instance, dams and associated hydroelectric facilities would harm the environment¹ 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}

Indeed, hydroelectric power generation has resulted in significant and ongoing impacts to fish and wildlife populations and habitat, to ecological processes, and to aboriginal communities.⁷

Furthermore, facilities that use headponds, impoundments, diversions, or cycling and peaking operations, can be particularly harmful to the environment. These are some of the usual tools that are used to maximize power generation, and to take advantage of the lucrative peaking incentives designed to provide power during peak demand hours.

Additionally, multiple cascading units on a single river, with interconnecting impoundments can compound the impacts across a catchment and beyond. These cumulative effects can include serious turbine mortalities⁸, exacerbation of water quality and water quantity impacts, as well as severe fragmentation of aquatic and terrestrial habitats, due to the associated construction and mere presence of infrastructure (generating stations, hydro corridors and access roads). Many of these effects are ongoing, and at times accumulating in their effects for the life of the facility and may be irreversible.^{9,10}

For example, the Ottawa River watershed supports 50 waterpower facilities. The individual environmental effects of these facilities have not been effectively identified and mitigated, let alone their cumulative effects; nor has there been any meaningful attempt to do so. However, there have been some relatively recent examinations of the cumulative effects of some Ottawa River waterpower facilities on mortality of downstream migrating eels.^{11,12}, as well as the effects of water regulation in the Ottawa River on Lake Sturgeon and other large bodied fish communities.^{13,14,15} Adding more facilities to this watershed would make little sense without effective mitigation of existing effects.^{16,17}

The cumulative impacts of multiple waterpower facilities must be assessed at the appropriate regional scale¹⁸. Cumulative effects assessment at the individual project scale frequently addresses the wrong perspective in time and space.¹⁹ *"The accumulated effects of multiple small-scale waterpower operations could amount to similar overall environmental degradation per unit of electricity generated as is caused by larger projects."*²⁰ In fact the cumulative impacts of many small projects can be even larger, depending on the circumstance.^{21,22}

Consequently, the size of the project should not be the determining criteria but, instead, a regional scale cumulative approach should be used when federal regulatory jurisdiction will be impacted, i.e., when fish will be killed, or habitat destroyed.



Recommendations:

1. Rather than a Project List, ORA recommends that all federally-regulated projects that may harm the environment, go through an Impact Assessment, using an effective and robust threshold that depends on science-based environmental criteria, including cumulative effects at the appropriate regional scale.
2. Given the potential serious and ongoing environmental effects of hydroelectric power generation, which is very site specific and not always mitigable, that all hydroelectric projects that incorporate dams, reservoirs, diversions, peaking or cycling operating strategies, must be included in any IAA Project List.

Information Requirements:

ORA is concerned that the proposed early planning phase requiring the proponent to submit an initial project description containing the information to be prescribed in the regulation would allow the proponent to lock in (and defend) its preferred option long before public participation has commenced. This approach also renders meaningless the obligation to consider alternatives to the project, and alternative means of carrying out the project, within the assessment process.

Additionally, the proponent should be required to file a detailed project description with a reasonable range of alternatives that address the perceived need, issue or opportunity identified by the proponent. This filing would trigger the early planning phase under the Act and would engage the public and Indigenous communities in an open and transparent planning process that would weigh all the pros and cons of the alternatives using sustainability criteria. It would help the proponent and participants to jointly identify and plan the preferred alternative from a sustainability perspective.

The early planning requirements under the IAA must be substantially improved and expanded to obtain process efficiencies that enhance public and Indigenous engagement and funding.

The ORA was awarded Intervenor Status in the Energy East Pipeline Application, and one of the most frustrating and challenging issues was that when the hearing process began the proponent had not submitted a complete application – and it never really was complete. It is virtually impossible to properly review such a massive compilation of documentation when the information is constantly changing and/or is incomplete.

Recommendations:

1. Require the early planning phase to commence with the proponent's filing of a detailed description of a reasonable range of alternatives that address the need, issue or opportunity that the proponent intends to pursue.
2. The IAA steps and stages must ensure meaningful public participation throughout each of the assessment and reporting processes, from the early planning phase right through to the post-approval, monitoring and follow-up programs.
3. The early planning phase should trigger adequate participant funding programs to enhance public and Indigenous engagement.
4. A proponent must be required to submit a fully completed application before the formal hearing process begins.
5. Provide a time-limited opportunity to appeal the Agency's planning phase determination to the Minister.



Time Management:

The focus of a credible IAA process should be on the thoroughness of public and Indigenous engagement and consultation, not on legislated timelines. ORA rejects the legislated timelines concept.

Currently the usual comment timeline on a Notice of Completion is only 30 days. It is unrealistic and unfair to expect a layperson to review thousands of pages of technical documentation within such a short timeline. 60 days to 90 days would be much more realistic for a comment or appeal deadline.

Recommendations:

1. Timelines for early planning, impact assessment, and decision making must not be included in the IAA or its regulations.
2. Provide a deadline of 60 to 90 days for comments on a Notice of Completion or to appeal a decision.

Thank you for this opportunity to comment!

Respectfully,

Linda Heron
Chair, Ontario Rivers Alliance
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¹ PEW Environment Group. 2011. *A Forest of Blue: Canada's Boreal*. Online: <http://www.pewtrusts.org/~media/legacy/uploadedfiles/peg/publications/report/PEGBorealWaterReport11March2011.pdf.pdf>

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⁴ St. Louis, V.L., Kelly, C.A., Duchemin, E., Rudd, J.W.M., Rosenberg, D.M. 2000. Reservoir Surfaces as sources of greenhouse gases to the atmosphere : a global estimate. *BioScience* 50(9) : 766-775.

⁵ World Commission on Dams. 2000. *Introduction to Global Change, Working Paper of the World Commission on Dams, Secretariat of the World Commission on Dams, Cape Town, South Africa.*

⁶ Environment Canada. 2004. *Threats to Water Availability in Canada. National Water Research Institute, Burlington, Ontario. NWRI Scientific Assessment Report Series No. 3 and ACSD Science Assessment Series No. 1. 128 p.*

⁷ PEW Environment Group. 2011. *A Forest of Blue: Canada's Boreal*. Online: <http://www.pewtrusts.org/~media/legacy/uploadedfiles/peg/publications/report/PEGBorealWaterReport11March2011.pdf.pdf>

⁸ MacGregor, R., Haxton, T., Greig, L., Casselman, J.M., Dettmers, J.M., Allen, W.A., Oliver, D.G., and McDermott, L. 2015. The demise of American Eel in the upper St. Lawrence River, Lake Ontario, Ottawa River and associated watersheds: implications of regional cumulative effects in Ontario. Pages 149–188 in N. Fisher, P. LeBlanc, C. A.



Rose, and B. Sadler, editors. *Managing the impacts of human activities on fish habitat: the governance, practices, and science*. American Fisheries Society, Symposium 78, Bethesda, Maryland.

⁹ MacGregor, R., Casselman, J., Greig, L., Dettmers, J., Allen, W.A., McDermott, L., and Haxton, T. 2013. *Recovery Strategy for the American Eel (Anguilla rostrata) in Ontario*. Ontario Recovery Strategy Series. Prepared for Ontario Ministry of Natural Resources, Peterborough, Ontario. x + 119 pp. P-45.

¹⁰ Gower, T., Rosenberger, A., Peatt, A., and Hill, A. 2012. *Tamed Rivers: A guide to river diversion hydropower in British Columbia*. Prepared for Watershed Watch Salmon Society. 64pp. Online: <http://www.watershed-watch.org/resources/tamed-rivers-a-guide-to-river-diversion-hydropower-in-british-columbia/>

¹¹ MacGregor, R., Haxton, T., Greig, L., Casselman, J.M., Dettmers, J.M., Allen, W.A., Oliver, D.G., and McDermott, L. 2015. *The demise of American Eel in the upper St. Lawrence River, Lake Ontario, Ottawa River and associated watersheds: implications of regional cumulative effects in Ontario*. Pages 149–188 in N. Fisher, P. LeBlanc, C. A. Rose, and B. Sadler, editors. *Managing the impacts of human activities on fish habitat: the governance, practices, and science*. American Fisheries Society, Symposium 78, Bethesda, Maryland.

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¹³ Haxton, T.J., and Findlay, C.S. 2008. *Variation in lake sturgeon (Acipenser fulvescens) abundance and growth among river reaches in a large regulated river*. *Canadian Journal of Fisheries and Aquatic Sciences*. 65: 645-657.

¹⁴ Haxton, T.J. and Findlay, C.S. 2009. *Variation in large-bodied fish community structure and abundance in relation to water management regime in a large regulated river*. *Journal of Fish Biology*. 74: 2216-2238.

¹⁵ Ibid.

¹⁶ MacGregor, R., Casselman, J., Greig, L., Dettmers, J., Allen, W.A., McDermott, L., and Haxton, T. 2013. *Recovery Strategy for the American Eel (Anguilla rostrata) in Ontario*. Ontario Recovery Strategy Series. Prepared for Ontario Ministry of Natural Resources, Peterborough, Ontario. x + 119 pp. P-45.

¹⁷ MacGregor, R., Haxton, T., Greig, L., Casselman, J.M., Dettmers, J.M., Allen, W.A., Oliver, D.G., and McDermott, L. 2015. *The demise of American Eel in the upper St. Lawrence River, Lake Ontario, Ottawa River and associated watersheds: implications of regional cumulative effects in Ontario*. Pages 149–188 in N. Fisher, P. LeBlanc, C. A. Rose, and B. Sadler, editors. *Managing the impacts of human activities on fish habitat: the governance, practices, and science*. American Fisheries Society, Symposium 78, Bethesda, Maryland.

¹⁸ Duinker, P.N. and L.A. Grieg. 2006. *The impotence of cumulative effects assessment in Canada: ailments and ideas for redeployment*. In *Environmental Management* 37(2): 153-161. Springer Science.

¹⁹ Gower, T., Rosenberger, A., Peatt, A., and Hill, A. 2012. *Tamed Rivers: A guide to river diversion hydropower in British Columbia*. Prepared for Watershed Watch Salmon Society. 64pp. Online: <http://www.watershed-watch.org/resources/tamed-rivers-a-guide-to-river-diversion-hydropower-in-british-columbia/>

²⁰ Abbasi, T. and Abbasi, S.A. 2011a. *Small hydro and the environmental implications of its extensive utilization*. *Renewable and Sustainable Energy Reviews*, 15: 2134-2143.

²¹ Gower, T., Rosenberger, A., Peatt, A., and Hill, A. 2012. *Tamed Rivers: A guide to river diversion hydropower in British Columbia*. Prepared for Watershed Watch Salmon Society. 64pp. Online: <http://www.watershed-watch.org/resources/tamed-rivers-a-guide-to-river-diversion-hydropower-in-british-columbia/>

²² Kibler, K.M., and Tullos, D.D. (2013), *Cumulative biophysical impact of small and large hydropower development in Nu River, China*, *Water Resour. Res.*, 49, doi:10.1002/wrcr.20243.