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2 December 2013

Ian Kerr, Manager
Ministry of the Environment
Environmental Programs Division
Modernization of Approvals Branch
135 St. Clair Avenue West, Floor 4
Toronto, Ontario
M4V 1P5

Dear Mr. Kerr:

Re: EBR 012-0290 – Coordinated Policy Guidance for Waterpower Projects

Ontario Rivers Alliance (ORA) is a Not-for-Profit grassroots organization acting as a voice for the French River Delta Association, CPAWS-OV, Council of Canadians, Kiishik Community Association, Food & Water First, Whitewater Ontario, Vermilion River Stewardship, Mississippi Riverwatchers, French River Stewardship, as well as many other stewardships, associations, and private and First Nations citizens who have come together to protect, conserve and restore healthy river ecosystems all across Ontario.

Thank you for this opportunity to comment on the draft Coordinated Guidance for Waterpower Approvals under the Lakes and Rivers Improvement Act (LRIA), and Permits to Take Water (PTTW) under the Ontario Water Resources Act (OWRA). ORA would like to thank both you and Jennifer Keyes for meeting with our organization to explain the proposed changes and their implications for waterpower proposals going through the permitting and approvals process.

ORA is supportive of the idea of improving efficiencies and of eliminating unnecessary duplication, as long as the purpose and integrity of the statutory responsibilities of the Ministry of Natural Resources (MNR) and Ministry of Environment (MOE) are not weakened, and that environmental protection and oversight are not compromised, but rather are improved.

Healthy river ecosystems are fundamental to the overall well-being of Ontario's environment, its freshwater resources, and inhabitants. However, hydroelectric has numerous and well documented impacts on water quality, water quantity, fisheries, riverine ecosystems, biodiversity, recreation and tourism and, most importantly, on public health and safety. There are numerous studies reporting that wetlands¹ and boreal upland forests² flooded to create headponds can result in dramatic increases, by 10 to 20 times, in both methylmercury and greenhouse gases³. Many hydroelectric dams are proposed on rivers running through cities,

¹ [The Rise and Fall of Mercury Methylation in an Experimental Reservoir[†]](#), DOI: 10.1021/es034424f

² [Impacts of Reservoir Creation on the Biogeochemical Cycling of Methyl Mercury and Total mercury in Boreal Upland Forests](#)

³ [Processes affecting greenhouse gas production in experimental boreal reservoirs](#), DOI: 10.1002/gbc.20046

towns, and reserves which are used to dilute wastewater and mining effluent, and contain heavily contaminated sediment, at a time when local communities are already struggling with blue-green algae blooms threatening their drinking water.

With climate change upon us it is imperative that environmental protection takes an even higher priority, and is strengthened with any streamlining and efficiencies – not weakened. Saving tax dollars or making it easier and quicker for waterpower proposals to move through the approvals process must not take precedence over protecting and conserving our environment and natural resources.

It is imperative that the respective regulatory requirements and Statements of Environmental Values of MOE and MNR are fulfilled by ensuring that any benefits associated with waterpower are properly weighed and assessed against the potential impacts on the environment, culture, society and the economy. If fish consumption limits are negatively impacted, if water quality and water quantity impacts have the potential to decrease or threaten the availability of clean fresh water and healthy ecosystems, then those impacts must be weighed against any benefits to determine whether the proposed waterpower facility is environmentally, socially and economically sustainable and viable. It must not be an automatic assumption that the project will proceed at any cost.

As well, the cumulative effects of multiple existing or proposed developments in a watershed are seldom adequately considered during the Environmental Assessment and approvals and permitting process for an individual project. To determine the long-term sustainability of any proposal, it is imperative that the cumulative effects of multiple existing or proposed developments in a watershed are considered before any permitting and approvals are granted.

It is very difficult to feel confident with the content of this draft document without the details of any changes that are now or in the future being contemplated for any permit or approval under the Class Environmental Assessment for Waterpower (Class EA), the Environmental Assessment Act (EAA), LRIA and OWRA.

ORA submits the following recommendations:

1. Environmental Assessment – Integration with Permits and Approval Decisions

Currently there is no requirement for public consultation throughout the permitting and approvals phase. The only opportunity for public input is through the Class EA. Often Environmental Reports that have been submitted for comment are incomplete, and important choices/decisions have been deferred, or documents are offered in draft form for many key aspects of the project, such as environmental flows, operating strategies, fisheries and endangered species mitigation, and habitat compensation. Many of these decisions are currently not made until the permitting phase of the project; however, this means that the public will have no opportunity for input.

For this reason, it is imperative that the proponent have all the planning aspects that are required in the permitting phase completed by the time of posting of their Notice of Completion.

The EAA requires that the Class EA be completed before permitting and approval decisions are made, however, the proponent's preparatory work should be completed by the time the Notice of Completion is issued so that the public can have meaningful input and make

comments on the proposed project. Decisions by the regulators can be made after the Statement of Completion is issued.

It should not be up to the proponent to decide whether the public will have an opportunity to review the permitting and approvals considerations – this aspect should be required.

ORA recommends that it be made mandatory that all preparatory work for permits and approvals be completed at the time the Class EA work is completed, and the Notice of Completion is issued.

2. Not a Division, but a Meshing of Responsibilities

We are being asked to comment on this division of responsibilities, but the proposed changes are presented in a very broad and general context. Before we can make a useful submission it is imperative to know the details of the desired outcome to fully comprehend the requirements and magnitude of change represented in these guidelines.

For instance, how will cumulative effects and fish passage be addressed? These are crucial considerations that must be highlighted in the guidelines. The final guidelines must also include reference to cumulative effects and fish passage.

All areas of responsibility naturally overlap when we're talking about dam operations, flows and fisheries. Therefore the guidelines must result in a meshing of responsibilities, and not a division.

Permitting and approvals and the Class EA must also mesh and be completed as one unit before Notice of Completion is issued.

3. Roles & Responsibilities

It appears that MNR is taking the lead for the most part, and MOE is taking a step back and relying to a great extent on MNR's review. ORA is concerned that this will be at the expense of adequate rigor before signing off on their respective areas of responsibility. With a proponent led process in place, it has been reassuring to know that MNR and MOE have both had a very active role in scrutinizing waterpower proposals, often backing one another in their stance with a proponent that is sometimes unwilling to adequately consider, let alone mitigate, some of the more damaging aspects of waterpower projects, especially when it will impact negatively on profits. This meshing of responsibilities has ensured that what one Ministry misses, the other will be sure to cover. Proponents often just ignore the regulators' best advice anyway, but this is why there must be a tightening and clarity within the guidelines and policies so that proponents are aware up-front of what is required and the public is assured that those requirements will be met.

ORA is concerned that the bulk of the review is now left to a single Ministry that has been severely impacted by downsizing. With MNR moving to a more regional approach, and with the loss of many local MNR offices, ORA is uncertain of how this will impact on their ability to adequately scrutinize proposals with any kind of certainty, especially from a local perspective.

MNR and MOE must have the power to decide on final mitigation measures, and the proponent should be obliged to follow their guidance.

4. Scope and Detail

Unfortunately the scope of this draft document seems to be very large, and yet there are few details of what will actually be required of a proponent when planning a waterpower project. This is of concern because it is difficult to know the intent and extent of the proposed guidelines, which leaves its interpretation very open and uncertain.

Additional details of exactly what will be required of the proponent must be provided before ORA can fully comment.

The draft guidelines state that *“The scope of the information required and the extent of assessment will depend on the degree of potential impact and the importance of the significant wildlife habitat being affected.”* Small hydro can be just as devastating on a riverine ecosystem as a large hydro project, therefore all waterpower proposals, whether large or small, must have equal scrutiny, care and requirements.

ORA submits that the extent of the assessment should be universal in all waterpower proposals – retrofits, upgrades, and new proposals alike. This assessment process must have rigor and reliability.

5. Water Availability – Other Water Uses

Section 3.2.5 seems to infer that MOE and MNR will rely on the assessment of the proponent, to the point that they will let the assessment stand until such time as unacceptable interference occurs. This is not acceptable. Once the unacceptable interference occurs it is too late, as the damage will already have been done. Riverine ecosystems are sensitive and are already under stress with climate change and other development pressures – this cannot be treated as a grand experiment with the hope that the proponent has used rigor and best practices to make the assessment.

The area of assessment must not just cover the project study area as the geographic limit, but a proper assessment must be based on the upstream and downstream watershed when considering the effects of the proposal. If there are upstream mining and waste water treatment facilities releasing effluent and taking water outside of the project study area it will carry major implications for cumulative negative impacts resulting from the project. These cumulative effects must be fully assessed and determined before project approval.

Cumulative effects and fisheries must also be included in the list of general categories.

3.2.6 Water Quality

The proponent must be required to do more than just document its assessment of the pre-construction and post-construction predictions to baseline water quality changes. If the project has potential to have significant negative impacts, then MNR and MOE should have the mechanism to impose restrictions, mitigation measures, and in some instances stop development of the proposed project.

Methylmercury studies must be completed prior to project permits and approvals being issued – we do not want to find out after the fact that mercury levels in fish tissue have increased – long after the damage has been done. The guidelines speak of the proponent

identifying a monitoring program and associated actions to minimize production of methylmercury and to include proposed contingency measures, but what contingency measures would continue to allow fish to be eaten by First Nation and local residents that rely on fish as a main staple in their diet? There are numerous studies indicating that methylmercury increases in headponds will result in increased fish consumption restrictions that can last for 30 years or more. The potential for methylmercury production must be determined in advance of approval through appropriate in-field studies.

3.2.7 Ground Water Surface Water Interaction

Again, there must be a scientific study that has identified and fully assessed the potential impacts and ensures that no unforeseen impacts to the above amenities will occur. MNR and MOE must not just rely on proponent generated assessments of how a proposed project will impact on a river ecosystem.

The construction of a hydroelectric project should not be a trial and error experiment that could have serious impacts on local wetlands, water wells, soil consolidation and water tables.

3.3 Monitoring Program

ORA agrees that a robust environmental monitoring program can result in benefits by measuring environmental change, providing early warning of emerging impacts, detecting climate change impacts, and informing of adaptation strategies.

Therefore the proponent must be required to provide a plan for monitoring the negative effects associated with the construction and operation of their project, and detail the effectiveness of established mitigation measures. The draft indicates "*where monitoring is deemed necessary*".

ORA submits that monitoring should always be a key component of every permit and approval – not just where deemed necessary, and it is important that MOE and MNR have a strong oversight role in any monitoring program.

3.4 Record of Consultation

The proponent's record of consultation should do more than just identify the suggested components, but it must also detail a complete record of concerns and how they were addressed, along with any resulting mitigation measures.

In conclusion, waterpower is a big taker of water. Storage of water to generate power can have devastating impacts on the downstream and upstream riverine ecosystem, including navigability, fishery decline, water quality and water quantity. Therefore, ORA strongly believes that the policy and process surrounding PTTW must be strengthened, not eliminated.

ORA has no problem with the approach taken in these guidelines as long as both environmental and proponent interests are being served in a balanced and fair way. It is important that MNR and MOE not just work with the Ontario Waterpower Association when creating these policy and guideline revisions, but key stakeholder environmental groups must also have a place at the table. It is too late to have meaningful input when policies have already been drafted and

posted on the Environmental Registry. ORA is requesting a place at the table whenever key policy and process revisions are being considered within the ministries, so that environmental interests are balanced with proponent's interests.

Finally, a 45 day public review is not sufficient for meaningful input, especially when there are several policy revisions occurring at the same time. ORA is requesting a minimum of 90 days for any significant policy revision posting.

Ontario has an extensive history of hydroelectric dam development, and the damages inflicted have led to the extinction and extirpation of many aquatic species. Some of the early impacts on Ontario streams were created by the mill dams that caused the extinction of Lake Ontario Salmon, and doubtless many other lesser migratory populations that weren't so well documented; and twentieth century hydro dams have devastated many other species such as the American Eel and Lake Sturgeon. The numerous problems with hydroelectric have not gone away, and these operating strategies devised to take advantage of peak demand have only served to increase the potential for negative impacts. ORA therefore urges the Ministries to ensure that any changes to guidelines, policy and process only serve to tighten environmental protection – not weaken it.

Ban Ki-moon reported that, *"Unless greater efforts are made to reverse current trends, the world will run out of freshwater."* *"Although seemingly abundant, only a tiny amount of the water on our planet is easily available as freshwater."* *"Biodiversity and the ecosystem services it provides are central to achieving the vision of a water secure world."*⁴

Thank you for this opportunity to comment.

Respectfully,



Linda Heron
Chair, Ontario Rivers Alliance

⁴ New York, 21 May 2013 - Secretary-General's message on the International Day for Biological Diversity, Ban Ki-moon, Secretary General, United Nations