

I am writing to express my objections to the purchase of hydropower produced from any man-made impoundments in Canada constructed for the purported benefit of clean, carbon-free energy to meet the requirements of New York's Climate Leadership and Community Protection Act (CLCPA).

I was employed as a wildlife biologist by NYSDEC for more than 30 years, and I contributed comments on a proposed purchase of hydropower from Canada ("Great Whale Project") in the early 1990s. I expressed concerns about the significant impacts of flooding and destroying vast acreages of wetlands that are critically important to migratory birds. Furthermore, the operation of hydropower plants that result in extreme and unnatural water level fluctuations throughout those reservoir systems prevent the reestablishment of any useful habitat for wildlife and aquatic resources. I also noted that the resulting release of mercury into the environment was a concern to any fish and wildlife that may attempt to use the area, as well as to indigenous people that utilize those resources. I urge you to review and consider the Generic Environmental Review completed by NYSDEC (circa 1993). At the time of that review, greenhouse gas emissions were not a widely acknowledged concern and were outside of my area of responsibility. However, that should now be a critical consideration as New York strives to achieve the goals of the CLCPA. I have no objection to hydropower produced from run-of-river operations that do not impound vast areas of land, but the vast flooding and destabilization of water levels over thousands of acres of once-productive wetlands outside of New York is not a sustainable solution to the state's energy needs. Moreover, it is essential that New York now account for the greenhouse gas emissions that result from flooding boreal forest and coastal wetlands, and from hydropower operations. A quick internet search revealed that Hydro Quebec has completed a lot of research and analysis of these impacts during the past 30+ years (<https://www.hydroquebec.com/sustainable-development/specialized-documentation/synthese.html>). However, while they conclude: "The result is higher greenhouse gas (GHG) emissions after impoundment, mainly CO₂ (carbon dioxide) and a small amount of CH₄ (methane)... However, these emissions are temporary and peak two to four years after the reservoir is filled...During the ensuing decade, CO₂ emissions

gradually diminish and return to the levels given off by neighboring lakes and rivers.” What they don’t report, and must be considered, is how greenhouse gas emissions from the reservoirs compare to land cover types that were inundated, rather than neighboring lakes and rivers.

Finally, given the strong emphasis that the CLCPA places on environmental justice to disadvantaged communities in New York, it is imperative that those concerns be extended to indigenous people in Canada who are directly affected by the development of hydropower resources in Canada.

Thank you for considering these comments.