



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

14 August 2025

Julia Black
Minister of Energy and Mines
77 Grenville Street
Toronto, ON
M7A 2C1

By email: Julia.Black@Ontario.ca

Re: ERO-025-0660 Enhancing Electricity Transmission Capacity in Northern Ontario
The Greenstone Transmission Line

Dear Ms Black:

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

The ORA is pleased to provide comments on ERO-025-0660, a proposal to prioritize and advance the Greenstone Transmission Line (GTL) project. While ORA recognizes the importance of transitioning remote First Nations communities off of diesel and enhancing grid reliability, we raise serious concerns regarding the environmental, procedural, and reconciliation implications of this proposal as currently structured.

1. Environmental Risks and Regulatory Oversight

Transmission projects of this scale risk significant and often irreversible environmental impacts—fragmenting intact boreal ecosystems, disrupting wildlife corridors, degrading watersheds, and accelerating road-based encroachments into ecologically sensitive areas.^{1,2,3,4} Yet, the posting does not include provision for baseline environmental data, route alternatives analysis, cumulative effects assessment, including climate change, or specific mitigation strategies.

The posting asserts: “This proposed action does not impact the requirement for the transmitter to obtain all required government permits and approvals, including those required under the Environmental Assessment Act.” However, such statements offer little comfort when the Ministry simultaneously seeks to pre-emptively fast-track the project by declaring it a 'priority project' and streamlining Ontario Energy Board (OEB) reviews under s. 96.1(1) of the Ontario Energy Board Act. These measures are likely to compromise the integrity and independence of regulatory review processes intended to protect the public, Indigenous communities, and the environment.



2. Undermining the Ontario Energy Board's Mandate

Declaring the GTL a 'priority project' would require the OEB to accept the project's necessity, thus removing its discretion to evaluate whether the project is actually needed in the public interest. This erodes the OEB's statutory oversight role. The OEB would still assess cost and service quality impacts, but the most fundamental test—project necessity—would be predetermined by Cabinet. Such politicization of regulatory due process severely undermines the credibility and accountability of Ontario's energy governance.

3. Delegation of the Crown's Duty to Consult

The Ministry indicates it *'expects to delegate the procedural aspects of Crown consultation to the transmitter'* if the proposal advances. This practice—while routine in some instances—raises major legal and ethical issues when deployed in projects with the potential to infringe upon constitutionally protected Aboriginal and treaty rights.

*"Although the legal duty to consult remains with the Crown, the Crown may delegate the procedural aspects of consultation to project proponents. ... Project proponents are typically best positioned to speak to the specific planning, technical and environmental aspects of projects ... The Crown remains responsible for oversight of the consultation process and for ensuring the adequacy of consultation with communities to whom the duty to consult is owed."*⁵

As established by the Supreme Court of Canada in *Haida Nation v. British Columbia* (2004 SCC 73), the Crown bears the duty to consult and accommodate affected Indigenous peoples where its actions may adversely impact their s. 35 rights.⁶ Delegation of procedural steps is permissible, but ultimate responsibility cannot be abdicated. The Crown must ensure that consultation is meaningful, adequately resourced, and responsive to concerns raised. Fast-tracking priority designation without robust consultation violates both the spirit and letter of this constitutional obligation.^{7, 8}

4. Indigenous Partnership Framing and Energy Justice

The Ministry frames the project as advancing reconciliation through economic partnerships, noting Hydro One's 50% equity stake model. It also encouraged *"remote First Nation communities that are diesel-dependent for electricity purposes to explore alternative electricity generation options..."* While equity participation may offer long-term benefit to participating Nations, it does not equate to free, prior and informed consent (FPIC).

Equity models may create incentive structures that pressure First Nations to accept projects out of economic necessity, rather than through autonomous community decision-making. For genuine energy justice, Indigenous communities must be supported to identify their preferred clean energy solutions—including environmentally sustainable community-scale electricity projects like solar, wind and geothermal—not locked into top-down, centralized grid expansion premised on resource extraction and southern demand. More on this below.

5. Climate Impacts and Long-Term Planning Gaps



While electrification is necessary, all energy infrastructure—especially large-scale transmission—must be planned through a climate lens. This includes full life-cycle emissions accounting, land-use change impacts, and alignment with Ontario’s January 2023 Climate Change Impact Assessment Report⁹ (CCIA) and climate targets.

Yet, the Integrated Energy Plan cited in the posting totally ignores the CCIA and does not reflect legally binding carbon budgets, climate mitigation measures or sector-specific targets.

In 2024, Stephen Lecce, Minister of Energy and Mines, was sworn in. In 2025, he announced a new path forward by issuing a Minister’s Message, ‘Energy for Generations: Ontario’s Integrated Plan to Power the Strongest Economy in the G7’.¹⁰ The report is primarily focused on becoming a “*Global Energy Superpower*” and having the “*Strongest Economy in the G7*”. It also misleadingly greenwashes hydropower as clean and non-emitting and is totally void of the words “climate change” or any short or long-term view of planning or risk assessment of its effects on the resilience and longevity of such a water-reliant electricity resource as hydropower. Water availability is crucial to hydropower, and 2025 is already shaping up to be the hottest year on record, surpassing the record-breaking temperatures of 2023 and 2024.

If the Minister does not take climate change and the CCIA seriously, the environmental effects could be devastating for Indigenous communities.

Ontario lacks a credible pathway to net-zero, and proposals like the GTL further entrench a resource-intensive, centralized system rather than accelerating distributed, community-led solutions that are more resilient, scalable, and climate-aligned.

6. Climate Change is the Death Knell for Hydropower

The 2023 *Ontario Provincial Climate Change Impact Assessment* utilized historical and projected future climate data as fundamental components to assess the risks and consequences of extreme weather events, as well as projections of future climate risks. It reports that “*changes in Ontario’s climate are expected to continue at unprecedented rates... and it will pose indirect threats to things like water availability and water quality.*”¹¹ The report further indicates that northern Ontario, which experiences on average four extreme heat days annually, is projected to see upwards of 35 such days each year. Southern Ontario will see upwards of 55-60 extreme heat days annually by the 2080s—a fourfold increase from the current annual average of 16 days. These changes threaten stream temperature regimes, species survival, wetland retention, and seasonal flows.

In addition, “*Climate change poses risks to water sources, which affect supply and quality. Dry conditions and extreme hot temperatures change water balances and cause disruptions to the water flow regulation service, leading to reduced surface and groundwater levels, changes in intra-annual patterns of water availability, loss of available freshwater supplies for human use, wetland drying and loss, changes in distribution and abundance of animal and fish species and altered ecosystem function over a long term.*”¹²

This assessment confirms that climate change will have significant effects on water quality, water quantity, aquatic life, riverine ecosystem sustainability, and the communities that rely on these freshwater resources. It will also have severe negative impacts on the intermittent and unreliable nature of hydropower generation.



Despite perceptions of reliability, hydropower is **highly vulnerable to seasonal and long-term hydrological fluctuations**. According to Statistics Canada, total electricity generated in Canada decreased by 3.9% year-over-year in 2023. It was the hottest summer on record since 1940, according to Environment and Climate Change Canada (ECCC), and hydropower is susceptible to persistent dry conditions. In 2023, Western and Central Canada received below, or well below-average amounts of precipitation, putting a strain on hydroelectric generation and exports. In fact, Quebec (-9.3%), British Columbia (-21.5%) and Manitoba (-12.1%) were affected by drought conditions and saw electricity generation drop as a result.¹³ In 2024, persistent dry conditions continued to reduce hydroelectric generation, similar to what was experienced in 2023. In fact, during the months of February, March and April 2024, Canada became a net electricity importer, rather than a net electricity exporter.¹⁴

In fact, “2024 was the warmest year on record, and the first year to exceed the 1.5°C threshold established by the Paris Agreement... Although ECCC forecasted only a 17% chance of exceeding the 1.5°C threshold in 2025, their decadal forecasts indicate that the next five years are likely to be the warmest five-year period on record.”¹⁵ 2025 is already turning out to be much hotter and drier than 2024.

In 2024, a group of 60 international scientists released *Indicators of Global Climate Change*, reporting that “Things aren’t just getting worse. They’re getting worse faster.” said study co-author Zeke Hausfather of the tech firm Stripe and the climate monitoring group Berkeley Earth. “We’re actively moving in the wrong direction in a critical period of time that we would need to meet our most ambitious climate goals...”¹⁶

Building new hydropower facilities now is an investment that will not be operational for another 5 to 10 years and could become a stranded asset by that time. With climate change advancing at such an increasingly rapid pace, hydropower poses a significant risk to ratepayers’ investments and returns in an increasingly volatile, problematic, and diminishing energy resource. New hydropower will also place riverine ecosystems and their connecting lakes at ever-increasing risk, when we should instead be removing dams to increase freshwater ecosystem resilience.

7. Hydropower’s Dirty Secret

The hydropower industry has intensified its lobbying efforts for a new renaissance in hydropower, as capacity additions have been declining since 2013. This is due not only to the falling costs of competing technologies but also to a broader set of challenges, including high-profile cancellations, growing hydrological risks, cost and schedule overruns, technical challenges, and increasing social resistance. Now you can add greenhouse gas emissions, including methane, at the top of that list.

When a dam is built and land is flooded to create a reservoir, microbes decompose submerged organic matter. Throughout the dam’s life, sediment and biomass accumulate behind it, in a process that leads to the emission of methane, carbon dioxide and nitrous oxide for the full life cycle of the dam.

Methane is a potent greenhouse gas with a heat-trapping capacity 28 to 34 times greater than that of carbon dioxide on a 100-year time scale, and measured over a 20-year time period, that



ratio grows to 84 to 86 times.¹⁷ Methane is generated in reservoirs by bacteria living in oxygen-starved environments. These microbes feast on rotting organic matter from plants for energy, just like people and other animals, but instead of breathing out carbon dioxide, they breathe out methane.

A 2004 Environment Canada report states:

“Largely because of the climate-change driven pursuit of “clean” energy sources, attention has also focused on the role of water storage in affecting production and emission of greenhouse gases (GHG). In contrast to the widespread assumption (e.g., in Intergovernmental Panel on Climate Change [IPCC] scenarios) that GHGs emitted from reservoirs are negligible, measurements made in boreal and tropical regions indicate they can be substantial.”¹⁸

Hydropower reservoirs have over three decades of independent peer-reviewed studies to back this up.

A recent study out of Quebec quantified the long-term historical and future evolution of GHG emissions from 1900 to 2060, examining the cumulative global surface area of 9,195 reservoirs in four different climate zones (boreal, temperate, subtropical, and tropical) around the world. It reported:

“reservoir-induced radiative forcing continues to rise due to ongoing increases in reservoir methane emissions, which accounted for 5.2% of global anthropogenic methane emissions in 2020. We estimate that, in the future, methane ebullition and degassing flux will make up >75% of the reservoir-induced radiative forcing, making these flux pathways key targets for improved understanding and mitigation.

While CO₂ and CH₄ diffusion are modelled as decreasing with reservoir age, ebullition and degassing remain constant, such that these two latter emission pathways grow increasingly important with time. Thus, while CO₂ diffusion was the dominant flux pathway in the twentieth century, C-CH₄ emissions, mainly via ebullition and degassing, are expected to surpass C-CO₂ around 2032 and account for 75% of reservoir C emissions by 2060. In addition, the higher greenhouse warming potential of CH₄, relative to CO₂, amplifies the climate impact of CH₄ emissions. Furthermore, estimated fluxes do not account for future global temperature increases or water eutrophication changes, both of which would probably stimulate CH₄ emissions more strongly than CO₂. Methane emissions, and especially CH₄ ebullition and degassing, are expected to dominate future reservoir C-GHG release (39% and 32% in 2060, respectively), implying that mitigation efforts aimed at reducing CH₄ fluxes via pathways could be quite effective.”¹⁹

The study clearly indicates that carbon dioxide and methane diffusion decrease within the first 20 or more years of a new reservoir being created; however, methane emissions through ebullition and degassing persist and can increase over time. Measurements made at hydroelectric facilities in boreal and temperate regions indicate that GHG emissions can be substantial^{20, 21} and in some instances can rise to the level of a gas-fired facility.²²



For instance, a Swiss study of a temperate hydropower reservoir indicates that *“the total methane emissions coming from Lake Wohlen, was on average $> 150 \text{ mg CH}_4 \text{ m}^{-2} \text{ d}^{-1}$, which is the highest ever documented for a midlatitude reservoir. The substantial temperature-dependent methane emissions discovered in this 90-year-old reservoir indicate that temperate water bodies in older headponds can be an important but overlooked methane source”*.²³

The IPCC also reports that *“hydropower plants without or with small storage may be susceptible to climate variability, especially droughts, when the amount of water may not be sufficient to generate electricity (Premalatha et al. 2014) (Section 6.5).²⁴* Reliance on hydropower in times of drought also accelerates GHG emissions when depleted reservoirs necessitate the use of fossil fuels, particularly natural gas, to fill the gap.

It is also important to consider that creating a hydroelectric reservoir on a previously untamed riverine ecosystem can transform a healthy ecosystem from a GHG sink into a relatively large source of emissions into the atmosphere.²⁵

You can turn off a gas-fired facility when a cleaner form of electricity comes along; however, a hydroelectric reservoir will continue to emit methane until the dam is removed. You cannot just turn off emissions coming from a reservoir because biomass continues to collect behind the dam. The problem is consequential because these facilities will be in place for a century or more, and upfront dam decommissioning funds are not required by the province. This is a huge problem because dam removal has proven to be cost-prohibitive, as it can add up to \$millions, and there is little to no funding available for decommissioning dams.

The collateral environmental damage caused by dams and waterpower facilities has been well documented for decades, 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)^{26,27}, declining biodiversity²⁸, impaired water quality (including elevation of mercury concentrations in fish tissue)^{29,30}, and are critical threats to imperilled aquatic species.³¹



Lake Sturgeon stranded in a hydroelectric facility's overflow channel.



The hydropower industry in Ontario has consistently prioritized power generation and profit over ecological stewardship. Out of 224 hydroelectric facilities across the province, only two are equipped with operational fishways—an alarming indicator of systemic neglect for fish passage and aquatic ecosystem connectivity.

8. Recommendations

1. Do not fast-track or declare the GTL a 'priority project' until comprehensive, transparent, and science-based environmental and cumulative effects assessments are completed and publicly disclosed.
2. Maintain full OEB oversight authority over project need and alternatives assessment.
3. Ensure that consultation with Indigenous communities is resourced, Crown-led where required, and includes mechanisms for consent and alternative development pathways.
4. Ensure that the January 2023 Climate Change Impact Assessment Report and its warnings and recommendations are fully integrated into mitigating all projects being considered in Ontario.
5. Require the inclusion of climate resilience, biodiversity protection, and land-use minimization in the design and planning process.
6. Expand support for decentralized, Indigenous-led renewable energy systems as an alternative to centralized transmission expansion.
7. No new hydroelectric procurement in Ontario.
8. Reject the socio-economic overreach embedded in Ontario's 'Global Energy Superpower' narrative. This aspirational framing prioritizes international prestige and resource exploitation over environmental responsibility, public interest, and community-scale resilience.

Thank you for the opportunity to comment on this proposal. The Ontario Rivers Alliance urges the Ministry to reconsider the structure and assumptions underpinning this transmission proposal and to uphold its responsibilities to Indigenous peoples, ecological integrity, and future generations.

Respectfully,

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

Cc: The Honourable Stephen Lecce, Minister of Energy & Mines – MinisterEnergy@Ontario.ca

¹ Jeff A. Wells, Melanie A. Lawrence, and Steven J. Price, "Boreal Forest Health and Intactness in Canada: A National Assessment," *Frontiers in Forests and Global Change*, vol. 3 (2020): 90. <https://www.frontiersin.org/articles/10.3389/ffgc.2020.00090/full>

² Canadian Science Publishing, "Seismic Line Impacts on Boreal Ecosystems," *Environmental Reviews*, vol. 26, no. 2 (2018): 107-120. <https://cdnscepub.com/doi/10.1139/er-2017-0080>



-
- ³ Wikipedia contributors, "Linear Infrastructure Intrusions," *Wikipedia*, last modified 2024. https://en.wikipedia.org/wiki/Linear_infrastructure_intrusions
- ⁴ Wikipedia contributors, "Habitat Fragmentation," *Wikipedia*, last modified 2024. https://en.wikipedia.org/wiki/Habitat_fragmentation
- ⁵ LT1 RFP Indigenous Consultation Information Package (Independent Electricity System Operator, 29 August 2023), pp. 10 and 4. Available at: [IESO Indigenous Consultation Information Package \(August 29, 2023\)](#)
- ⁶ Supreme Court of Canada, *Haida Nation v. British Columbia (Minister of Forests)*, 2004 SCC 73. https://en.wikipedia.org/wiki/Haida_Nation_v_British_Columbia_%28Minister_of_Forests%29
- ⁷ Parliament of Canada, "Duty to Consult Aboriginal Peoples," Research Publications, 2019. https://lop.parl.ca/sites/PublicWebsite/default/en_CA/ResearchPublications/201917E
- ⁸ Dwight Newman, "Assessing the Duty to Consult," Fraser Institute, 2014. <https://www.fraserinstitute.org/sites/default/files/assessing-the-duty-to-consult.pdf>
- ⁹ Ontario Provincial Climate Change Impact Assessment, Technical Report, January 2023. Online: <https://www.ontario.ca/files/2023-11/mecp-ontario-provincial-climate-change-impact-assessment-en-2023-11-21.pdf>
- ¹⁰ [Energy for Generations, Ontario's Integrated Plan to Power the Strongest Economy in the G7. June 2025.](#)
- ¹¹ Ontario Provincial Climate Change Impact Assessment, Technical Report, January 2023. Online: <https://www.ontario.ca/files/2023-11/mecp-ontario-provincial-climate-change-impact-assessment-en-2023-11-21.pdf>
- ¹² Ibid.
- ¹³ Hydroelectricity generation dries up amid low precipitation and record high temperatures: Electricity year in review 2023. StatsCan. March 5, 2024. <https://www.statcan.gc.ca/o1/en/plus/5776-hydroelectricity-generation-dries-amid-low-precipitation-and-record-high-temperatures>
- ¹⁴ Dry weather dampens overall generation: Electricity year in review, 2024. StatsCan. May 15, 2025. <https://www.statcan.gc.ca/o1/en/plus/8076-dry-weather-dampens-overall-generation-electricity-year-review-2024>
- ¹⁵ [2025 forecasted to rival 2024 for record-breaking heat. By Hayley Dosser. Canadian Centre for Climate Services. 23 January 2025.](#)
- ¹⁶ [More extreme weather on the way, as greenhouse gas accumulation accelerates, scientists say. By Seth Berenstein. Canada's National Observer. June 18, 2025.](#)
- ¹⁷ Myhre, G., Shindell, D., Breon, F.-M., Collins, W., Fuglestedt, J., Huang, J., Koch, D., Lamarque, J.F., Lee, D., Mendoza, B., Nakajima, T., Robock, A., Stephens, G., Takemura, T., Zhang, H., Anthropogenic and natural radiative forcing. In *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*; Stocker, T. F., Qin, D., Plattner, G.-K., Tignor, M., Allen, S. K., Boschung, J., Nauels, A., Bex, V., Midgely, P. M., Eds.; Cambridge University Press: Cambridge, U.K. and New York, U.S.A., 2013.
- ¹⁸ 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. 32-150 p.*
- ¹⁹ Soued, C., Harrison, J.A., Mercier-Blais, S. et al. Reservoir CO₂ and CH₄ 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>
- ²⁰ 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. Online: <https://academic.oup.com/bioscience/article/50/9/766/269391>
- ²¹ 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.*
- ²² Scherer, L., & Pfister, S. (2016). Hydropower's Biogenic Carbon Footprint. *PLOS ONE*, 11(9), e0161947. <https://doi.org/10.1371/journal.pone.0161947>



- ²³ 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>
- ²⁴ Clarke, L., Y.-M. Wei, A. De La Vega Navarro, A. Garg, A. N. Hahmann, S. Khennas, I. M. L. Azevedo, A. Löschel, A. K. Singh, L. Steg, G. Strbac, K. Wada, 2022: *Energy Systems*. In *IPCC, 2022: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [P. R. Shukla, J. Skea, R. Slade, A. Al Khourdajie, R. van Diemen, D. McCollum, M. Pathak, S. Some, P. Vyas, R. Fradera, M. Belkacemi, A. Hasija, G. Lisboa, S. Luz, J. Malley, (eds.)]*. Cambridge University Press, Cambridge, UK and New York, NY, USA. doi: 10.1017/9781009157926.008. Chapter 6, 6.4.2.3 Hydroelectric Power. P-753/2258
Online: https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf
- ²⁵ 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. Online: <https://academic.oup.com/bioscience/article/50/9/766/269391>
- ²⁶ 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.
- ²⁷ 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.
- ²⁸ Carew-Reid, J., Kempinski, J., and Clausen, A. 2010. *Biodiversity and Development of the Hydropower Sector: Lessons from the Vietnamese Experience – Volume I: Review of the Effects of Hydropower Development on Biodiversity in Vietnam*. ICEM – International Centre for Environmental Management, Prepared for the Critical Ecosystem Partnership Fund, Hanoi, Viet Nam. Online: <https://www.icem.com.au/documents/biodiversity/bioHPdevt/Volume%20I%20Biodiversity%20and%20development%20of%20hydropower-Vietnam%20experience.pdf>
- ²⁹ Bodaly, R.A., Beaty, K., Hendzel, L., Majewski, A., Paterson, M., Rolfhus, K., Penn, A., St. Louis, V., Hall, B., Matthews, C., Cherewyk, K., Mailman, M., Hurley, J., Schiff, S., Venkiteswaran, J. *Experimenting with Hydroelectric Reservoirs*, 3 pp. *Environment Science and Technology*. American Chemical Society. Online: <http://library.certh.gr/libfiles/PDF/GEN-PAPYR-1135-ENVIRONMENTAL-by-BODALY-in-EST-V-38-ISS-18-PP-346A-352A-Y-2004.pdf>
- ³⁰ Kelly, C.A. et al. (1997). *Experimental Lakes Area Reservoir Project (ELARP). Increases in fluxes of greenhouse gases and methyl mercury following flooding of an experimental reservoir*, *Environ. Sci. Technol.* 31(5), 1334-1344, doi:10.1021/ES9604931.
- ³¹ Wilcove D.S., Rothstein, D., Dubow, J., Phillips, A., Losos, E. 1998. *Quantifying threats to imperiled species in the United States* *BioScience* 48: 607–615. Online: [http://faculty.washington.edu/timbillo/Readings and documents/global div patterns origins/general tropical biodiv conservation/Wilcove et al Bioscience 1998 Quantifying threats to biodiv.pdf](http://faculty.washington.edu/timbillo/Readings%20and%20documents/global%20div%20patterns%20origins/general%20tropical%20biodiv%20conservation/Wilcove%20et%20al%20Bioscience%201998%20Quantifying%20threats%20to%20biodiv.pdf)