

**Presented at the Clean Environment Commission Hearings on
Manitoba Hydro's Application to Continue to Regulate Lake Winnipeg
- March 11, 2015.**

My name is Mike Mason and I am a cottage owner and seasonal resident of Victoria Beach and currently the President of the Victoria Beach Cottage Owners Association.

Firstly, thank you to the panel for having me on the agenda tonight. Tonight I am pleased to also see on the agenda one of our council members and our Reeve. In previous hearings you have also heard from others from Victoria Beach and in up-coming hearings you will also hear from more VBer's. This certainly underscores the importance of Lake Winnipeg to our community.

I have had the pleasure and opportunity to spend my entire life enjoying summers on Lake Winnipeg and I have a great passion for the Lake, it communities and its beaches. I enjoy swimming, sailing, paddling and enjoying the lakes beautiful beaches and shores.

My children are also enjoying these opportunities. It's different now though. While they love the lake, they also worry about the lake. They worry about algae and look to see if the algae today is "blue-green" or just "regular" algae. They also worry about high water events and the loss of shoreline, damage to our friends and neighbors properties and damage to our beaches. To me this outlines our responsibility to future generations.

This panel has been charged with a momentous task and with that please except my thanks for taking on this sizable responsibility. The

outcomes of this hearing process can and will affect Lake Winnipeg and Manitoban's for decades to come, therefore it is imperative that this process does not yield to the pressures of today but puts the needs of Lake Winnipeg at the forefront.

Lake Winnipeg is vital to the Manitoba economy and the lake is truly one nature's gifts to our province and our country. As Manitobans, as Canadians we have been given the responsibility of being the custodians of this great lake. To date we have failed in this regard.

Currently, Lake Winnipeg suffers from excessive nutrient loading causing the eutrophication of the Lake. Massive nutrient increases in Lake Winnipeg in the 1990's has led to a doubling of the phytoplankton biomass and a shift to the very toxic blue-green algae dominance. This affects the health of the Lake, our health and our economy.

Lake Winnipeg also suffers in the last few decades from very high water levels that continue to have a negative impact on our shorelines. Many communities, particularly in the South Basin have seen massive erosion of their shorelines which has resulted in the loss of both private and public lands.

These two processes, eutrophication and high water, if not addressed, will continue to adversely impact Manitoba's economy. Simply stated Lake Winnipeg is one of the world's largest lakes (10th by surface area) and it now has the disturbing title as one of the world's most threatened lakes from the Global Nature Fund (world's most threatened in 2013).

We have a responsibility to improve conditions on Lake Winnipeg. This responsibility should be shouldered by individuals, by local government, by the provincial government, by the federal government, and by other provinces and U.S. states in Lake Winnipeg's massive catchment.

This responsibility should also be shouldered by Manitoba Hydro. Hydro and only Hydro are in the unique position to use Lake Winnipeg as a reservoir for hydro electric production and to regulate the Lake between 711 - 715.

With this unique position I believe that Manitoba Hydro should take on greater responsibilities related to the health of Lake Winnipeg and the erosion of Lake Winnipeg's shorelines.

We should listen to experts that indicate that we should "participate actively in the protection of wetlands and natural shorelines, for the benefit of healthy lakes and healthy communities". As a requirement of their license Hydro should participate actively in the protection of wetlands and the natural shorelines of Lake Winnipeg.

Open Letter from Dr. Gorden Goldsborough, Vicki Burns (Community Foundations of Manitoba), Dr. Pascal Badiou (Ducks Unlimited) and Bruce Smith (Lake Winnipeg Foundation).

Hydro should listen to Dr. Gorden Goldsborough who presented to this panel that in his "considered opinion that Lake Winnipeg regulation has contributed to the loss of emergent plant loss in Netley-Libau Marsh, by reducing the frequency of low-water periods critical to the maintenance of healthy plant stands". He goes on to say one management strategy would be "alteration of the Lake Winnipeg

regulation protocol to permit two-year, low-water periods with a frequency of roughly ten to twenty years". This should be seriously considered as a condition of the license to regulate.

Is there a role for Hydro in some of Dr. Goldsborough's other recommendations which could help restore the Netley-Libau marsh like construction of a structure at the Netley Cut to regulate flow through it and resumption of dredging at the Red River mouth.

Dr. Gordon Goldsborough (P. 12 – The Ecology of Coastal Wetlands around Lake Winnipeg and Vegetation Loss in Netley-Libau Marsh, January 2015 – Presented to the CEC.

A recent Baird Engineering report presented to this commission also indicated that a "comprehensive technical study of shoreline evolution at a variety of locations around the lake for the pre- and post-regulation era is required to further evaluate possible linkages between water level regulation and sandy shore evolution. " This technical study should also be undertaken by Hydro in conjunction with the provincial government as a condition of the license to better understand the relationship between water level regulation and its effects on our shorelines. With these investigations, two important questions could be answered:

- 1) How do the pre- and post-regulation erosion rates compare?
- 2) How does the post regulation erosion rate compare to the hypothetical scenario of no regulation structures from 1976 to the present?

Baird - February 2015 (P. 27 & P. 29 - Lake Winnipeg Erosion and Accretion Process).

A similar approach has also been proposed by Vicki Burns from the Save Lake Winnipeg Project. They presented to this panel that “studies to fully ascertain the impacts of the current regulation regime and then to forecast the implications of altering the parameters of the regulation requirements” “is an opportunity to put into place a balanced and modern approach taking into consideration the 40 years of experience Manitoba Hydro has now accumulated”.

Save Lake Winnipeg Project – May 2014

In a May 2014 letter to the CEC from the Manitoba Association of Cottage Owners this theme of further study is also echoed. The association outlines 10 areas of study that they would like to see included in the scope of investigations for this panel to consider. I would also encourage the panel to seriously consider these areas of study.

May 28, 2014 – Manitoba Association of Cottage Owners.

We don't concretely know what effect lake regulation has had on eutrophication . This seems to be because Lake Winnipeg remains under-studied. There has not been enough research done to be able to make any definitive conclusions. Therefore more research is needed.

As a result of a massive low pressure system over Lake Winnipeg in October 2010, which significantly damaged the shorelines and caused

flooding throughout Victoria Beach, the Victoria Beach community embarked on multi-year journey. This journey resulted in a Shoreline Advisory Committee, in contracting Baird Geotechnical Engineering to study our shorelines and advise our municipality on ways to preserve and protect our beaches, shorelines and mitigate flooding. This process is on-going and is a science based approach to shoreline management that can serve as a model for other communities in the south basin. It includes artificially nourishing shorelines to address shoreline erosion, rather than build negative impacting shore parallel structures. It may also include protecting shoreline ecosystem habitat and natural shoreline flora.

This could be an opportunity for Manitoba Hydro to actively participate with communities in the protection of our natural shorelines and beaches.

For the privilege to regulate Lake Winnipeg, Manitoba Hydro could and should partner with communities like Victoria Beach that are looking to implement thoughtful, science based, community stakeholder based, shoreline management plans that protect our natural beaches and shorelines.

To be clear when I say “partner” Hydro could work closely with communities to research, develop and help fund shoreline management plans.

This is an opportunity for Hydro to be a leader in sound environmental management and for Hydro to help contribute to building resilient

shoreline communities that have the capacity to sustain disturbances, such as erosion and flooding events.

Perhaps until the effects of Lake Regulation are far better understood and more definitive steps are in place by Hydro to work closer with municipal, provincial and federal governments and the science community so a comprehensive plan can be put in place which will yield positive net effects for the health of the Lake and its shoreline communities a shorter term license should be considered by the CEC for Hydro.

Thank You.

Mike Mason