

Bill 46 – Save Lake Winnipeg Act  
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Green Action Centre is a non-profit environmental organization, with 800 members across Manitoba. We promote greener living through environmental education and encourage practical green solutions for homeowners, workplaces, schools and communities. We coordinate many public education programs including Waste Reduction Week in October and the Commuter Challenge that many of you just completed. Our vision is a Manitoba where we all can live green and well.

I am speaking in support of Bill 46, the Save Lake Winnipeg Act. Lake Winnipeg is a globally significant ecological resource. It is the tenth largest freshwater lake in the world. Most Manitobans are aware of how important the lake is on a regional level, for recreation, fishing, and its environmental values, such as providing habitat and promoting biodiversity. On the east side of the lake, the Heart of the Boreal region has been nominated as a UNESCO heritage site. Protecting Lake Winnipeg is one of the most important responsibilities the government and people of Manitoba face.

However, Lake Winnipeg is in trouble. A century of agriculture, industry and urban development have put pressure on the lake, adding increasing levels of nutrients, including phosphorus and nitrogen. These nutrients have altered the natural conditions of the lake, resulting in what has been characterized as a “sudden ecological state change” which occurred around 1990 according to recent research. Lake Winnipeg today is not the lake many of you or your parents grew up knowing.

Algae blooms have become common on both the north and south basins in recent years. Some of these blooms contain toxic cyanobacteria that are hazardous to lake residents, their pets and to wildlife that come into contact with it. Some of the algae blooms are not directly toxic to humans, but can create conditions that choke out aquatic life. As the masses of algae decay, they use up the oxygen in the lake, making it inhabitable for many fish species and other lake organisms.

Many scientists have warned that fixing Lake Winnipeg will not be easy. It could take decades of work to return the lake to a healthy state. It is our duty to begin to repair the lake and not leave the problem for another generation. The Save Lake Winnipeg Act begins to take steps in the right direction. Here, I will comment on some of the ways this act takes us in the right direction, mention some ways this bill could be improved and finally a few further steps that will need to be taken.

This Bill includes parts dealing with protecting wetlands, several restrictions on livestock and manure production, a moratorium on peat and peat moss mining, requirements that new development must have sustainable water and waste water plans, a mandate for the City of Winnipeg to replace its North End Treatment plant.

Protecting our province's wetlands will have several environmental benefits including flood mitigation, reducing greenhouse gases and promoting biodiversity. Most significantly in this context, wetlands are also the filters of our watersheds. Well maintained wetlands can play an essential role in reducing the growth of nutrients in our lakes.

Unfortunately, we are losing wetlands at too high a rate. Every year, 2000 hectares of wetlands are lost in southwest Manitoba alone, and we have lost up to 70 per cent of wetlands in some areas already. This course must be reversed.

Coastal marshes are particularly at risk. Manitoba's great lakes contain more coastal wetlands than all the Laurentian Great Lakes combined. Netley Marsh has been transformed in recent decades, losing thousands of hectares of critical bulrush habitat and gaining an equivalent area of open water since the 1970s. Other major coastal wetlands are also at risk. This new legislation could provide a powerful tool to protect these important areas.

More should also be done to protect wetlands that are not on crown land and inland wetlands. I hope the government also makes proposals in the near future to deal with those areas.

The second part of this bill will regulate livestock production by extending the moratorium on expanded confined hog production to the entire province. This is an important step that puts the entire industry on an even footing. Some of the external factors that have slowed the growth of the hog industry nationwide could be coming to an end, and many expect there to be an increased demands from industry for increased production in the coming years. We have heard from some of our members in western Manitoba that they fear the partial moratorium could put pressure on increased development in areas of the province away from Red River Valley.

This bill is called the Save Lake Winnipeg Act, but it is important to remember that it is not just Lake Winnipeg that is suffering from the problems eutrophication and algae blooms. I recently attended a public forum in River Heights highlighting the problems in Killarney Lake, and the same problems can be witnessed across the province. Given that water bodies across Manitoba are affected, it makes sense to apply similar rules across the province.

There will also be a ban on winter spreading of manure. This spring's floods have given profound evidence of the importance of this policy. So much of our province is under water and nutrients applied during the winter are washing right into our waterways. Given predicted global shortages of phosphorus, we need those nutrients for our crops, not for polluting our lakes and rivers.

I recognize that there is a reprieve until 2013 for small farmers in this part of the bill, which makes sense as small farmers often have the fewest resources to adapt. I would like the province to go further and provide concrete assistance to small farmers to help

them implement this part of the regulation. Many small farmers practicing integrated and ecologically sound agriculture rely on allowing their animals to have access to their fields throughout the year. The natural ecosystem of the watershed had animals spreading manure all year long. I would not like to see this act push ecological farmers out of business. So I hope that the government works with those producers to see that they have the resources to comply.

I do not have much to say about peat moss mining, other than to note that Canada's National greenhouse gas inventory report for 2010 found that "Emissions from managed peatlands have increased 46% since 1990, amounting to 1.2 Mt in 2008." As with wetlands there are multiple reasons for protecting these sensitive areas.

The next part of this bill deals with drinking and waste water plans in Manitoba's Capital region. Green Action Centre has been a strong proponent of sustainable urban development. We have argued that all development should meet the criteria of fitting with our commitments to reduce greenhouse gas emissions and with the reality that we are already approaching or have exceeded peak oil levels globally. Water supply and treatment are among the most energy costly aspects of urban infrastructure. Unless we reduce sprawl as we build our communities, municipalities will require even more costly water infrastructure. Moreover, new water and waste water plans for the capital region should consider the effects of the new development they foster on other aspects of building a sustainable region, including the transportation demands they promote.

The final section of this bill deals with the refurbishment of Winnipeg's North End Treatment Plant. This may be the most important aspect of the bill, both because of the scale of nutrient emissions from Winnipeg, and because of the symbolic importance of Manitoba's capital and largest city showing leadership on this issue.

It is important to remember that when this aging plant failed in 2002, hundreds of millions of litres of untreated sewage escaped in the Red River. This facility must be upgraded before we allow a similar disaster to occur. Moreover, until we do, it will be difficult to make the case that other municipalities in the province should take action to improve their facilities. I was recently at a meeting in Morden with University of Winnipeg's Dr Charles Wong and his research team discussing the problem of releases from that community's lagoon into Deadhorse Creek. One of the most common questions that residents had for the scientists presenting the research was: "how does our community compare to Winnipeg?" Until we can give a better answer to those residents, it will be difficult to make the case they should improve their practices.

Finally I would like to broach one of the most controversial parts of the discussion around fixing Lake Winnipeg. There has been much breath and ink wasted already on the issue of nitrogen and its effects on the Lake, but both sides seem to be arguing about different things. I have never seen anyone argue in favour of removing nitrogen as a remedy for preventing cyanobacteria blooms. Those who wish to remove nitrogen argue that it is necessary firstly to prevent the non-toxic algae blooms, and secondly to minimize the toxic effects of too much nitrogen in our waterways. While the priority of

preventing toxic cyanobacteria is primary, as an environmentalist, I would not condone a solution to this problem that brings our ecosystem further out from normal.

Some have suggested that we should increase the levels of nitrogen in the lake to help maintain a ratio of phosphorus and nitrogen in the lake that is less conducive to the growth of cyanobacterial growth. Dr Schindler has suggested that 15 to 1 is the optimum ratio. I would like to point out that Lake Winnipeg's levels of nitrogen are already extremely elevated from historical norms. Such a solution would represent geo-engineering on a massive scale, and would not be in keeping with the precautionary principle. We do not have any evidence that it would be safe to allow nitrogen levels in the lake to climb still higher. Rather, in order to reach a safe state of the lake, the responsible measure is to bring down levels of both nutrients in the lake, minimizing the likely occurrence of both the toxic cyanobacteria blooms, and also the non-toxic but also dangerous algae blooms.

As I understand this bill it will not currently require the city of Winnipeg to remove nitrogen immediately, but it will require that the City upgrade its facilities so that nitrogen removal may be possible a later date. Given that these upgrades represent only 7 percent i.e. \$30 million of \$350 million, of the cost of the project, this seems a fair compromise, allowing citizens to concentrate on the 93% of the solution on which everyone should be agreed - that is the need to refurbish the plant so that further disasters like the one we saw in 2002 need never occur.

Thank you