

Michael Cardillo, Green Party, River Heights

Thanks for the questionnaire, I love the work your organization is doing to help protect the Lake.

I spent most of my childhood summer's near Grand Beach, either hiking or swimming the lake and forest left such an impression me. The lake is a treasure worth protecting and preserving for future generations.

Question 1

Whole-lake studies on Lake 227 at Canada's Experimental Lakes Area (ELA) over multiple decades demonstrate that phosphorus controls the growth of blue-green algae blooms. This research has driven important policy changes that have greatly improved Great Lakes water quality. This same research points to the need to maximize phosphorus removal from the City of Winnipeg's sewage.

Manitoba's Clean Environment Commission, the Province of Manitoba, the City of Winnipeg, and freshwater scientists from around the world agree that removal of phosphorus from Winnipeg treatment plant effluent is imperative to reduce algae growth on Lake Winnipeg. However, action to achieve this has been stalled for over a decade. In December 2015, Winnipeg's North End plant released effluent with almost four and a half times the recommended phosphorus.

How will you and your party resolve the longstanding stalemate that continues to prevent action to remove phosphorus from Winnipeg's wastewater? How will you ensure immediate action is taken ensure phosphorus in Winnipeg's effluent does not exceed 1 milligram/litre?

The Green Party Manitoba will create the Green Infrastructure Fund of \$166 million annually which will be created from revenues from a \$50/tonne carbon tax, some of this money will finance the required initiatives and repairs to bring Winnipeg's water treatment plants are brought up to standards. The Green Party Manitoba will also use the funds to reduce phosphorous run off from agriculture.

We recommend immediately undertaking a study of innovative interim and long term solutions to achieve the 1 mg/litre water quality standard. If this effluent discharge continues then at some point there should be consequences (ex. Penalties). The Green Party of Manitoba would also consider surcharges on water to fund plants (ex. Challenge Winnipeg where it is with the resent budget, move funds from water fees into general revenue.

Question 2

The eutrophication of Lake Winnipeg is a significant environmental threat caused by human activities occurring across a watershed that is 40 times larger than the lake itself. Improving, protecting and managing the health of Lake Winnipeg for long-term sustainability require financial investments commensurate with the scale and complexity of the challenge.

To protect Lake Winnipeg, Manitoba's department of conservation and water stewardship (MCWS) is responsible for water quality management, water monitoring programs, regulation of Manitoba's fisheries, and zebra mussel containment initiatives.

Over the past five years, MCWS's budget has been repeatedly cut – a troubling trend given that the health of Lake Winnipeg continues to decline while the cost of effective, sustainable solutions continues to rise.

Will you and your party commit to increasing MCWS's budget to rebuild the department's core capacity to monitor and manage Manitoba's valuable freshwater resources? To which other MCWS programs would you direct further investment?

Yes, Green Party Manitoba would revise the cuts to the department and would be committed to restoring funding to staffing and operating budgets operations to pre NPD levels. We are also committed to hiring the best qualified candidates instead of the current internal competitions.

Some programs we are committed to direct further investment would be:

- Commit to funding the implementation of 'sustainable fishery' management.
- Commit to enhance water quality monitoring.
- Commit to greater enforcement
- Commit to implementing means to reduce land use impacts to water quantity and quality (ex. Penalties for the removal of riparian areas).
- Improve the Environmental Review process respecting freshwater in the province

Question 3

Wetlands keep our water clean by filtering out excess phosphorus. Bill 5, the *Surface Water Management Act (Amendments to various acts to protect lakes and wetlands)*, died on the order paper in the last legislative session. This bill was the result of four years of public consultation, had the support of both conservation and agricultural communities, and would have been an important first step in protecting Manitoba's threatened wetlands.

The introduction of a new and strengthened *Surface Water Management Act* must be an immediate priority for Manitoba's new government. A revised bill should be based on the premise of no net loss of wetland benefits and put in place a drainage moratorium on seasonal (class 3) wetlands – equivalent to the protection granted to permanent and semi-permanent wetlands (classes 5 and 4).

Will you and your party commit to rapidly re-introducing a comprehensive bill enabling strong regulatory protection of Manitoba's threatened wetlands?

Yes, the Green Party Manitoba will protect seasonal wetlands because different species of wildlife use seasonal wetlands in comparison to semi-permanent and permanent wetlands. The Green party would require a no-net loss policy where any wetland drained would be replaced by wetland of the same class.

The Green Party Manitoba would also require determination of the total environmental costs of wetland drainage. This could include for example if we had increase of phosphorus into a system then mitigation would be required.

Question 4

Phosphorus inputs to Lake Winnipeg are driven by the amount of water flowing across the lake's vast watershed. Monitoring where, when and how phosphorus is entering our waterways is vital to improving the health of the lake.

The most recent publicly available data on phosphorus levels in Lake Winnipeg and its tributaries are from 2007. Since then, Manitoba has experienced two of the worst flooding events in its history.

To make smart water-management decisions, Manitoba needs a collaborative water-quality monitoring program that measures the impact of high-water events such as spring melts, floods and storms, and that draws on expertise throughout the province. Data must be made public so that all Manitobans know what's happening, and what remains to be done.

How will you and your party develop and fund a collaborative, events-based monitoring program? Will you also commit to regular annual public reporting of collected data?

The Green Party will consult with experts like Greg McCullough and other scientist to determine the most cost effective way to monitor water quality for Lake Winnipeg and it commits to annual public reporting of the collective data.

During flooding events water monitoring occurs through various departments and programs (ex. First Nation lands are monitored through Indigenous Affairs and Northern Development Canada and or the Manitoba Emergency Measures Organization), using these established channels we could expand them to monitor flows and nutrients.

Funding this initiative we have several options, one is to use some money from our Green Infrastructure Fund. Alternatively a funding model could be developed on the polluter-pay principle where the costs are assigned to those who contributing to the pollution and have to pay their share (some these include farmers – nitrogen and phosphorous, City of Winnipeg – phosphorus, peat farms – phosphorus and water).

Question 5

Recent media portrayals have led to widespread public perception that Lake Winnipeg cannot recover. Inconsistency in the way solutions are presented has left citizens concerned about what's been accomplished, what's left to do and who's responsible. Independent oversight is necessary to ensure our actions are adding up to real impact.

Though multiple collaborative initiatives and reports have generated hundreds of recommendations over the last decade, no mechanism exists to ensure these recommendations are being followed, or to evaluate the cumulative effectiveness of current efforts.

Establishing an Office of the Environmental Commissioner – as has been done federally and in Ontario – would create a means through which Manitoba's existing programs could be reviewed and aligned, and compliance could be enforced.

Do you and your party support the establishment of an independent Office of the Environmental Commissioner of Manitoba?

Yes, an independent office to oversee progress on environmental challenges/issues in Manitoba is absolutely necessary. The Green Party if elected would move to establish this Office immediately.