

Coalition to Save Lake Winnipeg



Hillside Beach



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Lake Winnipeg has been the calm for many in the storm of the uncertainty of the past years. Manitobans have come to seek refuge and find comfort in the natural beauty of Lake Winnipeg. The interconnection between human and ecosystems health is clear. While attention has been diverted by the pandemic, economic recovery and international security we must continue to ensure governments understand and invest in practices to restore and sustain the health of Lake Winnipeg.

VISION

A HEALTHY AND SUSTAINABLE LAKE WINNIPEG THAT CONTRIBUTES TO THE SOCIAL, ENVIRONMENTAL AND ECONOMIC WELL-BEING OF ALL.

TO ACT AS AN ADVOCATE INFORMING STAKEHOLDERS AND COORDINATING EFFORTS TO SAVE, PROTECT AND MAINTAIN POSITIVE, SUSTAINABLE PRACTICES FOR LAKE WINNIPEG.

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Please share this newsletter

Links available at
[Manitoba Cottage Owners Association](#)

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The CSLW encourages concerned citizens to contact Municipal, Provincial and Federal elected officials and candidates in the upcoming Municipal elections to demonstrate the importance of keeping Lake Winnipeg's health a focus and priority. In collaboration with other allied groups concerned for Lake Winnipeg it has been recognized that individual voices of concern become a "ground swell" to educate and inform elected officials about the critical nature of intergovernmental coordination and funding. Each email and/or phone call supports Lake Winnipeg.

Lake Winnipeg Foundation

Thank you to the Lake Winnipeg Foundation for sharing with us Alexis Kanu's, Executive Director of the Lake Winnipeg Foundation, presentation at the AGM on May 19, 2022. Please find Dr. Kanu's presentation at approximately 13 minutes. <https://www.youtube.com/watch?v=a6kXzjsKj34>

The April 2022 Federal Budget fell 82 million dollars short of the promised 100 million dollars per year allocated for fresh water in Canada. These important funds included restoration for Lake Winnipeg. It would appear that regionally funded initiatives, like the Lake Winnipeg Basin program, will experience delays in funding and uncertainty as the Federal Government moves to centralize water programming to the "Canada Water Agency".

Please visit [LWF News Federal Budget Fails Lake Winnipeg](#) for more information.

Concerned Citizens can contact

[Steven Guilbeault Minister of Environment and Climate Change Canada](#)

[Terry Duguid Parliamentary Secretary to Minister of Environment and Climate Change](#)

North End Water Pollution Control Center

Phosphorus compliance at the North End Water Pollution Control Center continues to violate the environmental license limits. Interim phosphorus reduction has been approved and funded; however, the City of Winnipeg would continue to be in violation at the expected 2.5mg/L of phosphorus emissions. The significant sewage overflow in the recent past along with the continued phosphorus emission violation of the NEWPCC negatively impacts the already uncertain future of Lake Winnipeg. The expected compliance date for 1mg/L emission is January 2031-January 2032. [City of Winnipeg Water and Waste Response to Assessment Options](#) In response to this submission, [Province of Manitoba Response to Water and Waste Submission](#).

It is important to recognize that in 2005 the City of Winnipeg had until 2014 for the completion of the NEWPCC upgrades.

By June 30, 2022 the City of Winnipeg must provide an updated plan to the Province of Manitoba for the upgrades to the North End Water Pollution Control Center. Lake Winnipeg needs phosphorus compliance **now**.

Please note that the implied support ([Nov 24 2021 Province of Manitoba News Release](#)) from the Province for the City of Winnipeg to receive Federal Funding was confirmed [Provinces removal of conditions for federal cash](#)

Concerned Citizens can add their voice by contacting their City Councillor and Minister Jeff Wharton, Environment, Climate and Parks.

[City of Winnipeg City Councillors Contact Information](#)
[Minister Jeff Wharton](#)

Sewage overflow City of Winnipeg

[Winnipeg Free Press](#)

Sewage Overflows in the City of Winnipeg Affect Lake Winnipeg

The City of Winnipeg suffers from a problem common to many major cities, in that a significant proportion of the city is serviced by a combined sewer system. Approximately one third of Winnipeg has single pipe sewers that collect both land drainage (rainwater and snowmelt) and wastewater (sewage from homes and businesses). Winnipeg has 43 combined sewer districts, with 76 run-off points into our rivers. Most of the time these systems work as intended, carrying wastewater and land drainage to the sewage treatment plant where it is treated and then discharged to the river. However, during periods of heavy rainfall or snowmelt, the additional volume of water exceeds system capacity and sends untreated sewage and debris into our rivers. These overflows are called Combined Sewer Overflows or CSO's. On average these CSO's occur 22 times during each year and have a major impact on the local environment and Lake Winnipeg, the ultimate destination of the untreated sewage. They also serve to reduce sewer backup into the basement of homes in combined sewer districts. **CSO's from Winnipeg contribute 0.3 percent of Total Phosphorous and 0.1 percent of Total Nitrogen that enter Lake Winnipeg, as well as spikes in bacteria levels that exceed regulatory guidelines and introduction of floatables and debris.** In years with high snowfall and/or precipitation such as 2022, these overflows occur with exponentially higher frequency and discharge billions of litres of untreated sewage into the environment.

As early as 2003, the City of Winnipeg was put on notice to reduce CSO's into local rivers following hearings and issuance of a report by the Clean Environment Commission. The CEC report recommended that the City of Winnipeg be directed to take *immediate* action to reduce Combined Sewer Overflows and that the work be completed within 25 years. The CEC also recommended that costs be shared by the City, Province and Federal Governments. Based on the CEC recommendations, the Province of Manitoba issued the City a CSO license (EA No. 3042, September 2013) mandating development of a Combined Sewer Overflow Master Plan. The terms and conditions of the license include mandatory use of green technology and innovative practices for storm and wastewater infrastructure, a public education plan, and a public notification system for all discharges from CSO overflow points, to be available on a real time basis.

To this end, the City of Winnipeg has made significant progress by developing a CSO Master Plan that was approved by the Province in November 2019. The CSO implementation plan is designed to meet Control Level 1 set out in the CSO License (EA 3042, 2013) which requires 85 percent CSO volume capture as a long-term control target. For context, the CSO volume capture in 2020 was 75 percent. Timelines for completion of the CSO Master Plan are dependent on funding and range from best case scenario of 2045 (tri-level funding) to 2095 (City only).

For details on the City of Winnipeg CSO Master Plan please refer to their website which includes easy to read and understand information:

<https://winnipeg.ca/waterandwaste/sewage/csoMasterPlan.stm>

Members of the CSLW recently attended a meeting with the Wolseley Residents Association (WRA) to learn more about the impact of CSOs on our rivers and Lake Winnipeg as well as effective mitigation strategies. **Hazel Borys** (Principal and Managing Director, PlaceMakers LLC (US) & PlaceMakers Inc., Canada) was invited to present to the WRA on her experience mitigating combined sewer overflows in other cities. Mitigation options for CSO's fall into two main categories referred to as "Grey Infrastructure" and "Green Infrastructure". Winnipeg's CSO Master Plan incorporates a mix of both and prioritizes Grey Infrastructure options.

Grey Infrastructure includes:

- Sewer separation
- Enhancing capacity of in-line, latent and off-line storage systems (i.e., installation of underground holding tanks, increasing pump station capacity)
- Floatables management by installation of bar screening at discharge points

Green Infrastructure offers environmentally friendly and aesthetically pleasing options for capturing and redirecting excess storm water to relieve the pressure on combined sewer systems. Some of the solutions also offer bio-management by utilizing natural systems such as Constructed Wetlands or Floating Wetlands to reduce pollution in affected waterways.

Green infrastructure includes:

- Installation of rain gardens – shallow, vegetated basins that collect and absorb run-off from rooftops, sidewalks and streets.
- Bio-retention areas – use a bed of sand, soil and plants to filter contaminants and pollutants from stormwater run-off.
- Green Parking Lots – incorporate a mix of permeable paving materials, recycled rubber pavers, tree planting, rain gardens or more extensive bioretention options instead of impermeable concrete or asphalt.
- Planter Boxes – urban rain gardens with vertical walls and open or closed bottoms that collect and absorb run off from sidewalks, parking lots and streets.
- Bioswales – use vegetation, mulch or xeriscaped channels to slow and filter storm water flows along curbs, sidewalks or in parking lots, redirecting stormwater away from the sewers.
- Permeable Pavement – paved surfaces that infiltrate, treat and/or store rainwater where it falls.
- Other techniques to reduce stormwater run-off include installation of green roofs, tree planting and water harvesting (rain barrel systems, other)

What Can YOU Do?

As concerned citizens we also have a valuable role to play. There are simple actions we can all take to reduce CSOs and their effects on our rivers and Lake Winnipeg. For example:

- Ensure all downspouts and sump pumps drain into a rain barrel or an area where the water can be absorbed by the ground, rather than diverted into the sewer system. Reuse it to water gardens and lawns.

- Maximize green space in your yard. Plant trees, shrubs and other vegetation whose roots help absorb excess water.
- Build rain gardens or bioswales in low lying areas.
- Consider installing a structurally sound green roof.
- Use paving stones rather than concrete when hardscaping your yard & driveway.
- Employ “Cottage Rules” during wet weather events by delaying use of laundry machines, dishwashers, showers / baths, and excess flushing of toilets until after the event has passed.
- Dispose of household chemicals and used oil properly by not pouring them down the drain or in storm sewers on the street.
- Pick up your pet waste and dispose of it in the garbage.
- Fix fluid leaks from your vehicles.
- Apply lawn chemicals in a way that minimizes runoff to storm sewers.
- Dispose of prescription and over-the-counter medications by returning them to the pharmacy for proper disposal.

For further ideas on how you can minimize your impact and help protect our waterways, check out this link: <https://winnipeg.ca/waterandwaste/sewage/ProtectingOurWaterways/index.stm>

Additional Resources:

CSO license – 2013: <https://winnipeg.ca/waterandwaste/pdfs/sewage/csoLicense.pdf>

2019 CSO Master Plan (complete document):

<https://www.winnipeg.ca/waterandwaste/pdfs/sewage/2019CSOMasterPlan.pdf>

Combined Sewer Overflows – Annual Results:

<https://winnipeg.ca/waterandwaste/sewage/annualresults/default.stm#tab-results>

2020 Combined Sewer Overflows Annual Report:

<https://winnipeg.ca/waterandwaste/pdfs/sewage/2020CSOAnnualReport.pdf>

Sewer Overflow Information System (in real time):

<https://winnipeg.ca/waterandwaste/sewage/overflow/present.stm>

Zebra Mussels

Zebra Mussels and Phosphorus

CSLW Steering Committee members have had discussions with the DFO directorate responsible for monitoring Aquatic Invasive Species (AIS) including Zebra Mussels (ZM). While research data is limited on Lake Winnipeg at this point, there is an extensive knowledge base from research done on the Great Lakes where both phosphorus overloading and zebra mussels have been considered major issues for decades. When asked about the relationship between phosphorus levels and ZM the response included:

“In general, there is a positive relation between nutrient concentration (phosphorus and nitrogen) and algae growth. Subsequently, there is also positive relation between algae concentrations and Zebra Mussel growth...”

In references to previous series of studies and research from the Great Lakes there are cases that present cause for concern. Specifically:

“Mussels are believed to alter phosphorus cycling and promote the growth of cyanobacteria... ..phosphorus retention in Saginaw Bay increased from approximately 46% of the tributary load in the pre-mussel era to approximately 70% following the mussel invasion...More than 30 years after the initial target phosphorus loads were established, Saginaw Bay continues to experience beach fouling (aka “muck”), and cyanobacterial blooms...”

Reference: Phosphorus targets and eutrophication objectives in Saginaw Bay: A 35-year assessment, Craig A Stow et al, Journal of Great Lakes research, Vol 40 supplement 1, 2014, P4-10. <https://www.sciencedirect.com/science/article/abs/pii/S0380133013001500>

DFO Science in collaboration with the University of Winnipeg has conducted a study to investigate if Freshwater Drum have switched their diet to Zebra Mussel in Lake Winnipeg. First results have shown only limited evidence of Zebra Mussel (*Dreissena polymorpha*) consumption by Freshwater Drum (*Aplodinotus grunniens*) in Lake Winnipeg (Wong et al. 2021). However, anglers have recently reported Freshwater Drum stomachs being filled with Zebra Mussel both in the Red River and Lake Winnipeg.

While ZM may not be as well established in Lake Winnipeg as they are in the Laurentian Great Lakes, they are well on their way. High phosphorous levels are feeding the invasive ZM which then store the phosphorus concentrations and cycle those concentrations through the water body for decades to come. Natural species will not turn the situation around for us all by themselves. Scientific evidence demonstrates this and must serve to raise our collective will and sense of urgency to deal with the phosphorus loads pouring into lake Winnipeg.

The continued high phosphorous that are allowed to continue pouring into the freshwater system of Manitoba, and strengthen the impact of these invasive species, must be turned around. The City of Winnipeg and Province of Manitoba must be called upon to act toward that goal now. Not in 35 years.



Please visit [Stop AIS in Manitoba](#) for updated information regarding stopping the spread of zebra mussels, cleaning your watercraft equipment, transportation, legislation and set fines.

“If you are looking to remove Zebra Mussels from shorelines such as your beachfront property, you must have an Aquatic Invasive Species (AIS) permit. AIS permits are reviewed on a case-by-case basis and may contain unique permit conditions.” [Permit for Removal Information](#)

Bill 22- The Environment Amendment Act – Pesticide Restrictions

The Provincial Government of Manitoba has proposed Bill 22 which is designed to end restrictions on cosmetic pesticides on private lawns, grassy areas near roadways and some municipal fields and parks. The CSLW joined allied organizations expressing concern regarding any changes to the current regulations that could increase the risk to children, general health of citizens and further contaminate runoff into waterways. Bill 22 has been delayed for review in the fall of 2022.

Lake Winnipeg's continues to be negatively impacted by the contribution of phosphorus and nitrogen from wastewater and agricultural run off. Lawn care chemicals run off into waterways, adding to stress on aquatic organisms. In December 2020, the Province of Manitoba published a document recommending the management of nitrogen and phosphorus contribution that negatively impact the health of water. [Prov MB Targets for Phosphorus and Nitrogen Dec 2020](#) In August 2021, the Province of Manitoba in collaboration with the Federal government, committed to protect the waterways to promote the health of Lake Winnipeg. [Province of Manitoba News Release Aug 12 2021](#)

Concerned citizens can contact [Minister Jeff Wharton Environment Climate and Parks](#), [Minister Audrey Gordon Health](#). Concerned citizens can copy their concerns to [Lisa Naylor NDP Environment and Climate Critic](#)

Upcoming Municipal Elections

Municipalities in Manitoba will be holding elections in 2022. The Municipalities of Winnipeg Beach, Dunnotar and Victoria Beach hold their elections on Friday, July 22nd, 2022. All of the other municipalities will hold their election on Wednesday October 26th, 2022.

Non-resident Voters: In order to qualify as a non-resident voter, a person must be:

- A Canadian citizen;
- At least 18 years of age on Election Day; and
- A registered owner of land in the municipality or Local Urban District for at least six months on Election Day.

For more information, please visit [Province of Manitoba Municipal Elections 2022](#) . Advance polling information and mail in ballot information is included in this link. Check your local Rural Municipality website for more information.

CSLW is preparing an additional newsletter that will include questions for candidate.

Provincial Government Ministers Responses to our Questions

No response was received from Minister Eileen Clarke- Municipal Relations and Minister Doyle Pivniuk, Transportation and Infrastructure.

PLEASE NOTE THE FOLLOWING WAS A RESPONSE ON BEHALF OF
MINISTERS Derek Johnson, Agriculture and Minister Jeff Wharton, Environment, Climate and Parks

Minister Derek Johnson – Agriculture
minagr@leg.gov.mb.ca

As the Minister responsible for Municipal Relations how will you ensure that municipalities are provided with the support to ensure compliance with the 1mg/l or less phosphorus emissions from the water treatment plants?

As the Minister responsible for Municipal Relations how will you support municipalities to fund for the collection and safe removal of zebra mussels from the beaches along the shores of Lake Winnipeg?

Minister Jeff Wharton – Environment, Climate and Parks
minecp@leg.gov.mb.ca

As the Ministry responsible for Environment, Climate and Parks how will you monitor and enforce the current environmental goal of reducing and maintaining a 1mg/l or less of phosphorus emission from Municipalities, Agriculture to protect Lake Winnipeg?

As Minister of the Environment, Climate and Parks how will you ensure that developments proposed for processing plants and mining will not contribute to the contamination of the waterways that lead to Lake Winnipeg?

As Minister of the Environment, Climate and Parks how will you work with the Ministry of Agriculture and Environment of Climate Change Canada to tackle the challenges of the zebra mussel invasion in almost all of Manitoba's waterways?

dmcc@leg.gov.mb.ca

Coalition to Save Lake Winnipeg
cslakewinnipeg@gmail.com

March 11, 2022

Dear Coalition to Save Lake Winnipeg:

Thank you for your letters dated January 31, 2022, to Honourable Derek Johnson, Minister of Agriculture, and Honourable Jeff Wharton, Minister of Environment, Climate and Parks, regarding Lake Winnipeg. As Deputy Minister, I have been asked to respond on their behalf.

We recognize the importance of Lake Winnipeg to all Manitobans and the critical role the lake plays in tourism, recreation, commercial and sport fisheries, hydroelectric generation, and as a drinking water source for many Manitobans. As you mention in your letter, algal blooms have become more frequent and intense on Lake Winnipeg due to elevated nutrient concentrations. Actions to improve water quality in Lake Winnipeg are challenging given the many small sources of nutrients across the one million square kilometer basin. More information on Lake Winnipeg and nutrients is available at www.manitoba.ca/lakewinnipeg.

Manitoba has been working to decrease nutrient loading to Lake Winnipeg and its tributaries through legislation, landscape management, incentives, research and monitoring, transboundary work, and education. The government has established strong water protection legislation aimed at reducing nutrients from both point sources and non-point sources. Under the Nutrient Management Regulation and the Livestock Manure and Mortalities Management Regulation, nutrient applications to land are regulated to reduce nutrients in surface runoff. Under the Water Quality Standards, Objectives, and Guidelines Regulation, medium and large wastewater treatment facilities are required to remove phosphorus to 1 mg/L. Compliance is increasing as facilities across the province are upgraded, and Manitoba continues to work with the remaining facilities to achieve compliance, including with the City of Winnipeg at their North and South End Water Pollution Control Centres. In addition, Manitoba is working with the Red River Basin Commission and partners in the United States to train operators to optimize nutrient removal within existing facilities. Finally, Manitoba has enshrined a commitment to no-net-loss of wetlands benefits in The Water Rights Act, in recognition of the benefits wetlands provide, including mitigating floods and drought, improving water quality, supporting wildlife and fish habitat, and sequestering carbon.

Manitoba's 2017 Climate and Green Plan provides a strategic framework to combat and adapt to climate change. Establishing Growing Outcomes in Watersheds (GROW), which provides incentives to farmers to maintain or improve local watershed health, supports the water pillar of this plan. A key outcome of GROW is improved water quality and reduced nutrient loading to surface waters. Manitoba's Watershed Districts are delivering GROW programming in partnership with agricultural producers, with over \$10 million in projects already underway. Other actions to improve water quality and enhance the environmental sustainability of farm operations include the Ag Action Manitoba Program, which provides incentives to agricultural producers to advance the adoption of on-farm beneficial management practices (BMPs), including those that reduce nutrient runoff.

The Manitoba government continues to work with stakeholders to encourage collaboration, facilitate educational opportunities, and advance our knowledge and understanding of the Lake Winnipeg ecosystem and BMPs to reduce nutrient runoff within the Lake Winnipeg basin. For example, the Manitoba Crop Alliance (Extremes of Moisture Initiative) and Living Laboratories Initiative are coordinating research into the science and management of agricultural landscapes in response to climate change. The Manitoba Government, Keystone Agriculture Producers, and Fertilizer Canada are also implementing a 4R Nutrient Stewardship framework for studying and educating agricultural producers on the principles and practices of Right Source of nutrients applied at the Right Rate, at the Right Time, and in the Right Place.

Manitoba's Environment Act outlines the environmental assessment and licensing process for developments in Manitoba that may have potential for significant environmental effects, including to Lake Winnipeg. The process exists to ensure environmental protection, encourage early consultation, allow for full public participation, and ensure economic development occurs in an environmentally responsible manner. Licenses are required for a variety of processing plants and mining activities. More information is available at https://www.manitoba.ca/sd/permits_licenses_approvals/eal/index.html.

Finally, the Manitoba government provides information and guidance to all surface water-users to help them to prevent the introduction and spread of zebra mussels and other aquatic invasive species. More information about the program's five pillars – Legislation; Prevention (including the Watercraft Inspection, Public Engagement and Partnership programs); Monitoring; Early Detection and Rapid Response; and Management and Control – is available at www.manitoba.ca/stopais. Manitoba works with water-users to provide guidance in inspecting their boats to be free of zebra mussels, draining water from their craft, and decontaminating equipment before it travels between lakes and rivers. Aquatic Invasive Species (AIS) program staff in Natural Resources and Northern Development also ensure safe management practices for handling zebra mussels through a permitting process for removal of zebra mussels from beachfronts and other places (required as possession of live or dead zebra mussels is prohibited). Currently, there is no charge to obtain a permit. For more information on safe removal of zebra mussels please contact Laureen Janusz, Fish Habitat Specialist, Natural Resources and Northern Development, at Laureen.Janusz@gov.mb.ca.

Thank you again for your letter and your organisation's continued efforts regarding Lake Winnipeg and the Lake Winnipeg basin.

Sincerely,
Deputy Minister
Jan Forster