At a Glance



Evaluation of the Freshwater Action Plan: Lake Winnipeg Basin Program

About the program

Announced in Budget 2017, the Freshwater Action Plan is a framework to advance Environment and Climate Change Canada's (ECCC) programming to protect and restore freshwater quality in the Great Lakes and the Lake Winnipeg basins. The Freshwater Action Plan includes \$70.5 million in funding between Fiscal Year (FY) 2017 to 2018 to FY 2021 to 2022, with \$25.7 million allocated to the Lake Winnipeg Basin Program and \$44.84 million allocated to the Great Lakes Protection Initiative.

The Lake Winnipeg Basing Program funds projects and activities aimed at reducing excessive nutrients from entering and deteriorating water quality in Lake Winnipeg, and investments in the Program build on 2 previous rounds of ECCC program funding for the basin that was allocated through budgets in FY 2007 to 2008 and FY 2012 to 2013, both for a 5-year period. Activities focused on the following areas: collaborative governance, indigenous engagement and nutrient reduction.

What the evaluation found

The evaluation found that the Lake Winnipeg Basin Program is making progress in achieving intended outcomes in its 3 program areas of collaborative governance, engagement with Indigenous peoples and nutrient reductions.

The presence of formal structures and agreements have helped to clarify relationships among the various water quality governance and stakeholder groups in the basin. Within this context, the evaluation found that the Lake Winnipeg Basin Program has implemented initiatives that enhance and strengthen collaborative efforts across water governance bodies and stakeholders vested in aquatic ecosystem health and to increase understanding of actions implemented by partners across the basin. There remain opportunities to further integrate efforts across departmental mandates (for example, fisheries and agriculture) and to increase linkages between federal and provincial partners involved in ecosystem reporting and indicator development work for Lake Winnipeg.

In terms of nutrient reductions, the Lake Winnipeg Basin Program funding has enabled ECCC's Science and Technology Branch to enhance water quality monitoring and advance science to support decision making about nutrient reduction efforts. Lake Winnipeg Basin Program grants and contributions funding contributes to the Lake Winnipeg Research Consortium, the only mechanism that exists to permit the in-lake science program to continue to gather data to support the development and verification of water quality indicators, via the operation of a





marine vessel called the MV Namao for sampling, monitoring and research. The MV Namao vessel platform is also used by other departments and partners, such as Department of Fisheries and Oceans (DFO) Canada, the Manitoba Government, Manitoba Hydro, and the University of Manitoba to support their various mandates. At the time of the evaluation, there was no cost-sharing agreement in place between the Consortium and its multiple funding partners. While the MV Namao is critical to ECCC's scientific and operational work on Lake Winnipeg, the evaluation found that current ECCC funding is not sufficient to cover the operating costs associated with the department's needs for using the vessel.

Program data indicates that ECCC is on track to meet its program target of reducing nutrient loadings by 44,700 kilograms per year by 2022. Lake Winnipeg Basin projects between 2010 and 2020 have reduced the amount of phosphorus reaching the lake from its watershed by an estimated 213,678 kilograms, or by an estimated 41,656 kilograms per year. To address phosphorus in the Lake Winnipeg Basin, projects have received funding to restore wetlands, build retention ponds, stabilize riverbanks and lake shorelines, and implement management practices to prevent livestock from entering lakes and rivers. Along with the Government of Manitoba and other partners, Environment and Climate Change Canada is supporting nutrient reduction demonstration projects and research, in support of Manitoba's long term-goal of reducing phosphorus concentrations to the lake to pre-1990 levels.

There are multiple partners and stakeholders that are conducting research on Lake Winnipeg. The sharing of data and research results collected by the various partners of the Consortium occurs through a number of channels including publications, data portals and ad-hoc requests. Since there is no formal policy or protocol among partners to share, curate or disseminate the data, there can be challenges with interoperability of systems and accessibility across sources, which was noted during the evaluation.

The evaluation found that there is broad support for the department to identify and target actions in specific areas within the basin that contribute the greatest proportion of nutrients to Lake Winnipeg. This approach was viewed as having benefits in terms of more effective use of resources to target nutrient reduction and improved ability to understand impacts of nutrients on freshwater quality using a small study area. Continued focus is expected to positively support the program's overall objective of nutrient reductions.

Between FY 2017 to 2018 and FY 2019 to 2020, the variance between expenditures and budget was less than 2%. The administrative costs to manage the grants and contributions component of the program was 11.5% of the total grants and contributions budget, which is lower than the administrative costs of 14% calculated in the 2017 evaluation of the previous and comparable Lake Winnipeg Basin Initiative. Grants and contributions project selection was seen as efficient with good leveraging of resources.

The Lake Winnipeg Basin Program has a well-established performance management framework and performance indicators that are used to inform program decision-making and contribute to reporting for the ECCC Water Quality and Ecosystem Partnerships Performance

Information Profile. The evaluation noted a need to increase linkages across various federal and provincial government partners involved in the State of Lake Winnipeg reporting and in the development of Lake Winnipeg indicators.

Finally, the program is making progress on intended outcomes related to engagement of Indigenous peoples. Grants and contributions projects supported capacity building and collaboration as well as the development of foundational relationships between Indigenous and non-Indigenous partners to build on for future initiatives.

Recommendations and management response

The following recommendations are addressed to ECCC's Assistant Deputy Minister of the Strategic Policy Branch, as the senior departmental official responsible for the Lake Winnipeg Basin Program.

Recommendation 1: The Assistant Deputy Minister of the Strategic Policy Branch should work with the Lake Winnipeg Research Consortium (the Consortium) and funding partners to identify options to ensure the continuing operations of the Consortium vessel research platform.

Management response: ECCC will work with Manitoba, other partners, and the Lake Winnipeg Research Consortium to identify options to support the continuing operations including a vessel to service a whole-lake research platform.

Recommendation 2: The Assistant Deputy Minister of the Strategic Policy Branch jointly with the Assistant Deputy Minister of the Science and Technology Branch should continue to identify and target actions in portions of the basin that are considered priority watersheds.

Management response: ECCC will apply a targeted approach in future programming that directs stakeholder-driven actions to focus on those practices known to be effective and in parts of the basin that contribute the greatest portion of nutrients to Lake Winnipeg. Together with partners and stakeholders, ECCC will identify effective beneficial management practices and use scientific information, geospatial and resource data and precision-based decision-support tools to implement a targeted approach for nutrient-reducing actions.

About the Evaluation

The evaluation was conducted during the FY 2020 to 2021, concurrently with an evaluation of the Great Lakes Basin program, which was also funded under the Freshwater Action Plan. The evaluation covered the period from FY 2017 to 2018 to FY 2020 to 2021 and examined the extent to which the Lake Winnipeg Basin Program achieved objectives related to 3 funded program priorities: collaborative governance, Indigenous engagement and nutrient reductions; as well as the extent to which resources have been used efficiently and performance information used to inform decision making.