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**To:** Chair and Members  
Lambton Area Water Supply System Joint Board of Management

**From:** Clinton Harper  
General Manager

**Subject:** Emerging Issues- Plastics

## Recommendation

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That the Emerging Issues- Plastics Report, and its accompanying documentation, **BE RECEIVED** for the information by the Board.

## Background:

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Previously, the Board had asked staff to prepare a letter to the Province of Ontario requesting details on what was being done to address plastics in source water.

## Comments:

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The Ministry of Environment Conservation and Parks prepares a "Minister's Annual Report" that provides an overview of the Province's programs, policies and initiatives to protect drinking water in Ontario. The Report stated the following on the subject of Plastics in drinking water:

*"Concentrations of various size plastics have been found to be particularly high near-shore around densely populated areas in the Great Lakes, and there is increasing public and scientific concern. Plastic pollution (food packaging, cigarette butts, plastic bags and plastic bottles) can break down into "micro-plastics". Micro-plastics are pieces of plastic ranging in size from 100 nanometres (or a tenth of the width of a human hair) to 5 millimetres (length of a red ant). Micro-plastics can come in the form of fragments, microbeads, line/fibres, foam, film and production pellets. In addition to the breakdown of litter, micro-plastics may come from personal care products, clothing fibers and building materials.*

*Monitoring and collaborative research in Lake Ontario and Lake Erie have found a variety of micro-plastics in lakes, streams, wastewater, sand and fish.*

*In 2017 the province began collaborating with academic partners to examine sources of micro-plastics in Lake Simcoe and Lake Ontario to examine how micro-plastics may affect the safety of fish that people eat. We expect to complete the study by 2020 and it*

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*will contribute to better management of micro-plastics in freshwater to protect fish and human health.*

*The ministry is following Health Canada's initiatives on micro-plastics in the environment and will monitor research aimed at methods to analyze micro-plastics in drinking water as well as the effectiveness of treatment methods to remove micro-plastics in drinking water systems. Although the understanding of the human health impacts of exposure to micro-plastics via food and water is in its early stages, the ministry is following the work of agencies such as the World Health Organization and research reports in academic journals aimed at improving our understanding of micro-plastics.*

*Through the environment plan, our government is committed to reduce plastic waste in Ontario. We will work with other provinces, territories and the federal government to develop a plastics strategy to reduce plastic waste and limit micro-plastics that can end up in our lakes and rivers. We will seek federal commitment to implement national standards to address recyclability and labelling for plastic products and packaging, to improve recycling and to reduce costs of recycling in Ontario. We will also work to ensure the Great Lakes and other inland waters are included in national and international agreements, charters and strategies that deal with plastic waste and have implications for Ontario."* (<https://www.ontario.ca/page/ministers-annual-report-drinking-water-2018>)

Attached is the MECP's "A Made-in-Ontario Environment Plan".

Canada's Plastic Science Agenda (CaPSA) is a call to coordinated action on plastics science priorities. It is designed to help all Canadian researchers and research funders understand the key plastics science needs in Canada. CaPSA is a framework that spans the lifecycle of plastics to inform future science and research investments for:

- detecting plastics in the environment
- understanding and mitigating potential impacts on wildlife, human health and the environment
- advancing sustainable plastic production, recycling and recovery
- providing the evidence needed to support decision making as we move toward a zero plastic waste future.

*"The Government of Canada has taken an action-oriented leadership approach to addressing plastic waste and pollution. As part of its 2018 G7 presidency, it spearheaded the Ocean Plastics Charter, which contains commitments and targets aimed at stopping plastic waste and the flow of plastics into the environment. Work on this front is continuing through the G7 and Canada continues to play an active role in advancing international collaborative efforts on plastics.*

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*Domestically, the Government worked with provinces and territories through the Canadian Council of Ministers of the Environment (CCME) to develop the Canada-wide Strategy on Zero Plastic Waste, which Ministers approved in principle in November 2018. The Strategy contains ten results areas that span the lifecycle of plastics, from product design to collection and recycling to clean-up. It also includes a specific focus on effective research and monitoring systems to inform decision making and measure performance.” (<https://www.canada.ca/en/environment-climate-change/services/science-technology/canada-science-plastic-agenda.html>)*

The Canadian Council of Ministers of the Environment’s Current Priorities for Strategy on Zero Plastic Waste is stated as follows:

*“Plastic waste and marine litter have emerged alongside climate change as a global environmental priority. In November 2018 environment ministers agreed to work collectively toward a common goal of zero plastic waste. To this end, they approved in principle a Canada-wide strategy on zero plastic waste, which outlines a vision to keep all plastics in the economy and out of the environment.*

*The Strategy outlines areas where changes are needed across the plastic lifecycle, from design to collection, clean-up and value recovery, and underscores the economic and business opportunities resulting from long-lasting and durable plastics. It is expected to be a driver for innovation and to create opportunities that will increase competitiveness in new business models, product design solutions, and waste prevention and recovery technologies.*

*CCME will develop an action plan that sets out the measures and actions needed to implement the strategy for ministers to consider in 2019. The plan will be developed in collaboration with stakeholders from across the plastics value chain and with a range of other interested parties.”*

In June 2019, Environment Ministers approved the first phase of the Canada-wide Strategy on Zero Plastic Waste. This first phase identifies the government activates that will support the implementation of the strategy. A second phase will follow in 2020 to address the last five key areas of the strategy.

(<https://www.canada.ca/en/services/environment/pollution-waste-management/zero-plastic-waste/canada-action.html>)

Attached is Canada’s Plastic Agenda, the CCME Strategy on Zero Plastic Waste, and the CCME Phase one of the Zero Plastic Waster Strategy.

## Consultation:

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none

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## Financial Implications:

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none

This report was prepared by Clinton Harper, General Manager

Attachment(s): A Made-in-Ontario Environment Plan

Canada's Plastic Science Agenda

CCME- Strategy on Zero Plastic Waste

CCME- Canada-Wide Action Plan on Zero Plastic Waste Phase 1