

# ONTARIO FEDERATION OF ANGLERS & HUNTERS



*Ontario Conservation Centre*

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OFAH FILE: 459

April 27, 2022

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**Subject:** Potential opportunities and approaches to improve municipal wastewater and stormwater management and water conservation in Ontario.

The Ontario Federation of Anglers and Hunters (OFAH) is Ontario's largest, non-profit, fish and wildlife conservation-based organization, representing 100,000 members, subscribers and supporters, and 725 member clubs. We appreciate the opportunity to provide comment on the Ministry of the Environment, Conservation and Parks' (MECP) discussion paper on Municipal Wastewater and Stormwater Management in Ontario as this is a critical first step towards improving the conservation of our water resources. In most instances, we have opted not to respond directly to questions included in the discussion paper. Rather, we raise attention to key areas of concern and specific topics of interest, with an emphasis on fisheries, for you to consider in the development of any potential future policy proposals.

## **Mandatory public reporting**

Clean and abundant freshwater is fundamental to human health, the environment, and the economy. For example, in Ontario, there are approximately 1.4 million licensed anglers who contribute over 2.2 billion dollars annually to the economy and there are many other less tangible, but equally important, benefits from fishing that are woven into the social and cultural fabric of Ontario. The negative effects insufficient wastewater and stormwater treatment has on ecosystems and human health are well documented and partly responsible for, among other things, fish harvesting and consumption restrictions (Government of Canada, 2014).

We must rely on the sound management of wastewater and stormwater to improve the conservation of our fisheries resources and enhance their socio-economic contributions now and into the future. To achieve this, one area that could be strengthened is mandatory public reporting of sewage overflows and bypasses. Permitting either raw or partially treated sewage into our invaluable waterbodies is completely unacceptable; there must be greater transparency and accountability in this regard. In our eyes, the general public is likely unaware of the frequency of occurrences of these events and the consequences of overflows and bypasses. Establishing public reporting requirements and having real-time monitoring of sewage discharges will engage Ontario residents and bring awareness to the costs to human health and the environment, which will ultimately lead to better solutions, more informed decision-making, and action.

Relying solely on guidance material for municipalities on overflows and bypasses will fall short of addressing the problem, and we would be displeased to see reporting requirements focused on "problem areas" and not the entire province. Any amount of discharge of raw or partially treated sewage is a major problem the public should be made aware of and, with population projections in mind, those areas that currently have lower discharge events or volumes will inevitably increase in the future. Also, determining subjective thresholds for what is considered a high number of events or large discharge volumes is impractical. As such, near real-time monitoring/modelling and public reporting of sewage overflows and bypasses should be made a province-wide requirement for municipalities.

Under legislation and written in policy, we would also like to see rules and specific guidance for municipalities for how information on discharge events should be shared and disseminated to the public that include a variety of sources (e.g., social media, email notifications, mail, physical postings, municipal website). MECP should develop a publicly accessible, online hub for overflow and bypass events and associated mapping that could include, for example, discharge volume, date/time, type of discharge (overflow/bypass), warnings/restrictions/advisories, reasoning/explanation, etc. The importance of broadly communicating information in plain, easy-to-understand language cannot be overstated.

### **Better wastewater and stormwater management**

Bringing attention to the dumping of sewage into public waters is key, but Ontario also needs comprehensive environmental protection policies because, without clear direction, management of wastewater and stormwater effluent suffers, and so do our fisheries. The Lake Erie Lakewide Action and Management Plan (2021) identifies discharges from wastewater treatment plants, stormwater runoff, and sewer overflows, as contributing factors towards eutrophication, which can exacerbate issues associated with harmful algal blooms (cyanobacteria) and nuisance benthic algae (Cladophora); moreover, respiration and dying off algae can also result in hypoxic conditions, negatively impacting aquatic life. It is unacceptable that some municipalities do not have a complete inventory of their stormwater management infrastructure or detailed mapping of storm sewer outfalls to waterways. This is a necessary first step in understanding the cumulative effects discharges have on our lakes, rivers, and streams.

The OFAH fully endorses the implementation of green stormwater infrastructure and low impact development; however, without adequate funding, resourcing, and government incentives for municipalities, we are concerned sustainable technologies and other advancements will inevitably be placed on the backburner or not implemented at all. There is a need for performance baselines and thresholds, as well as establishing timelines for bringing outdated facilities into compliance with a framework for the future that prioritizes the conservation of our water resources. There are innumerable facilities across the landscape that are individually or cumulatively causing harmful alteration, disruption or destruction of fish habitat that are going unchecked. Addressing every facility across the landscape would be challenging. Therefore, a more practical approach could involve random auditing and enforcement, coupled with strategies for replacements, retrofits, and other changes. It would be unreasonable to expect municipalities to bring every operational aspect into compliance in one fell swoop; however, fixing a predetermined subset on an annual basis could be a suitable middle ground.

### **Chemicals of emerging concern**

Policies on wastewater and stormwater are decades old and in need of updating that reflect long-standing concerns related to excess nutrients but also address chemicals of emerging concern (CEC). For example, recent research has shown that chemicals used in tire manufacturing processes can be toxic to valuable sportfish species like salmon (Tian et al., 2020), and the presence of similar compounds (i.e., 6PPD-quinone) have been found in urban rivers in the Greater Toronto Area that exceeded the median lethal concentration by 3 to 4 times (Johannessen et al., 2021). Multiple studies have shown the negative effects CEC have on aquatic organisms; thus, we need rules, policies, and methods for addressing these chemicals (e.g., flame retardants, pharmaceuticals, endocrine disrupting substances). Similarly, microplastics are being frequently detected in wastewater treatment facility effluent and combined sewer overflows (ECCC and USEPA, 2021). Plastic pollution threatens fish and wildlife, and their habitats, in a variety of ways and researchers are just beginning to uncover the distribution of the ecological effects and the persistence of these compounds in the environment.

The OFAH urges MECP to develop specific strategies to prevent CEC (including microplastics) from making their way through wastewater and stormwater facilities and infrastructure and into waterbodies. More broadly, MECP needs to update and establish new policies to help municipalities upgrade their wastewater and stormwater facilities and reduce discharge volume and frequency of events. Wastewater infrastructure needs to be optimized by facilitating investments in green infrastructure and new technologies, but we would also like to see additional attention put towards monitoring and assessment of watercourses including algae, hypoxic conditions, nutrient levels, and harmful chemicals.

### **Wastewater reuse and recovery**

The OFAH supports water reuse initiatives in Ontario as this will reduce the volume of wastewater and stormwater entering infrastructure and, consequently, the amount of chemicals, contaminants, and other harmful substances being dumped into waterbodies. We need to move away from negative public perceptions on reclaimed water that interfere with and/or stall progress. MECP should consider developing a regulatory framework or guidelines for water reuse to help ensure the methods and techniques are safe for the public and the environment, and to help alleviate negative public perceptions. Aside from this, we do not want water reuse initiatives to be met with barriers and red tape that prevent environmentally friendly projects from being implemented such as blue roofs and other rainwater and stormwater capturing solutions. One way to encourage water reuse and other water conservation measures in Ontario is to establish green-up infrastructure grants. MECP could also consider creating an online platform for innovative projects and solutions for water reuse technologies for Ontario businesses to consider in their own design and operation. As long as human health and the environment is not put at risk, the province should apply a reduce, reuse, and recycle model to wastewater management including resource recovery from wastewater such as using biosolids as nutrients and fertilizers for agricultural land. However, as previously stated, excess nutrients are a major threat to the health of Ontario's waterways; therefore, this strategy would also require good intergovernmental cooperation between MECP, the Ministry of Northern Development, Mines, Natural Resources and Forestry, the Ministry of Agriculture, Food and Rural Affairs, and federal government agencies, and the implementation of Best Management Practices to ensure environmental risks are reduced to the fullest extent possible.

**Closing remarks**

There is a need to update outdated rules and policies on wastewater and stormwater management in Ontario that will be relevant today and into the future. We want to encourage the use of innovative practices and create funding streams that facilitate solutions related to wastewater and stormwater. Many urban centres will continue to grow, including other regions in Ontario, and in the face of a changing climate, we need infrastructure that is resilient and adaptable in a way that conserves our freshwater resources. Multiple discharges and aggregated impacts of overflows and bypasses over the landscape are undoubtedly having major ecological consequences, as well as negatively impacting people and communities across the province. We are pleased to see MECP working towards progress on this front, but without adequate funding and resourcing for municipalities the rules and policies will be toothless in their implementation. Thank you for considering our feedback. We look forward to further development of any potential future proposals for the management of wastewater and stormwater in Ontario.

Yours in Conservation,



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AW/jb

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