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ALLIANCE**

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By email: Mirek.Tybinkowski@Ontario.ca

Re: ERO-019-4967 – Municipal Wastewater and Stormwater Management in Ontario
Discussion Paper

Dear Sir/Madamme:

The Ontario Rivers Alliance (ORA) is a not-for-profit grassroots organization with a mission to protect, conserve and restore riverine ecosystems all across the province. ORA advocates for effective policy and legislation to ensure that development affecting Ontario rivers is environmentally and socially sustainable.

The Ministry of Environment, Conservation and Parks (MECP) is seeking public feedback on potential policy approaches for a variety of topics related to wastewater and stormwater management and water conservation. The feedback will help inform any potential future policy proposals.

1. Overview of Wastewater and Stormwater

Inflow and infiltration of stormwater into municipal combined or dedicated sewer systems needs high priority attention through a more rigorous focus on disconnecting illegal downspout connections from sewer systems, improved stormwater planning, management, and sewer/manhole maintenance and design.

Municipal wastewater and stormwater reuse is a good idea, if it does not remove water from the watershed and that it is treated before reuse or discharge into the environment.

Treatment of wastewater through inground infiltration and membrane technology should be utilized when appropriate in urban areas, rather than releasing effluent directly into our lakes, creeks, and rivers. The MECP should also lower the phosphorus limits in Ontario rivers and lakes to ensure freshwater health and resilience in a warming climate.

The Discussion Paper notes that under the Ontario Water Resources Act, both wastewater and stormwater are considered “sewage” and all collection, conveyance, treatment and/or



disposal of it are considered “sewage works”. However, it is vitally important that stormwater and wastewater each have dedicated sewer systems in the first place, so they are not combined and funneled through one treatment facility. This is the primary reason for extreme rain events and winter and spring flooding leading to the bypass and overflow of sewage into Ontario lakes and rivers. Stormwater ponds, wetlands and other collection facilities should be used to handle stormwater while allowing wastewater treatment plants to treat sewage efficiently and thoroughly.

2. Reducing Sewage Overflows and Bypasses, and Public Reporting

Background:

The author of this submission has Chaired the Vermilion River Stewardship (VRS) for over 10 years, and for 28 years has lived downstream of 10 wastewater treatment facilities on the Vermilion River, in the District of Greater Sudbury. VRS members swim, fish and play in the river and many have private drinking water intakes drawing directly from the river.

In 2009, Ecojustice released a report indicating that in 2006 and 2007, Greater Sudbury’s sewage treatment plants discharged over 2.6 billion litres of untreated and under-treated sewage into the Vermilion River. That untreated and undertreated sewage flows right past many of our members’ homes on the Vermilion River. In 2014 the VRS worked with a local Councillor, and with unanimous support Sudbury City Council passed the following resolution:

THEREFORE BE IT RESOLVED THAT the City of Greater Sudbury implement a Sewage Action Alert system, based on the City of Kingston’s model, to alert the public and downstream water users in real time of any potential risk to water quality and/or their health and safety;

Staff immediately set to work on a real-time Sewage Bypass Alert system that would notify anyone registered through the City of Sudbury website. Consequently, whenever a bypass or overflow event occurs, registered participants receive a text message from the City’s wastewater staff when they are responding to the incident/s. The text message gives the facility/location of the spill, and the cause if known, i.e., heavy rain, blockage, malfunction, or whatever the case may be, and participants are notified in the same way when the bypass has ended.

1. Yes, it is critically important to the health and safety of the public that municipalities are required to provide monitoring and real-time public reporting of all sewage spills, releases, overflows, and bypasses. This reporting has always been left up to municipalities, until now and, to date, we are only aware of the Cities of Kingston and Sudbury providing real-time public reporting of sewage overflow and bypass events.

The Vermilion River is not unique in having several wastewater treatment facilities releasing treated, undertreated, and untreated sewage effluent into small and large creeks, rivers, and lakes in Ontario.

2. All municipalities should be required to report in real-time on all sewage bypass, overflow, and discharge events – both small and large. Bypass events pollute the waterways and place the public at risk. Real-time public alerts warn stakeholders so they can take the appropriate actions to protect their family’s health and safety.



3. The public should be notified in real-time through their selected choice of communications; however, texts have been very successful in Sudbury. Bypass Alerts are texted out by wastewater staff as they respond to the spill, and these texts go out to a list of registered stakeholders who have signed up on the City's website to receive the Alerts.

The municipal/city website should also contain detailed information about the spill showing the date and time of the bypass, the facility, cause, duration, any treatment details, and the total volume of sewage that was bypassed. Monthly and Annual Reports should also report on the bypass/overflow events, including total volumes and be made available for the public to access without delay, similar to the City of Kingston's model.

3. Changing the Way Stormwater is Managed in Urban Areas

1. Greater municipal adoption of green stormwater infrastructure, low impact development practices on public, private and commercial/industrial property must be mandatory – not just encouraged. With the increasing number, strength, and duration of extreme rain events it must be a requirement to ensure developments include an effective stormwater management plan that has been prepared by an expert and approved by the municipality.

All municipalities should be required to develop a stormwater master plan for each subwatershed and watershed, and all development should comply and fit within the master plan. There should be no more exceptions to developments within a flood plain.

2. Yes, the province should provide a province-wide environmental protection policy and guidance document to provide clear direction on stormwater management to municipalities, developers, planning authorities and others. Conservation Authorities would be well-suited for this policy and guidance, as well as Stormwater Development Applications and Approvals. It should be a requirement for developers to prepare a stormwater management plan that fits within the municipality's watershed and sub-watershed stormwater master plan to prevent flooding and allow stormwater to flow away from hard surfaces towards natural swales, wetlands, and vegetated/treed buffers before entering a stream, river or lake.
3. Yes, there should be mandatory stormwater management design and technology requirements in Ontario. It should be required under environmental protection policy for any new development, or an existing development where there have been issues with stormwater management and flooding.

4. Updating Policies in Management of Wastewater and Quality of Ontario's Water Resources

1. The province should make new policy and regulations requiring municipalities to assess, report, and take meaningful action/s to stop and prevent inflow and infiltration of stormwater into the wastewater treatment system. Inflow and infiltration should be minimized before any new wastewater treatment facility or increased capacity is developed.
2. As for provincial policy replacing federal regulation, the ORA is opposed to that because this provincial government has a very poor track record of making strong environmental protection policy and regulation, let alone monitoring or enforcing it on an efficient or consistent basis. Ministers make exceptions all the time through zoning orders and ministerial discretion, depending on the project and developer. Trust and confidence in the



motivations of this government do not exist, so, no thanks to provincial policy replacing federal regulations.

3. Inflow and infiltration are the major causes for bypasses and overflows and is a major issue in cities all across Ontario. If inflow and infiltration, including disconnection of illegal downspouts from the sewers were resolved in municipalities it would improve water quality on the Great Lakes and their tributaries and save municipalities from having to build additional wastewater capacity and facilities to handle the excessive flows during heavy rain events.

5. Promoting Water Reuse in Ontario

1. Ontario could initiate a Green Points program where people can accumulate points/credits resulting from their green actions, such as using a rain barrel, blue roof, permeable driveway, creating swales, buffers, etc., to reduce their footprint and save on property taxes.
2. The barriers to water reuse technology are insufficient funds, incentives, and a lack of information.
3. The specific operations that would benefit from water conservation and reuse are farming, mining, wastewater treatment, greenhouses, etc...
4. Yes, Ontario should develop a regulatory framework and guidelines for water conservation and reuse.

6. Recovering Resources from Wastewater

If a facility is reusing wastewater resources for heating, energy generation, biosolids, etc., then it is good to refer to the operation as “Water Resource Recovery Facility”; however, if the facility is just releasing the treated effluent into the environment and not taking any other actions, then it would be misleading to refer to it as a WRRF. It would be great to see WRRFs modified to generate as much energy as possible in the treatment process or are net energy producers.

1. Yes, the province should apply a reduce, reuse, and recycle model to wastewater management, as long as the end product is reused in an environmentally responsible and sustainable manner. Recycling of water/wastewater is essential if we are to adapt to a warming climate and ensure our freshwater resources are more resilient to climate change.
2. The province should pass policy or regulations to require municipalities to explore all possibilities for wastewater reuse.
3. The City of Sudbury Wastewater Treatment makes biosolids out of the sewage, and that has worked very well, and the biosolids are used by Vale for greening efforts.
4. For increased uptake of innovative technologies, there should be more stringent limits and requirements, better monitoring and enforcement of Environmental Compliance Approvals, and a requirement for tertiary treatment using membrane technology.

7. Improving the management of Hauled Sewage from Private Septic Systems



1. Under no circumstances should raw sewage ever be applied to the land anywhere in Ontario. All wastewater must be required to go through treatment at a regulated wastewater treatment plant, even if it means the truck has to drive a long distance.
2. All wastewater treatment facilities in Ontario must be mandated to take in untreated hauled sewage for treatment.
3. Source Water Protection only protects public drinking water intakes and wells. Unfortunately, the Clean Water Act, 2006, does not protect the multitude of private drinking water intakes in rivers, lakes and wells that could be contaminated by untreated and undertreated sewage dumping. No untreated or undertreated sewage should be released into the environment. There should be overflow holding ponds to allow for treatment of all sewage. The practice of dumping sewage on the land would be a disaster for Ontario rivers, lakes and aquifers.
4. The province is way overdue for private drinking water intakes to be protected under the Clean Water Act. We all live in a watershed; therefore, spreading untreated sewage on the land will eventually end up running into a creek, stream, river, or lake.

8. Improving Financial Sustainability

1. Perhaps a municipality should first explore its priorities to determine whether their focus should be on growth or on efficiencies and better maintenance of existing infrastructure. Wastewater and stormwater infrastructure should always be maintained as a public utility, rather than privately owned. A municipality must ensure available dollars are spent wisely and efficiently before considering entering into private innovative financing arrangements.
2. The public and corporations pay municipal, provincial and federal taxes which are purported to cover public infrastructure, such as stormwater, wastewater, roads, etc. Perhaps all levels of government should be directing these taxes to the essential services they have committed to instead of non-essential expenditures.
3. Developers should contribute significantly towards stormwater and wastewater facilities to service their homes/subdivisions/developments. Those people purchasing the homes should pay their fair share of services.
4. Yes, small and medium sized municipalities should move towards full cost pricing of wastewater and stormwater phased in over the next 10 to 15 years. Efficiencies should be a priority, as there are numerous wastewater treatment facilities in Ontario that must focus on stopping inflow and infiltration of rain and meltwater before considering expansions, new subdivisions, or new builds.
5. The provincial and federal governments should assist municipalities with grants and allow for integration over an extended timeframe.

9. Improving Public Access to Data on Wastewater and Stormwater Discharges

1. Real-time Sewage Bypass Alerts to warn communities living downstream of wastewater treatment facilities of a spill, bypass, or overflow, would alert stakeholders to whether it may



be unsafe to swim or take drinking water along a lake or river corridor. ORA recommends using the Cities of Kingston and Sudbury Water/Wastewater models of real-time bypass and overflow reporting, as well as an alert system indicating when a bypass/overflow begins, when it ends. Real-time, monthly and annual bypass reports are also made available to the public as indicated previously.

2. It would be an improvement if all wastewater treatment plants were required to have a webpage showing the above real-time data, and a Sewage Bypass/Overflow Alert system where stakeholders can register to receive notice when a bypass occurs and ends. There should also be a central provincial repository for all data that is accessible to the public, as mentioned above.
3. It's unclear who sector partners are; however, it is paramount that we have public transparency and accountability.
4. Communities and individuals already participate in citizen science with the CoCoRaHS Rain Gauge Program, the Lake Partner Program, and local lake and river stewardships taking on water quality sampling and other fisheries and water quality related projects.
5. There must be both individual wastewater and stormwater reporting, as well as central reporting. It is imperative that communities know what is going into the creeks, rivers, and lakes in their community. The data/information reported to the MECP could also be integrated into a central repository where stakeholders could access key data for any wastewater plant in Ontario.

10. Making it Easier to Follow the Rules

1. The province should not be streamlining reporting requirements. Wastewater and stormwater management are vitally important to the health and resilience of our freshwater resources and to the people of Ontario. There are numerous complex and site specific considerations for each and every outfall of sewage effluent that is unique to the area and the water body. We cannot continue to release partially treated or untreated sewage into our lakes and rivers. We must stop thinking about how we can make it easier and start thinking about how we can make wastewater treatment more efficient and effective so we can build resilience into our lakes and rivers to help prepare for a warming climate.
2. The only way you can make achieving compliance easier is to loosen the rules, and that would be a disaster. Instead, the government should be thinking about how we can make the rules more rigorous to protect the environment.
3. Measuring the health of downstream lakes and rivers, and ultimately the Great Lakes, is the best province-wide performance measurements to ensure effective management of wastewater and stormwater assets.

It is imperative that the MECP follow its vision, mandate, and business by ensuring *an Ontario with clean and safe air, land and water that contributes to healthy communities, ecological protection, and environmentally sustainable development for present and future generations.*

Thank you for this opportunity to comment!



Respectfully,

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