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**RE: Conservation Ontario's Comments on the "Municipal Wastewater and Stormwater Management in Ontario Discussion Paper" (ERO# 019-4967)**

Thank you for the opportunity to provide comments on the "Municipal Wastewater and Stormwater Management in Ontario Discussion Paper". Conservation Ontario (CO) is the network of Ontario's 36 conservation authorities (CAs). Comments shared through this consultation are not intended to limit comments received directly from CAs.

Conservation Ontario greatly appreciates the opportunity to provide critical feedback on the Municipal Wastewater and Stormwater Management in Ontario Discussion Paper ("Discussion Paper"), in order to include the conservation authorities' practical considerations. As local watershed management agencies and service delivery partners, Conservation Authorities (CAs) bring important perspectives to the discussion on stormwater and municipal wastewater management and water conservation in Ontario. The comments and perspectives in this response are generally provided through the lens of CAs' delivery of mandatory programs and services related to the identification and management of natural hazards, source protection, and the development of watershed-based resource management strategies. As local delivery agents, CAs maintain a wealth knowledge through watershed-based research and monitoring on the impacts of urban development and climate change experienced by watersheds across the Province. The following comments have been organized to respond to the various sections of the Discussion Paper, including providing responses to the individual discussion questions.

### **Section 1** **Overview of Wastewater and Stormwater**

The overview captures climate change considerations adequately and Conservation Ontario was pleased to see the inclusion of climate change considerations in this discussion paper.

The overview section of the Discussion Paper identifies key definitions and descriptions of terms used throughout the document. Conservation Ontario offers the following recommendations to expand the definitions and descriptions used throughout this document:

- **Green Infrastructure:** While Conservation Ontario is pleased to see acknowledgements to Green Infrastructure (GI) in the Discussion Paper, it is noted that no definition is included, and the text regarding the aims of GI appears limited as compared to the definition provided in the *Low Impact Development Stormwater Management Guidance Manual* (ERO#019-4971). Given the relationship between these two proposals, it is recommended that the definition for Green Infrastructure from the LID Guidance Manual be incorporated into future guidance and policy for municipal wastewater and stormwater management.
- **Municipal Stormwater Infrastructure:** This section includes a more traditional definition of municipal stormwater infrastructure, however, it is recommended that reference to this infrastructure be expanded to include other elements such as curbs and gutters, catch basins and manholes, ditches, swales, engineered flow channels, as well as the travelled portion of most rights-of-way, which often functions as the “major flow system”. Additionally, it is noted that this description is largely focused on urban areas, and should be expanded to include context for stormwater infrastructure in rural areas.

## **Section Two**

### **Reducing Sewage Overflows and Bypasses, and Public Reporting**

- i) Should municipalities be required (e.g., through a regulation) to provide near real-time monitoring/modelling and public reporting of sewage overflows and bypasses, or should the decision be left to individual municipalities based on guidance material that would be developed by Ontario?**

Conservation Ontario notes that municipalities are currently required to report any unusual operating condition, such as an overflow or bypass, immediately to the Spills Action Centre as a condition of their Environmental Compliance Approval or under Part X of the *Environmental Protection Act (EPA)*. The discussion paper mentions that the Spills Action Centre has piloted a web-based platform for bypass and overflow reporting. Given this pilot program, the Ministry of the Environment, Conservation and Parks (MECP) may be in a position to collect bypass and overflow information in real-time, which may represent an opportunity for a centralized, provincially led initiative to provide near real-time information to the public, rather than duplicating reporting efforts and pushing the responsibility for public reporting back onto the municipalities.

While there is a desire for municipalities to provide near real-time monitoring/modelling and public reporting of sewage overflows and bypasses, it is recognized that the size of municipality, potential impact on receiving water and financial responsibilities associated with a such a program will impact a municipalities’ ability to provide real-time reporting. Should the Province consider a regulation, these implementation and capacity barriers must be considered.

Furthermore, it is suggested that the use of any low impact development practice to return groundwater recharge and baseflow in water courses to the original/ predevelopment conditions include recommendations for infill and brownfield sites. This is an important consideration in areas of rapid development and increasing imperviousness.

- ii) **If it is to be a requirement, should it be province-wide or focused on problem areas (e.g., those areas with many sewage overflow and bypass events or high discharge volumes)?**

While province-wide provision of near real-time monitoring/modelling and public reporting of sewage overflows and bypasses would create consistency amongst municipalities and provide a common ground for sharing of resources and best practices, it is recommended that resources be directed to “problem areas” as a priority, with the opportunity to expand in the future, as necessary. However, given the potential impacts to health, infrastructure, and local communities, it is recommended that municipalities continue to report all unusual by-pass and overflow events to the Spills Action Centre.

- iii) **What information should be reported to the public by municipalities when a sewage overflow or bypass occurs, how quickly would you want to know, and how should this information be made publicly available?**

To avoid risks to public health, timely messaging to inform the public should be considered and occur during or shortly after the by-pass or overflow. Information could include: time, location, estimate discharge volume and duration, potential health risks, any mitigation measures to address any heightened concern (avoid area, do not swim, etc.) and the level of treatment achieved (if any). The messages may be posted on municipal websites and notices could be made on local media (e.g., radio, online news outlets, social media, etc.). Where notices are issued, the information should be clear and easy to understand for the public. Wherever possible, municipalities should be encouraged to share resources and build upon existing municipal models which provide public access to by-pass and overflow events.

### **Section 3** **Changing the Way Stormwater is Managed in Urban Areas**

Conservation authorities hold a range of expertise related to watershed management and are on the frontline of both the promotion and implementation of proper stormwater management in the province. As such, they are valuable partners with practical expertise reflected in the development of a number of green stormwater infrastructure / low impact development programs such as the Sustainable Technology Evaluation Program (<https://sustainabletechnologies.ca/>) created by the Toronto & Region (TRCA), Credit Valley (CVC) and Lake Simcoe Region (LSRCA) Conservation Authorities. Where possible, the province and municipalities are encouraged to leverage this expertise to assist with innovative and sustainable stormwater management.

- i) **How can greater municipal adoption of green stormwater infrastructure/low impact development practices on public, private and commercial/industrial property be encouraged?**

Greater adoption of green stormwater infrastructure/low impact development (GI/LID) practices on private and commercial/industrial property could be encouraged through funding for technical support and implementation incentives for programs that encourage energy retrofits (energy audit followed by cost-share funding to implement audit recommendations). Credit Valley Conservation’s (CVC) Greening

Corporate Grounds Program (<https://cvc.ca/greening-corporate-grounds/>) is a positive example of an existing program model.

Furthermore, stronger policies requiring the adoption of GI/LID, tax credits or discounts on utility costs for the installation of GI/LID, retrofit assistance programs (assistance for analysis, construction costs), and streamlining the approvals process (ECA / municipal permitting) should all be considered. It would be helpful to incorporate stronger direction regarding the use of GI/LID into the Provincial Policy Statement with clear definitions and criteria.

### **Current challenges/ barriers for adoption**

The lack of municipal funding to monitor and maintain stormwater management services is a significant issue and barrier to acceptance and implementation of LID measures on public land. Adequate funding is required for public sector institutions to monitor conditions and maintain these facilities to ensure continued efficacy and identify improvements and best management practices. Without the appropriate capacity for monitoring and maintenance, public sector institutions may be hesitant to implement more GI/LID stormwater management devices.

A solution-based resource, The Region of Durham [Towards Resilience Community Adaptation Plan \(2016\)](#) identified LID techniques and the need for monitoring and rehabilitation for existing stormwater systems as a key component of the climate adaptation plan. As a potential solution it also recommends development of a Stormwater Management (SWM) Fee and Credit system to fund monitoring and maintenance of municipal SWM services, and the inclusion of climate change factors for the design of SWM works. It is important to note that while this resource may be applicable in some circumstances, the approach may not be feasible for all municipalities in Ontario.

### **Economic SWM Optimization Strategies**

To promote greater municipal adoption, cross-jurisdictional sharing of capital and operations and maintenance (O&M) stormwater management (SWM) costs between municipalities along with private landowners to address greater urban catchment area objectives (e.g., flood reduction, water quality parameter(s) of concern reduction, incl. Phosphorus) are recommended (see, [A New Way to Manage Stormwater](#) from the Lake Simcoe Region Conservation Authority for more details on such an approach).

Using the *Drainage Act* would also provide ample room for local knowledge, context, and priorities to be incorporated within green, low impact drainage infrastructure designs. The benefit of utilizing this Act to support more GI including LID implementation is that drainage features designed and constructed using the Act are protected, with appropriate recourse in instances where contraventions occur, protecting GI/LID in retrofit scenarios. It would provide right-of-access to presiding municipalities for inspecting and maintaining drainage infrastructure on private property.

### **Better appreciation of O&M costs for both GI/LID and conventional SWM**

The 'heightened costs' for O&M related to appropriate upkeep of GI/LID has been a common barrier identified by municipalities. A more comprehensive and accurate economic study to demonstrate true cost comparisons for O&M between GI/LID and conventional SWM would help address this barrier. These efforts may also support more insight and recommendations to share with municipalities to

support more holistic O&M approaches, and improve SWM program efficiencies resulting in cost savings.

**ii) Should there be a comprehensive and province-wide environmental protection policy or guidance document to provide clear direction on stormwater management to municipalities, developers, planning authorities and others? What should be included?**

It is recommended that comprehensive and detailed implementation guidance for the Provincial Policy Statement, 2020 (PPS, 2020) be provided with respect to all of the water management policy directions. This should include detailed guidance for each of the following:

- maintaining linkages and related functions among ground water features, hydrologic functions, natural heritage features and areas, and surface water features including shoreline areas;
- implementing necessary restrictions on development and site alteration to:
  - protect all municipal drinking water supplies and designated vulnerable areas; and
  - protect, improve, or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions;
- planning for efficient and sustainable use of water resources, through practices for water conservation and sustaining water quality;
- ensuring consideration of environmental lake capacity, where applicable; and,
- ensuring stormwater management practices minimize stormwater volumes and contaminant loads and maintain or increase the extent of vegetative and pervious surfaces.

The comprehensive policy approach would help all parties (municipalities, developers, planning authorities, and others) to follow a standardized guide on design, maintenance, and inspection.

Finally, while it may not be written in a “comprehensive environmental protection policy”, some guidance currently exists from the province, namely the *Stormwater Planning and Design Manual (2003)* and applies within the ECA process. It is suggested that this resource guide be updated to better incorporate required targets for water quantity and quality (linking to the Provincial Water Quality Objective or other water quality standards, thresholds, guidelines) and to require LID/GI where feasible.

Incorporating a checklist as a tool in the updated guidance would assist in ensuring that all requirements are adequately addressed.

Finally, it is recommended that the Province endorse a commitment to review the guidance / policy every 10 years to be sure that there is alignment with updated technology and science and other related provincial policies.

**iii) Should there be mandatory stormwater management design or technology requirements in Ontario? If so, how can that be phased in for new development and existing development areas?**

With an increasing population and subsequent urbanization there is additional pressure placed on the environment, resulting in the need for effective stormwater management. Mandating the

implementation of LIDs/GI in new and existing developments where appropriate could ease some of the environmental pressures.

The incorporation of new comprehensive methods managing stormwater should be mandatory, while implementation should retain a certain degree of flexibility based on the project scale, existing natural conditions, and community requirements. There is the opportunity to use / develop standardized stormwater management online tools and software.

For new developments, stormwater management requirements could be site specific and focus on enhancing existing natural features rather than removing it from the overall stormwater management strategy. For existing development areas, the focus could be on implementing LID/stormwater management in areas that lack any green infrastructure or need upgrading. Grants could help implement features on privately owned developments.

The updated SWM criteria established by the Greater Toronto Area conservation authorities (LSRCA, CVC, TRCA), focus on runoff volume reduction, both suspended solids and phosphorus reduction, and should be considered as consistent requirements. Engaging all relevant and interested agencies at the consultation phase will allow for clear expectations and communication around the proposed stormwater management techniques and methods. Proponents would be responsible to demonstrate, through site investigation/analysis, the feasibility of volume control on the site. Once a mandatory requirement is in place, any new development proposals (applications) would have to meet the new requirements.

#### **Section 4**

### **Updating Policies Related to the Management of Wastewater and the Quality of Ontario's Water Resources**

#### **i) What feedback do you have for the potential policy updates and new policies identified above?**

Conservation Ontario is generally supportive of the potential policy updates and the new policies identified in the discussion paper. Wherever possible, new and updated policies must maintain a certain degree of flexibility to allow for consideration of local / watershed context, issues and needs.

There is support of the proposed approach to update guidelines for industrial contaminants that municipal wastewater treatment plants are not capable to remove to appropriate levels for assimilative capacity within the receiving water. It is recommended that the proposed approach align any updates with existing policies that continue to be relevant and effective, such as the document *Improving efforts in support of Water Management*, July 1994 'Blue Book' Policy 4 "*Ensure that special measures are taken on a case-by-case basis to minimize the release of hazardous substances that have not been banned.*"

Furthermore, it is also recommended to maintain the 'Blue Book' Policy 5. Mixing zones should be as small as possible and not interfere with beneficial uses aligning with the original policy. For example, mixing zones are not to be used as an alternative to reasonable and practical treatment is updated to incorporate more specifics on source water considerations.

Additionally, CAs are supportive of policy updates which would include more stringent phosphorus limits for wastewater discharges, as well as the proposed requirement to eliminate chlorine from municipal wastewater effluent in a new Ontario regulation for municipal wastewater systems. Policies to include more stringent phosphorus limits could be applied in many watersheds across Ontario, and the elimination of chlorine would result in overall benefits to aquatic health.

Lastly, when assessing potential policy updates and/or new policies, it is recommended that the parameters within the Water Quality Objectives be reviewed and updated as required. Interim values could be reassessed and updated, and additional parameters could be added (based on current and emerging concerns). Any updated policies should direct users to other guidelines, threshold, limits, used in Canada if there is not sufficient data within Ontario.

## **ii) What additional issues should be addressed in the updated or new policies?**

The process of updating or developing new policies could include the following to address existing and emergent issues:

- Consideration of cumulative impacts for multiple wastewater discharges in a single area;
- Investing in research to improve wastewater treatment methods to better address pharmaceuticals and other “non-traditional” waste products;
- Limiting chloride and/or related salts in water systems; and,
- Preventing degeneration of dissolved oxygen in lakes.

Furthermore, it is recommended that the Province consider stricter regulations regarding the discharge of wastewater in a vulnerable area for a municipal drinking water supply.

## **Section 5** **Promoting Water Reuse in Ontario**

### **i) How can the province encourage water reuse and other water conservation measures in Ontario?**

Given the multiple proponents and sectors involved in water conservation and reuse, it is recommended the Province explore multiple avenues to encourage, incentivize, and where possible, require water reuse and conservation measures in Ontario. As such, we offer the following suggestions:

- 1) **Updates to the Ontario Building Code and Supplemental Guidance:** The Province is encouraged to explore incorporating water reuse and other conservation measures into the Ontario Building Code as a requirement (rather than standards) to facilitate the infrastructure required for reuse (e.g., capture roof runoff, cisterns for in home use or lawns, etc.).

Further, the development of guidelines and best management practices around water reuse, including environmental considerations (i.e., only reuse ‘excess’ water and ensure environmental flows continue to creeks and rivers), would be helpful. These guidelines should be developed for a wide range of audiences

- 2) **Increasing Education and Outreach:** To ensure that information on water reuse and conservation measures is distributed widely throughout Ontario, the Province is encouraged to

increase education and public outreach activities. This outreach should be targeted at a wide array of audiences, and highlight simple actions that can be undertaken by the public with minimal costs at the single-property level. As an example, the Province could consider providing information about the required water quality for different uses and comparing this with water reuse quality to demonstrate appropriate means of reusing this resource. Many conservation authorities offer various workshops to residents and businesses promoting sustainable rainwater conservation practices. The Province is encouraged to leverage the information provided in these workshops as appropriate.

- 3) **Financial Incentives:** Lastly, the Province should consider financial incentives such as cost sharing programs, tax breaks, provincial grants for reuse project implementation, or discounts on utilities for landowners and businesses to promote water reuse and conservation. There are many examples of municipally led initiatives (such as the flexible property tax system model (taxation policy) developed by the City of Kitchener) which could be further explored for implementation ideas.

**ii) What are the obstacles that prevent your business from using water reuse technology in your operations?**

Overall, conservation authorities cited the capital, operating and maintenance costs and lack of financial incentives as key obstacles which prevent the implementation of water reuse technology.

Another obstacle is a lack of local practical examples to learn from, share resources and adopt best practices. To address this, the Province is encouraged to invest in pilot studies and demonstration sites, while jointly providing associated funding opportunities to implement this technology.

Finally, there is a need for water reuse technology design standards that are supported by regulatory authorities. This could be achieved through the development of a multi-disciplinary best management practices.

**iii) Are there specific operations, facilities or sectors which may benefit from water conservation/water reuse?**

While the benefits of water conservation and reuse would be visible across a wide range of sectors, Conservation Ontario supports the approach of investigating potential operations that may benefit from water reuse and conservation. When assessing specific sectors, considerations should include: water usage type and appropriate water quality parameters, and standard drawings and design for water reuse infrastructure.

Though many sectors and facilities will benefit from these actions, Conservation Ontario suggests that initial areas of focus could include: Commercial, Industrial or Institutional Buildings (specifically flat-roofed buildings), high-density residential buildings, and recreational facilities.

**iv) Should Ontario develop a regulatory framework or guidelines for water reuse?**

A provincial regulation or guidelines can be helpful to outline requirements for water harvesting and conservation for multiple sectors and stakeholders, and given increasing population growth and impacts of climate change, may reduce stress on Ontario's water resources. Such a regulation or guidelines



would also be beneficial in promoting a consistent approach across the province. Should the Province move forward with a regulatory framework or guidelines, it is recommended sufficient flexibility be built into these frameworks to allow water users to implement reuse and conservation actions which are appropriate for their local context.

## **Section Six**

### **Recovering Resources from Wastewater**

**i) Should the Province apply a reduce, reuse, and recycle model to wastewater management?**

Conservation Ontario supports the Province applying a “reduce, reuse, recycle” model to wastewater management in Ontario to take advantage of wastewater resources, reduce waste, and ultimately, reduce impacts on the natural and human environment.

**ii) How could the province encourage resource recovery at a centralized system such as a wastewater treatment plant, or at the source?**

The Province could have a leading role to incentivize research and development and/or implementation of resource recovery. The recovery of nutrients and biogas or other materials could be beneficial for the province, municipalities, and industry. Further research and innovation, including pilot studies would help with resource recovery reuse. Additionally, the Province should consider a role in education and promotion of benefits to encourage resource recovery, such as reducing erosion in receiving waterways, emphasizing the benefits of reuse, and energy resources which could be extracted through the resource recovery process.

**iii) Do you see challenges to recovering resources from wastewater, and are there potential solutions?**

One of the primary challenges to recovering resources from wastewater is the initial capital costs to acquire necessary land and infrastructure needed to effectively recover resources. To combat reluctance, jurisdictional scans could be completed which document the long-term cost benefits / recovery of implementing these processes and infrastructure investments. This research should be appropriately communicated to municipalities to assist with budgeting and identification of near- and long-term infrastructure needs.

Additionally, contaminants among wastewater are a concern as legacy and emerging contaminants may pose risk and obstacles for the recovery of resources from wastewater (e.g., pharmaceutical, microplastics, polymers, etc.). In addition, creating or identifying markets for recovered resources may be difficult and may require additional outreach.

**iv) What do you think could be done to help increase uptake of innovative technologies and practices for resource recovery?**

There are several actions that could be carried out to help increase the uptake of innovative technologies and practices for resource recovery, which range from developing a regulatory framework to financial investments in the implementation of innovative technologies and developing benefit programs.

As a first step, the Province is encouraged to support more pilot projects, demonstration /education sites, and effectively promoting the outcomes of pilots and the benefits of innovative technologies and practices to municipalities.

Lastly, from a business development standpoint, expanding the market for recovered resources to other industries (e.g., reuse biosolids for remediation and restoration of degraded areas) would help increase the uptake of innovative technologies and practices for resource recovery.

## **Section 7**

### **Improving the Management of Hauled Sewage from Private Septic System**

**i) What are the potential benefits and/or challenges, including cost and environmental considerations, of the options identified in this section?**

The considerations proposed by the Province must include the practical perspective that rural communities need an affordable way to empty their septic tanks. An identified challenge with hauled sewage is that this practice is commonly associated with rural or sparsely populated areas. In these areas, the nearest wastewater treatment plant may be located in a small community and the plant may have limited capacity to deal with these types of wastes. If not handled correctly, hauled sewage can have detrimental impacts on wastewater plant performance and the quality of the final effluent.

Treating hauled wastes in a small wastewater treatment plant will consume plant capacity that would otherwise be reserved for residential or commercial growth in the community. The proposed geographical based local ban based on the local municipal wastewater treatment plant capacity could be a potential solution to this challenge.

The benefits of hauled sewage from septic systems to wastewater treatment plants means that the septage can be properly treated including more difficult compounds. Available funding could be made available to municipalities to upgrade their wastewater treatment plant to increase capacity.

In terms of updating guidelines for treatment, land application and trench disposal and untreated hauled sewage (no bans), upholding stringent protection of drinking water sources and negative impacts to ecological integrity should be priority considerations in any discussions.

Finally, education and outreach for new residents owning septic systems will help improve the understanding of the septic system and process of hauling sewage. During the pandemic there was a shift of urban residents moving to rural areas which do not have the same services complement as urban areas.

**ii) Are there other options or changes to the approaches to managing hauled sewage that could be considered?**

In areas where there isn't capacity at sewage treatment plants the province could partner with municipalities to develop centralized dedicated facilities for septage treatment, where needed. These could be designed with energy and nutrient recovery systems to make them profitable.

In addition, funding could be made available to municipalities to upgrade their wastewater treatment plant to increase capacity.

## **Section 8**

### **Improving Financial Sustainability**

**i) Are there any barriers to utilizing innovative financing approaches?**

A significant barrier to utilizing innovative funding approaches is agreement between parties on how to appropriately cost-share responsibilities in a fair, equitable, and agreeable manner when sharing infrastructure capital and operation and management costs.

**ii) Are there other innovative financial approaches for wastewater and stormwater management, including water reuse that could be considered?**

As previously mentioned, the Province and municipalities should look to incentivize individual homeowners to implement water reuse and conservation actions. For example, municipalities could consider reducing a homeowner or business' contribution to municipal stormwater charges (if applicable) if LID, water reuse, or filtration mitigation measures are implemented directly on the property.

**iii) What opportunities are there for encouraging economies-of-scale for wastewater and stormwater?**

The 'heightened costs' for operations and maintenance related to appropriate upkeep of GI/LID has been one challenge or barrier identified by municipalities. A more comprehensive and accurate economic study to demonstrate true cost comparisons for operations and maintenance between GI/LID and conventional SWM would help address this barrier some municipalities still have.

These efforts may also support more insight and recommendations to share with municipalities to support more holistic operations and maintenance approaches, and improve SWM program efficiencies resulting in cost savings.

See previous Economic SWM Optimization Strategies as listed in question 3(i).

**iv) How can municipalities improve their wastewater and stormwater management cost recovery? Should full cost recovery or life cycle costing be mandatory for municipalities?**

Full cost recovery should be implemented for municipalities. Recommendations include a phased approach, via pilots experimenting within the new Consolidated Linear Infrastructure (CLI) ECA SWM framework for a feasible, paced roll-out over the next decade and beyond. Furthermore, it is recommended that municipalities maximize opportunities for sediment reuse applications through new CLI ECA SWM residual re-use considerations.

Lastly, to improve operations and maintenance for SWM, it is recommended that municipalities identify immediate / near-term opportunities for maintenance to extend service life and overall functionality of features (e.g., bottom draw inspections and clean-outs at appropriate time for wet features).

**v) With the goal of achieving full cost recovery for wastewater and stormwater services, what specific actions can different levels of government take to encourage, or better support municipalities to adopt innovative approaches to financing these services?**

To achieve the goal of full cost recovery, it is recommended that funding partnerships be developed between multiple levels of government (municipal, provincial, and federal) given the shared responsibility of protecting water resources.

Other actions that can better support municipalities to adopt approaches to financing these services include providing more guidance and flexibility for the residual management system to allow temporary storage of sediment and/or other rehabilitated materials until repurposing opportunities are identified. Certain conditions for the temporary storage would have to be met, potentially using waste transfer sites as model for adoption / further adaptation. Additionally, it would be beneficial to have greater acceptance of sediment cleaned out of SWM features which could be re-applied for various capital projects and agricultural scenarios, while still considering application sediment quality guidelines.

### **Section 9**

#### **Improving Public Access to Data on Wastewater and Stormwater Discharges, and the Quality of Ontario's Waters**

**i) What wastewater and stormwater data would support you and/or your organization's decision making, and how would it be used?**

The conservation authorities require wastewater and stormwater data to assess impacts on aquatic biota and other beneficial uses of water bodies. The data are used in watershed water quality simulations for deciding appropriate best management practices. Data that could benefit conservation authorities include:

- **Wastewater:** ECA, bypass event type and start and stop time, quality of receiving water during and after a bypass event and the bypass report that is submitted to MECP
- **Stormwater:** Quality of receiving water during and after a storm event

With support from Ontario (MECP), the Grand River Conservation Authority (GRCA) currently collects wastewater data directly from local municipalities through our Watershed-wide Wastewater Optimization Program. The municipalities provide data voluntarily using a spreadsheet template. Performance data is then compiled into an annual report which is used to demonstrate progress toward reducing phosphorus and ammonia loadings to the Grand River. This is a good model that could be considered to share wastewater and stormwater data in other areas of the province.

**ii) How can public access to wastewater, stormwater and water quality-related data be improved?**

Posting the data at locations that are intuitive (e.g., municipal or MECP's websites) to the public would promote easy access for the public. Conservation authorities could help direct public traffic to the applicable webpages. Successful models that are already available for water quality data from partner organizations should be considered (for example conservation authority websites).

**iii) What role could sector partners contribute to improving public transparency of wastewater and stormwater data?**

Municipal partners could provide annual reporting of stormwater management operation and maintenance activities and showing if the status has improved, deteriorated, or stayed same.

Posting datasets for public consumption without providing any context or interpretation should be considered from a communication perspective.

**iv) What role could community science play in the collection and/or reporting of wastewater and stormwater data?**

Wastewater data is very controlled by the municipalities; however, community scientists could do visual inspections/ monitoring of wastewater/stormwater discharge outlets for blockages or anomalies.

Community science could play a role in monitoring / reporting across a broader, landscape scale to help collect data to assess system-wide, cumulative impacts. The Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) system of community-based weather observers across Canada are a good example of a long-term community science program.

With training, some field monitoring for stormwater related parameters (e.g., flow, temperature, turbidity, and possibly even more defined water quality parameters) can be implemented through community science. There are many successful examples of community science water-based projects.

**v) How could all data on wastewater and stormwater discharges and water quality generated within Ontario by various entities be consolidated and made publicly available? Should there be an independent body charged with managing this data, and who could that be?**

The Province can and should play a role in the collaborative setting of standards for the collection and storage of wastewater and stormwater data, but then the data should be published by the organization that collected it - in an open, machine-readable format. For example, if a municipality collects the wastewater and stormwater data, they would use the Provincial standard data format and make it available via open data to the public. The open, standardized data format allows the Province (or anyone else) to compile the data and pull it together based on whatever geography is of interest.

## **Section 10**

### **Making it Easier to Follow the Rules**

There is support for streamlining approvals and removing unnecessary review / approval at provincial level, particularly for aspects that add little value to the goal of minimizing impacts on the receiving environment. There is support of amalgamating ECAs where a single entity owns / operates numerous facilities, with limited provincial periodic review as noted above.

Complying and adhering to the requirements of the ECA could be achieved by making monitoring and reporting as easy as possible, but when compliance with targets is not being achieved oversight and enforcement should be enhanced.

**i) What else can the Province do to streamline reporting requirements?**

To streamline reporting requirements, the Province could consider implementing an on-line portal (similar to the PTTW annual reporting), where updated data/report criteria could be shared from a municipal database.

Additionally, it may be beneficial for the province to set general expectations for municipalities to organize their inventory, with a defined expectations of how annual changes to the SWM collection system, O&M activities, and periodic monitoring updates are to be communicated within the on-line portal / municipal database.

Once again, thank you for the opportunity to provide comments on this proposal. Should you have any questions about this letter, please contact Deborah Balika at extension 225 or Nicholas Fischer at extension 229.

Sincerely,



Deborah Balika  
Source Water Protection Manager



Nicholas Fischer  
Policy and Planning Coordinator

c.c: All CA CAOs/GMs