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Dear Mr. Gupta,

**Re: Proposal for Innovative Options for Providing Stormwater Infrastructure and Services**

We, the undersigned, are supportive of establishing an independent stormwater rate, and doing so through a stormwater utility in Toronto, but it must be designed within a larger stormwater management framework that aims to improve water quality through innovative and comprehensive approaches to stormwater. Stormwater is rain and melted snow that flows over surfaces and that can overwhelm storm sewers and back-up sewer pipes causing basement flooding or the pollution of our water bodies. Stormwater management is a challenge that is exacerbated by climate change and Toronto's aging and outdated infrastructure. The fee can help support stormwater management approaches that are more effective and less costly than 19<sup>th</sup> century piped infrastructure. As an example, a smart infrastructure alternative would be distributed lot-level utilities. We support the City of Toronto in its efforts to build a stormwater resilient city that sufficiently addresses the leading source of property and casualty insurance claims in Canada.

We do not agree with the approach proposed in the November 6, 2014 Stakeholder Meeting presentation entitled "Funding Toronto Water's Capital Program". The funding for a stormwater utility cannot be considered independent of the planning and building of stormwater infrastructure. While we agree that a rate adjustment is needed to address the ongoing challenge of maintaining a state-of-good-repair budget for water, wastewater and stormwater infrastructure, we urge City Council to consider innovative options that ensure dedicated financial and environmental sustainability of municipal stormwater infrastructure.

Currently City Council has approved significant large-scale projects to implement the Wet Weather Flow Master Plan (WWFMP). A significant expenditure however has been dedicated to the building of large underground storage tanks that pool storm and wastewater during wet weather events such as storms. While this "business as usual" approach reduces the pollutant loadings that foul our streams, rivers and Lake Ontario beaches, it is less resilient, far more costly, and less effective than innovative distributed stormwater management methods that eliminate the majority of the flow before it requires expensive, cross contaminated, end of pipe storage.

Rather than expanding the capacity of the faulty combined sewer system, we recommend "doing more for less" by directing public dollars to approaches that are lower cost with added effectiveness. We urge City Council to direct Toronto Water to consider decentralized, scalable, and cost-effective alternatives to conventional dug infrastructure as a means of cheaply and effectively controlling runoff, mitigating flooding and minimizing the adverse impacts to communities and the natural environment.

Automated, decentralized stormwater management systems, which capture and store stormwater more cheaply at the lot-level, avoid strain on the sewer system and thereby extend the life of the

infrastructure. Where feasible, other Low-Impact Development (LID) solutions that can be implemented on the property level should be considered, which include a rain harvesting utility, urban canopy protection and restoration, roof gardens, permeability requirements for all hard surface, bioswales, and rain gardens.

City Council should direct Toronto Water to undertake more research to ensure that the stormwater fees are introduced in such a way that they incentivize responsible distributed stormwater management, without undue burden on vulnerable groups, or strain on commercial property business viability. As proposed, the rate structure does not allow any incentive programming to reduce runoff and therefore reduce negative impact on water quality for properties less than 1 ha in area. Establishing a separate stormwater charge across all properties is a more transparent method of funding. However, we encourage City Council to adopt a fee determined by the volume of runoff generated by the property's impermeable surface. This would align with the general practice utilized by other jurisdictions, such as the City of Edmonton, to bill properties on an equivalent run-off unit (ERUs) basis. To calculate a fair rate structure, such ERUs can be determined by taking the roof/building area, readily found in the property tax database. This also allows City Council to direct Toronto Water to establish lot level stormwater programs funded by the stormwater fee.

Further, we suggest that Toronto Water engage and consult more widely with the public as it considers a stormwater utility. Council must re-establish Toronto's citizen leadership derived from Task Forces and related groups eventually marginalised by the Wet Weather Flow Management Master Plan process directed by Toronto Water.

In summary:

1. The overall approach to stormwater infrastructure needs to be broadened to reflect an opportunity to improve ecological health of Toronto's rivers and Lake Ontario. Implementing an effective funding model is only one component of a successful approach to stormwater management. A comprehensive approach to improving stormwater management is needed. Toronto Water should improve stormwater programs that support source protection best management practices, significantly reduce stormwater runoff by volume and improve the quality of stormwater that does flow into Toronto's rivers and Lake Ontario.
2. We support the move towards establishing an independently funded stormwater utility provided that the rates are transparent, fair and create a universally accessible incentive for Toronto Water stormwater runoff programs for all property owners (not just large commercial properties over 1 ha).
3. Transparency is crucial to ensure the funds are allocated in alignment with Council directed priorities. We encourage Council to establish a citizen-led Stormwater Innovation Council following the terms of reference similar to the Task Force to Bring Back the Don or the Stormwater Working Group to advise Council on innovation alternatives now ignored by Toronto Water. The effectiveness of the funded projects should be tracked against identified economic and ecological goals such as delisting Toronto as an Area of Concern under the international Great Lakes Water Quality Agreement.

4. The capital acquired through the fees should maximize the value of these public dollars through a dedicated fund for expenditures on approaches that reduce the rate of water entering the stormwater system. This has the benefit of both lower costs and enhanced effectiveness. Large scale, Business as Usual (BAU) projects, such as combined sewer collection systems, stormwater ponds and conveyance systems must be compared in full life-cycle terms of cost-efficiency, environmental protection, and social viability against innovative distributed stormwater management alternatives.

Thank you for considering our comments. Any questions may be directed to Nancy Goucher, Water Campaign Manager, Environmental Defence at [ngoucher@environmentaldefence.ca](mailto:ngoucher@environmentaldefence.ca) or 416-323-9521 ext 257.

The following organizations have endorsed this submission:

 <p>environmental defence INSPIRING CHANGE</p>	<p><b>Environmental Defence</b> Nancy Goucher, Water Program Manager</p>
 <p>RainGrid LOT-LEVEL STORMWATER UTILITIES</p>	<p><b>RainGrid Inc.</b> Kevin Mercer, President</p>
 <p><b>EARTHROOTS</b></p>	<p><b>Earthroots</b> Josh Garfinkel, Senior Campaigner</p>
 <p>SIERRA CLUB ONTARIO</p>	<p><b>Sierra Club Ontario</b> Dan McDermott, Chapter Director, Sierra Club Ontario</p>
	<p><b>Ecojustice</b> Liat Podolsky, Staff Scientist</p>
	<p><b>Dr. Lino Grima</b> Professor</p>
 <p>Canadian Environmental Law Association EQUITY. JUSTICE. HEALTH.</p>	<p><b>Canadian Environmental Law Association</b> Theresa McClenaghan, Executive Director</p>

## **Appendix 1 – Updated Comments on Rationale for Toronto Water’s Future Rate Increases**

We are generally supportive of water rate increases in Toronto. Despite years of efforts to raise the residential and industrial water rates, Toronto maintains some of the lowest water rates in the region. This continues to undermine the city’s ability to support conservation efforts or to provide for adequate investments in the maintenance and expansion of Toronto’s drinking water, sewage collection and treatment, and stormwater management infrastructure. Low water rates translate into a lack of investment in water infrastructure which can result in instances of sewer system surcharging that cause basement flooding, combined sewer overflows, and costly system capacity operational demands, not to mention impaired water quality for streams and lakeshore habitats, and threats to potable water quality.

More leadership is needed from City Council to ensure that Toronto’s water rates facilitate responsible water management by Toronto Water and that individual property owners pay the full-cost of water services to their properties, keeping in mind the policy objective to do so without placing an undue economic burden on low income families.

With regard to the 2013 proposal regarding financing of water and wastewater system good state of repair and future operations, we prefer option 3: introducing a separate charge for stormwater that reflects the cost of operating the stormwater system. In addition to levying individual lot level stormwater charges, we recommend Toronto Water maintain a general water rate increase of 3% annually to support the state of good repair priority for capital investments, water conservation programs, and operations and maintenance.

Rationale for support of separate stormwater rates:

- Stormwater charges would better help cover the costs of providing stormwater services. Someone ultimately has to pay these costs. It just makes sense to do so directly through a separate fee on the water bill.
- Stormwater runoff is a major environmental issue that results in flooding, and environmental degradation of our streams, rivers, and lakes (through direct runoff and combined sewer overflows). Nutrients and pollutants from the urban landscape contribute to the eutrophication of water bodies and algal blooms. Actions taken by property owners to reduce stormwater runoff can help improve water quality in local streams and lakes. Drinking water source protection is significantly affected by runoff water quality and quantity issues.
- Stormwater rates could help fund integrated, cost-effective and environmentally-sound services that better consider the
- Having a separate stormwater charge provides more direct information to the customers about the costs of managing stormwater, thereby indirectly informing customers about the environmental linkages within the urban water system. The calculation of stormwater utility fees must be calculated on the basis of permeability coefficients that are at least reflective of the rooftop lot coverage of the buildings on the property. They should not just be based on a standardized charge per residential, commercial or institutional property.
- As a question of equity and fairness; property owners who have largely paved their land or built to the lot lines, must not be charged the same amount as those who have done their

best to reduce stormwater runoff?

- Revenue generated by stormwater rates can be reinvested into the capital water budget to repair aging infrastructure, develop and enhance stormwater reduction programs, and runoff reduction programs that apply to the individual property rather than end of pipe or conveyance infrastructure. Ultimately, this is an investment in the future of Toronto, and an acknowledgement of the principles contained within the original Wet Weather Flow Management Master Plan that Council approved.
- Improved pricing provides a strong incentive to innovate, and a significant portion of the funding from any stormwater charges must be allocated to the financing of low impact development best practices.
- Stormwater utilities are a common administrative structure of many other cities throughout North America and successfully illustrate that dedicated funding along with explicit policies to reduce stormwater at source are effective measure to ensure the fiscal and infrastructure health of a city.
- Stormwater will increasingly be a problem in the future. Scientists are predicting that climate change will result in more frequent intense precipitation events. It is definitively cheaper to utilize methods that slow the rate of, and enhance the quality of water entering the major and minor drainage systems. A storm water utility and property-by-property permeability pro-rated charge is needed to incentivize land owners to expand the capacity of the stormwater system beginning where the rain falls.

As Toronto Water considers an increase in water rates, there are two important factors to keep in mind:

1. It is critical that Toronto Water ensures that any stormwater charges act as an incentive for property owners to reduce runoff and therefore reduce negative impact on water quality. For example, the City must establish sufficient substantial property-based incentives and programming methods to reduce stormwater without relying upon property owners to voluntarily implement low impact development best practices (BMPs) to reduce the rate of stormwater runoff.
2. Any water rate increases cannot impose undue burden on low income families. Potential negative consequences of water rate increases must be mitigated. Programs to ensure equitable access to water services should be considered alongside rate increase plans.

Thank you for considering our comments. Any questions may be directed to Nancy Goucher, Water Campaign Manager, Environmental Defence at [ngoucher@environmentaldefence.ca](mailto:ngoucher@environmentaldefence.ca) or 416-323-9521 ext 257.