

Weathering the Storms: Municipalities Plead for Stormwater Infrastructure Funding

In order to better assess Ontario's ability to cope with the impending impacts of climate change and severe weather patterns, the Ontario Society of Professional Engineers (OSPE), Consulting Engineers of Ontario (CEO), Residential and Civil Construction Alliance of Ontario (RCCAO), and Ontario Sewer and Watermain Construction Association (OSWCA) are partnering to conduct a study on the condition of stormwater infrastructure and the type of asset management planning that is done in municipalities across Ontario. Below are initial results of a survey sent to all 444 municipalities in Ontario, which 55 municipalities across the province completed.

Key Messages

What resources do you need to develop a SIAMP?

"We require staff specifically for asset management and COUNCIL BUY IN...!!! Better yet, regulation that Council cannot work around!"

- Significant investments will be required to maintain or bring municipal stormwater infrastructure up to a good or better condition rating
- Most municipalities do not have adequate stormwater management assets; adequate funding resources to meet the changing demands and regulatory requirements for these assets; and/or, the human resources to appropriately track and monitor these assets and their metrics
- Stormwater infrastructure assets are a major part of municipal infrastructure and need to be appropriately accounted for in municipal asset management plans

What is the most critical issue for the next five years?

"Climate change increasing intensity and frequency of storms, resulting in more flooding issues. Regulatory requirements - We are expecting environmental regulations to become more stringent. Aging infrastructure - it is not urgent right now, but we know it's an issue, and we need to prepare for the future."

Key Statistics

- Most respondents represent towns with a population of less than 50,000. However, cities of all population sizes are represented and come from all regions of Ontario
- 58% have limited to no engineered stormwater management infrastructure
- 35% have a separate Stormwater Infrastructure Asset Management Plan (SIAMP) from their Water/Wastewater plan
- Only 15% have a Stormwater Monitoring Plan – a plan that collects data on the performance of the existing systems (i.e. are stormwater ponds meeting environmental compliance)
- Only 11% reported that their SIAMP accounted for climate change
- The cost to replace stormwater infrastructure in six focus municipalities ranging in population from less than 50,000 to more than 750,000 is estimated at \$1.2 billion, or on average, over \$200 million
- In 2016, 16 municipalities had emergencies that required repairing damaged stormwater infrastructure at an overall cost of \$2.1 million – 88% in towns of fewer than 50,000 people
- 25% have implemented Low Impact Development (LID) practices, such as rain gardens, permeable pavement, etc., although several are concerned about the costs that could be incurred as a result of the proposed MOECC LID standards, with one respondent reporting that their municipality estimates costs to implement and maintain LID could require hundreds of millions of dollars

What issue should be most important for municipal councillors to know?

"Climate change and aging infrastructure will require additional funding in the near future to replace and upgrade the systems installed in the 50s and 60s."

Key Recommendations

- SIAMPs should be a required component of municipal Asset Management Plans to ensure that all municipalities are working towards the provincial Climate Adaptation Goals
- Stormwater management assistance needs to be considered as a funding priority in the next provincial Long-term Infrastructure Plan, especially for municipalities with populations under 50,000, as many do not have the necessary resources to develop a SIAMP
- Ontario needs to develop standardized criteria to help municipalities properly monitor stormwater systems

What issue should be most important for provincial politicians to know?

1. Funding and resources are needed to sustain a good state of repair of the existing stormwater infrastructure network, and management of its performance;
2. Government must provide clear and consistent decisions, directions and regulations to municipalities for planning, management and repair of stormwater infrastructure; and
3. Government must understand that a "blanket" approach cannot be used province-wide – e.g. what works for the GTA may not work for other areas."