



To the Editor:

This is an article from a series of monthly columns by Environmental Law Specialist Dianne Saxe, one of the top 25 environmental lawyers in the world. These articles are available for publishing at no charge, provided Dr. Saxe is cited as the author. She can be contacted at (416) 962 5882 or admin@envirolaw.com. For more information, visit <http://envirolaw.com>.

Wild Weather: How Municipalities can Adapt to Climate Change

As the results of climate change become increasingly clear, so does the necessity of adapting to them. Canadians are waking up to the unpleasant fact that this is a much more immediate issue than we anticipated five years ago. Our children will not be the first to feel the full effects of this crisis – we will.

While Ottawa has not adopted legislation on climate change, a recent federal government report¹ clearly acknowledges the danger:

The impacts of changing climate are already evident in every region of Canada.

Climate change will exacerbate many current climate risks, and present new risks and opportunities, with significant implications for communities, infrastructure and ecosystems...

*...Impacts of recent extreme weather events highlight the vulnerability of Canadian communities and critical infrastructure to climate change... (**emphasis added**)*

What does this mean for municipalities?

Climate change poses expensive threats to municipalities, both because it changes average weather and because it increases the frequency of “severe weather events”.

Changes in average weather will place immense stress on water resources, significantly raise temperatures and render coastal and erosion prone areas more dangerous. Municipal facilities that aren’t air-conditioned may become too hot in the summer to meet occupational health and safety standards. Severe weather events will become increasingly frequent, and more dramatic.

¹ Lemmen, D.S., Warren, F.J. and J. Lacroix. (2008): Synthesis: in *From Impacts to Adaptation: Canada in a Changing Climate 2007*, edited by D.S. Lemmen, F.J. Warren, J. Lacroix and E. Bush; Government of Canada, Ottawa, ON, p. 1-20.

Someone – municipal governments, residents or insurers – will have to pay for the inevitable damage. And it could be huge. In Toronto, for example, a mere three hour rainstorm on August 19, 2005 racked up \$500 million in insurance claims. The Insurance Bureau of Canada cites this as the country's most expensive natural disaster (in terms of insurance claims) after the 1998 ice storm.

The city ended up with \$44 million in uninsured costs. That's 10 times the amount of money it would take to keep open dozens of endangered city pools. Clearly, even a single severe storm can sideswipe a municipal budget, and devastate the economic heart of a municipality.

What can municipalities do?

The best way for a municipality to adapt to climate change is to evaluate its unique vulnerabilities and take appropriate action. Unfortunately, senior governments have not been as helpful as they could in this regard. IPCC maps take no account of specific local circumstances, and environment Canada is about 15 years behind in analyzing temperature and rainfall and wind data.

The City of Toronto has introduced one useful new resource - an on-line library dealing specifically with climate change adaptation - as part of its "Ahead Of The Storm" initiative. Other help is coming from the insurance industry in the form of an Industrial Research Chair on Extreme Weather Events at McGill University, and a study on municipal disaster prevention.

Fortunately, the federal government's report concludes with a dry, but significant, call to action:

Integrating climate change into existing planning processes, often using risk management methods, is an effective approach to adaptation. Barriers to adaptation action need to be addressed, including limitations in awareness and availability of information and decision-support tools.

Stirring rhetoric, it isn't. But when even the federal government admits we have a problem, then we have a problem.