

"We have to face the reality of climate change. It is arguably the biggest threat we are facing today.

*William Hague,  
British politician*



---

*With appreciation for our association during the past year. Wishing you all a Merry Christmas and all the best for a sensational year to come!*

---

## STORMS, FLOODS, DROUGHT ...

While Canada's federal government, for better or worse, is finally focusing the nation on dealing with climate change, the American federal government seems on its way to reversing many of the substantive changes made during the past eight years.

Ignoring the economic implications of the actions humans take to reduce (and possibly) reverse changes to world-wide climate it seems incredible that there are still people who deny that change is happening. Cindy Wallis-Lage, Black & Veatch president, global water business says "You would have to live in a box to not notice that we have seen changes. It is negligent for us to ignore it."

One of the easiest observations demonstrating changes affecting municipalities is to see how tunnels built for 'normal' storm water events are almost routinely flooded today. Roads surfaces constructed for historic temperature conditions are being damaged by extreme heat; storm water reservoirs and dams built for the established guideline of 'one-in-100-year storms' are failing far more often.

Many engineers and builders are past the point of arguing about why these events are happening. Instead of arguing why these changes are happening, we should be focused renovating facilities and infrastructure to withstand more frequent extreme weather events, the likelihood of sea-level rise and greater temperature extremes. Those of us who are far away from oceans can't ignore sea level rise. After all, 'sea' level is just a term meaning 'water' level. As sea level rises so too does the level of lakes and tributaries.

What does all this tell the average municipal risk manager? That many are far behind in their response to the need for more storm water retention ponds, raised arterial roads used as emergency evacuation routes, and

revised standards in areas from building insulation to road surfaces. When constructing buildings, specifications should be developed for seen and expected changes - not limited to current building-code standards which are insufficient for expected future conditions.

Don Forgeron, president and CEO of the Insurance Bureau of Canada said earlier this year that cities should begin rejecting proposed developments located near fire-prone forests or on flood plains in order to mitigate the damage from future natural disasters.

While mitigation measures will help reduce the intensity of climate change impacts, adaptation can help avoid some impacts through more-resilient infrastructure and more-flexible operating systems. Ideally, adaptation planning will be integrated into all facets of operations – it's just one more risk management tool. Failure to adapt is likely to result in substantial future costs that will easily outstrip preparation costs.

It simply makes financial sense to ensure they can tolerate extreme storms --whether they happen every 100 years or every five years. In a report published by the National Round Table for the Environment and the Economy in 2011 "Climate change costs for Canada could escalate from roughly \$5 billion per year in 2020 — only three years away — to between \$21 billion and \$43 billion per year by the 2050s". Infrastructure is a long-lived asset; it is significantly less expensive to design it with the future in mind than to incur the costs of repair, and then, retro-fit. Bear in mind that not all preparation and adaptation tools are pricey. Nor do they need to be done overnight. The important part is to recognize the change and to pro-actively adapt.

Many services provided by government entities are unavailable from the private sector. It is critical that attention also be focused on the ability to quickly recover from an event in order to continue providing those necessary services.

## CONCLUSION

Implementing changes poses risks to government sectors. Historically reluctant to lead the way for fear of criticism, some municipalities are taking tentative steps toward adaptation and mitigation. Many regions in Canada have been affected by catastrophic events in the past few years; the number and intensity of these events is rising. Instead of focusing on the fear of criticism for spending money to be prepared, why not look at the very real possibility of having to explain why you were not prepared?

---

### Cloutier Measuring Device

Do you need trust-worthy evidence against trip and fall claims? Here's the perfect solution to enhance your defense. Developed by a claims investigator, this device, with a photograph, gives you undeniable evidence for only \$179.00, including shipping and handling

#### FEATURES:

Easy to read, Remains standing while being photographed; Accurate and durable with a metal ruler (metric/imperial).

