

MOTHER NATURE vs. CITY COUNCILS

Gord Hume...July 22, 2013

When it comes to a battle between Mother Nature and our various elected City Councils, the winner is pretty clear. But the biggest losers are the homeowners, businesses, communities and people across the country who have had their lives and property shattered by a year of fierce natural disasters.

High River. Calgary. Toronto. These are just a few of the dozens of communities scarred by the devastating floods that ripped through their cities this past summer. Walls of water, fast-rising rivers and overwhelmed sewer systems meant basements full of water, cars on the street with water reaching high up their windows, and property damage that will reach into the billions.

The impact on human lives and families is even greater. Loss of life. Businesses devastated, some of which will never reopen. Houses that are uninhabitable and will have to be destroyed. Family lives shattered. The true costs will never be fully known or understood.

The flooding is just a part of the past year's sad record of natural disasters. Forest fires have hit many parts of northern Canada, causing evacuations of neighbourhoods and the loss of timber and natural spaces, and endangering lives and property.

The Emerald Ash Borer is slowly making its devastating path across southern Ontario and heading east. Towns and cities are devoting tens of millions of dollars to cutting, destroying and then replacing the ash trees that have been caught in the inexorable path of the nasty little beetle.

BC has suffered through Pine Beetle attacks for several years. Projections are that by 2015, about three-quarters of the entire pine volume in the interior of BC may be dead. Dozens of municipalities, over 100 First Nations' communities and many rural settlements are impacted.

The Northwest Territories, Yukon, Alberta, Saskatchewan and other areas are also engaged in the battle. Actions to stop or limit the spread of this devastation include prescribed fires; selective and strategic harvesting; and planting more diverse species of trees.

Hurricanes and tropical storms lash the Maritime regions of Canada. Tornadoes seem to be touching down with greater frequency in several parts of Canada, and there is some thought that the major storm cells that have traditionally been centered in the US Midwest are now moving north. Storm chasers are appearing in Canada. The smashing path of havoc that these tornadoes leave in seconds takes years for towns and cities to recover from and to rebuild.

In less than two minutes the worst tornado to hit Ontario in fifteen years struck Goderich, Ontario in August, 2011. The path of destruction left 1 dead, 37 injured and \$100 million in damage. Two years later, the town is still rebuilding but has shown a resilient spirit and a determination to recover.

What can municipalities do?

In the aftermath of the 2013 floods and other natural disasters, municipalities inevitably are taking a hard look at their own planning, emergency and mitigation plans and strategies. And too often, they are discovering that the lack of investment and planning is now coming back with devastating consequences.

“Across much of the country, there are no flood maps and there are virtually no restrictions to floodplain development—meaning that communities keep being built, and rebuilt, in high-risk flood zones,” said Steve Kee, a spokesman for the Insurance Bureau on Canada in an interview with the *Globe & Mail* in July, 2013. “What’s more, investment in flood control, such as dams and dikes, continues to be spotty at best.”

For municipal planners and councillors, one critical question soon emerges—how much do you invest now for a once-in-a-hundred year event? Or even a 1 in 300 year flood? Can you justify the costs today of giant storm sewers, berms and other mitigation? Will the community support and pay for such costs?

On the other hand, the cost of a storm-related incident can be vastly higher than the mitigation costs. Hurricane Katrina and the Gulf Coast flooding that resulted from the 2005 storm that some believe was the worst hurricane in US history left nearly 2,000 dead and over \$80 billion in damage.

Hurricane Sandy struck the US Northeastern seaboard in 2012, again leaving a path that slashed and smashed New York and other communities. The price tag? An estimated \$50 billion. That puts into perspective the announcement earlier this year by New York City Mayor Michael Bloomberg to invest \$20 billion for flood walls, levees and bulkheads around NYC. That plan also calls for construction of a “Seaport City”, which is designed to protect the Lower Manhattan district of New York City.

Following the Alberta floods, Premier Allison Redford appointed an expert panel to report on future flood mitigation plans. “We’re going to do it in a common-sense way that makes Alberta a global leader in flood protection and prevention,” she announced.

The impact of climate change and global warming are being debated by scholars, but the reality is that changes in weather patterns are being felt on the streets. Municipalities have to reassess

their traditional thinking about storm water management, flood plain protection and become more pro-active in planning and development.

Political Realities

Finding the right balance is going to be one of the biggest challenge for our elected leaders. How much are local taxpayers willing to spend today on mitigation measures that may never be needed in their, or their grand-children's, lifetime? How do you argue for a larger chunk of the ever-limited municipal budget to go to vastly larger storm sewers, or to build giant dikes, when local taxpayers are hollering about zero-increases for their property tax bills?

Cities that have suffered a recent tragedy are more likely to be supportive of such investments, but even that can drift away quickly. A US report indicated that \$1 invested in mitigation and community preparation was worth \$15 in damages. That same report, done by Stanford and Loyola Marymount Universities in California, also showed that voters rewarded politicians for leading in a crisis or emergency (Calgary Mayor Naheed Nenshi, for example, was widely applauded for his leadership during the Alberta floods), but voters soon cooled on spending for natural disaster preparedness and mitigation.

What seems clear is that all six orders of government in Canada need to work and plan together. Communities need more effective mitigation techniques, community planning and emergency preparedness. And certainly the local property tax base cannot afford all of the costs these infrastructure investments require. There will have to be large provincial, territorial and federal contributions, or municipalities will need to get access to new sources of non-property tax based revenues. Probably both are required.

Planning, zoning, development and design are generally local responsibilities, and municipalities will have to review seriously their policies for allowing building in or near flood-plain or flood-prone areas. At the same time, since Canadians generally do not have flood insurance, homeowners will see higher insurance rates slam them because of the payouts on these natural disasters across the county will increasingly be questioning why and if we should be allowing rebuilding of private and public property in those areas.

These calamities concern and impact our sustainability as municipalities. They are certainly going to create debates and policy reviews in every community across the country. Record rainfalls, horrific hurricanes and tornadoes, flooding, fires and all the other natural disasters that municipalities face also means one other thing—as much planning and mitigation that communities do, Mother Nature will always have a surprise in store. Nobody beats Mother Nature.