Adapting to Extreme Rainfall
The Institute for Catastrophic Loss Reduction celebrates leadership amongst Canadian cities in its latest publication.

By Sophie Guilbault

Climatic extremes, including extreme rainfall events, have become a major threat to communities in recent decades. Over the past 30 years, the frequency and intensity of extreme rainfall events have increased, causing widespread damage to homes and infrastructure. This trend is anticipated to continue as climate change progresses, making it an urgent issue for communities to address.

Canadian municipalities have been proactive in developing adaptation strategies to mitigate the impacts of extreme rainfall events. This is evidenced by the City of Toronto, which implemented a stormwater credit program that allows homeowners to receive credits for implementing projects that reduce stormwater runoff, such as the installation of rain gardens or infiltration systems. These credits can be used to offset the costs of installing more permanent solutions, such as green roofs or permeable pavements.

In addition to installing on-site solutions, municipalities are also considering the integration of green infrastructure into urban planning. This approach involves incorporating natural systems into the built environment to manage stormwater more sustainably. For example, the City of Vancouver has been working on a pilot project to install rain gardens in public parks, which not only help reduce stormwater runoff but also provide habitat for local wildlife.

Despite these efforts, there is still a need for more comprehensive strategies to address the impacts of extreme rainfall events. This is where the Institute for Catastrophic Loss Reduction (ICLR) comes in. Through its work, ICLR seeks to provide leadership and guidance to communities in adapting to these challenges.

This year, ICLR published "Adapting to Extreme Rainfall", a book that highlights the efforts of 20 Canadian cities that have developed creative approaches to reduce the risk of loss from extreme rain events. The book features case studies from cities across the country, including Toronto, Calgary, and Vancouver, among others.

The book also includes a comprehensive guide to developing adaptation strategies, as well as case studies from around the world that have successfully implemented similar solutions. This resource is valuable for communities looking to develop their own adaptation plans and for researchers and policy makers who want to learn more about best practices in this field.

In addition to its publication, ICLR has been working with communities to implement these strategies. For example, the City of London has been working with local residents to install rain gardens and infiltration systems, and has seen a significant reduction in the volume of stormwater runoff since the implementation of these projects.

ICLR is committed to continuing its work to support communities in adapting to the impacts of extreme rainfall events. By providing guidance, resources, and case studies, ICLR is helping to build a more resilient future for communities across Canada.