

Urgent action needed to curb possible debilitating loss of natural infrastructure assets in Canada: IBC/Intact Centre/IISD Report

Natural infrastructure is fundamentally important to limiting the financial impact of climate change in coastal and inland environments

September 18, 2018 (HALIFAX) – A new Insurance Bureau of Canada (IBC) report urges communities to consider natural (or “green”) infrastructure to limit their flood risk. IBC collaborated with the Intact Centre on Climate Adaptation (Intact Centre) and the International Institute for Sustainable Development (IISD) in this latest insurance industry initiative to help communities address their economic risk associated with climate change.

“Nature conservation and climate resilience go hand in hand,” said Craig Stewart, Vice-President, Federal Affairs, IBC. “This report emphasizes that coastal and inland flood risk can be reduced by conserving and restoring natural infrastructure, such as wetlands and coastal marshes, and that the return on investment of natural infrastructure can at times exceed that of built infrastructure, such as dams and dikes. Nature can be our best friend in lowering the risk of exposed communities.”

In 2016, in response to consumer needs, the property and casualty insurance industry began offering homeowners products that cover overland flooding. However, we are facing a decade-long transition as governments shift the financial risk of floods from taxpayers to homeowners and private insurers. Currently, for every dollar of losses borne by insurers in Canada, three to four dollars are absorbed by governments and home and business owners.

“Property and casualty insurance payouts from extreme weather have more than doubled every five to 10 years since the 1980s,” said Stewart. “Coastal and inland flood risk is rising across the country as a result of extreme weather events driven by climate change. Insurance companies are on the frontlines of helping Canadians cope with the impacts of the changing climate, paying out over \$1.5 billion in the last 12 months alone.”

Key Findings of the Report

As a general rule, in order of preference, the most cost-effective means to mitigate flooding using natural infrastructure are to:

- retain what you have
- restore what you’ve lost and
- build what you must.

The natural infrastructure implementation framework profiled in the report provides an improved due-diligence process for the assessment and implementation of natural infrastructure projects. It consists of the following key components:

Watershed and climate risk assessment: It is critical to assess the broad range of climate change and land use impacts on watersheds to understand key risks facing communities today and in the future (e.g., floods, drought, water quality issues and habitat loss).

Materiality assessment: Materiality assessments involving key community stakeholders are required to prioritize the most pertinent watershed challenges and to direct the focus of potential natural and engineered infrastructure solutions towards those that can generate “multiple wins.”

Feasibility assessment: A feasibility analysis, which consists of assessing the technical, legal and regulatory, organizational, social and economic factors for implementing projects, can confirm which natural and/or built infrastructure projects best address the priority issues.

Economic costs and benefits assessment:

A comprehensive assessment of the financial, environmental and social costs and benefits – a Total Economic Value (TEV) assessment – is required to compare and contrast natural infrastructure investments against traditional, engineered alternatives. TEV assessments help illuminate otherwise uncaptured benefits of natural infrastructure, which go over and beyond traditional, engineered solutions (e.g., habitat creation, biodiversity improvements and community aesthetics).

Grey infrastructure projects are typically the baseline for the cost-benefit assessment, and the economic, environmental and social impacts of the implementation of natural versus grey infrastructure projects should be evaluated, using TEV, side by side.

Design, construction and maintenance: To ensure that natural and built infrastructure projects are implemented on time and on budget, multiple considerations warrant attention, including the complexity of infrastructure design, construction length and extraneous impacts (e.g., weather-related project disruptions). Longer-term success of both natural and built infrastructure relies on regular operation and maintenance.

Monitoring and reporting: The use of natural infrastructure for climate adaptation is still a novel approach. Accordingly, the documentation, monitoring and reporting of the actual benefits versus the actual costs incurred from the time of project implementation is critical for further driving the “value for money” business case for natural infrastructure investments.

Intact Centre quote

“Natural infrastructure, such as an inland or coastal wetland, is not mere decoration – it limits flood risk and the downstream discharge of pollutants, while at the same time supporting biodiversity. In response, every attempt should be made to retain and restore natural infrastructure today, if we are to avoid unconscionable economic, social and environmental losses tomorrow.”

- *Dr. Blair Feltmate, Head, Intact Centre on Climate Adaptation*

IISD quote

“Natural infrastructure can be more cost efficient than built infrastructure. This is critical because with climate change, more frequent and intense weather events are becoming the new normal and leading to escalating costs. Natural infrastructure can offset millions in spending and offer multiple enviro

- *Anne Hammill, Director of the Resilience Program at IISD*

Additional Resources

To view the report online: [Click here](#)

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About Insurance Bureau of Canada

Insurance Bureau of Canada (IBC) is the national industry association representing Canada's private home, auto and business insurers. Its member companies make up 90% of the property and casualty (P&C) insurance market in Canada. For more than 50 years, IBC has worked with governments across the country to help make affordable home, auto and business insurance available for all Canadians. IBC supports the vision of consumers and governments trusting, valuing and supporting the private P&C insurance industry. It champions key issues and helps educate consumers on how best to protect their homes, cars, businesses and properties.

P&C insurance touches the lives of nearly every Canadian and plays a critical role in keeping businesses safe and the Canadian economy strong. It employs more than 126,000 Canadians, pays \$9 billion in taxes and has a total premium base of \$54.7 billion.

For media releases and more information, visit IBC's Media Centre at www.ibc.ca. Follow IBC on Twitter @InsuranceBureau or like us on Facebook. If you have a question about home, auto or business insurance, contact IBC's Consumer Information Centre at 1-844-2ask-IBC.

If you require more information, IBC spokespeople are available to discuss the details in this media release.

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