



**Private sector – nature
based insurance solutions
in Canada**

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Thank you, and good morning everyone.

Insurance, properly deployed, is about financial resilience.

Insurance involves the transfer of risk from the public (governments, their taxpayers and consumers) to the private capital markets.

Through premiums we send price signals to incent desired behaviour and reduce risk. As a form of contract, if you or your community take actions to lower your risk by investing in stormwater upgrades or by flood or fire proofing your home, you/your customers/and your taxpayers should be rewarded with lower premiums. We price risk. The lower the risk, the lower everyone pays.

As you all know, nature provides significant benefits in protecting communities from risk. When we impair mangroves, coral reefs, and sand dunes, we actually impair the resilience of the communities which they protect. If we

restore or conserve natural systems, we also restore and increase resilience. For example, wetlands in Southern Ontario play an important role in reducing flood risk to communities, because they efficiently absorb excess water from intense rainfall. We know these natural assets increase resilience -- our challenge is how to price these assets, when nature is often considered a market externality.

For this reason, IBC is partnering with Swiss Re and the Canadian Municipal Natural Assets Initiative to scale an innovative approach to nature-based solutions... through insurance solutions for nature. We call this “nature-based insurance solutions.”

We spoke with over twenty municipalities who expressed interest in these solutions. Based on these conversations, we grouped three types of flood perils and insurance solutions based on agricultural, urban and coastal

communities. We then drew up three use cases based on two product models – insuring the natural asset itself and insuring the municipality’s public infrastructure but pricing in the resilience benefits provided by the natural asset.

For example, the city of Drumheller, Alberta faces flood challenges due to agricultural land use practices outside of its administrative boundary. A parametric insurance policy could be designed that would provide rapid payout should the Red Deer River reach a flow rate high enough to damage public infrastructure in the city. Given a contract length of say ten years, the insurer could price the contract assuming natural storage basins aka wetlands are restored upstream of Drumheller. Appropriate premium reductions could be front end loaded into a trust fund and blended with government contributions and used to incent restoration of wetlands on unproductive agricultural lands. A variation of this model could take a watershed approach

with policies entered into with a number of municipalities along the Red Deer River thereby somewhat diversifying the risk and allowing for wetland restoration and flood mitigation at a larger scale.

Or a second solution involves insuring natural assets, such as sand dunes around the bay of Fundy.

For example, the town of Truro could purchase a parametric policy on a protective natural asset that mitigates the effects of coastal flooding to the community, such as a salt marsh or sand dunes. This product could include: Coverage for costs of construction work to restore a salt marsh or sand dunes, based on either an annual or multi-year policy. The policy can also address additional risks, such as costs associated with community impacts, business interruption or clean-up. A payout is triggered when a predetermined condition tied to a natural peril is met, such as wave height, water level or wind speed – this

is called a parametric trigger. Once the funds are distributed to the policyholder (i.e., the Truro government), they would directly fund the cost of the emergency response to restore the natural asset.

Earlier this autumn, we hosted an online meeting to explain the approach to interested municipalities. We are now engaged in dedicated follow-up with the most advanced ones to customize solutions for the context of our municipality partners. Our ambition is to secure memoranda of interest for pilots by this January, with the goal of demonstrating that nature-based insurance solutions can and should be scaled. We see this as an important contribution for nature-based solutions, and we are excited to be scaling this approach in a country that has been so dedicated to nature protection. Thank you.