

The Essential Role of Adaptation in the Climate Crisis



As global temperatures rise, Canada must respond in two ways – by adapting to the changing climate to keep its citizens and communities out of harm's way now, and by reducing its carbon footprint to help slow and even reverse the warming trends over time.

What is adaptation?

Adapting to climate change means acting to protect people and property from the consequences of changes that are occurring now and that will occur in the future.

Scientists state that no matter what steps governments take to reduce global warming, changes in the climate that are already set in motion will continue for many years. This is why adaptation is key to protecting Canadians from an increase in severe weather events that is linked to climate change. In particular, Canadians across the country now face an increased risk of flooding.

The good news is that Canadians, with the help of their governments, can learn to adapt to this increased flood risk and protect their homes, their possessions and their pocketbooks.



How GOVERNMENTS can help Canadians adapt

The federal government must set the pace. Canada needs a National Action Plan on Flooding that includes new policies and standards on mitigation and adaptation to:



Move people out of harm's way



Educate Canadians about flood risk



Invest in flood defences



Provide all Canadians with access to affordable insurance



End building on flood plains.



Provincial and municipal governments must follow up by strengthening their land-use planning rules and building codes to protect their citizens' property as flood risk increases.

To ensure that Canadian communities adapt to increased flood risk, all levels of government must prioritize investments in new flood defence infrastructure, such as dams and berms, as well as improvements to sewers and stormwater infrastructure. Investments in structural assets are crucial and should be targeted to the highest-risk communities.

Governments should also invest in preserving and restoring natural wetlands, which has been shown to be a cost-effective way to reduce flood risk.



How INSURERS can help Canadians adapt

In Canada and worldwide, insurers are on the forefront of documenting the changing climate as they witness increasing claims costs for flooding and other severe weather events. To

help Canadians adapt, insurers must innovate their products to cover these new risks that customers face. Insurers also have a role to play in educating Canadians and their governments about ways to adapt effectively in order to lower risks.

Insurers in Canada first introduced overland flood protection for homeowners in 2015. Here are the results of the most recent market survey done in early 2018:

- ▶ 21 insurers representing **82%** of the residential property insurance market were offering overland flood insurance.
- ▶ **35%** of properties nationally were covered by overland flood insurance.

However, insurance cannot be made affordable or even available for properties that are at highest risk of flooding. Insurers and the federal government are working together on a plan to help protect those who are the most vulnerable to flooding and to ensure all Canadians have access to affordable insurance. However, until such a plan is put into action, owners of the properties at highest risk face uninsured losses that could threaten their financial security. In addition, not being able to obtain flood insurance can also be a factor that affects property values and access to mortgages.

Insurance Bureau of Canada (IBC), in its role as a member of Canada's National Advisory Council on Flooding, has proposed the transfer of residential property risk from taxpayer-funded disaster assistance programs to private-sector insurance solutions. This plan focuses on the floods that many Canadian communities have experienced and would decrease pressure on public finances and encourage community-based resilience.

In most provinces where flood insurance is available, in the event of a significant flood, disaster financial assistance from the government is only available to help homeowners with losses that cannot be insured.



How CANADIANS can help themselves

Almost all homes and their contents can be adapted to make them less vulnerable to flood risk.

Here are some practical steps to take:

- ☐ Avoid keeping valuable items in the basement.
- ☐ Never pour fats, oils or grease down the drains.
- ☐ Reduce home water use during heavy rainfalls.
- ☐ In the winter, clear snow away from the house foundation.
- ☐ Maintain plumbing, fixtures and appliances.
- ☐ Clean and maintain downspouts and eavestroughs twice per year.
- ☐ Keep any city drains near the property free of leaves and other debris.
- ☐ Use window well covers to keep water away from basement windows.

More complex steps that homeowners should consider include:

- ☐ **Use water-resistant building materials** below ground level.
- ☐ **Raise large appliances**, furnaces, hot water heaters, electrical panels and oil tanks above any anticipated flood levels.
- ☐ **Install a backwater valve** – a device used to prevent water that exits through a dwelling's drainpipes from flowing back into a home.
- ☐ **Ensure proper lot grading.** If possible, build up the ground around the house so that water will drain away from basement windows.
- ☐ **Maintain sewer laterals** (pipes that connect your home's plumbing system to your municipal sewer system).
- ☐ **Check that sidewalks, patios, decks and driveways** don't shift over time and cause water to drain toward the house.
- ☐ **Disconnect weeping tiles** from the sanitary sewer and install a sump pump with a battery backup.
- ☐ **Disconnect downspouts from the sanitary sewer** and extend them at least six feet from the basement wall. Water should drain away from the house, and neighbouring houses, toward the street or backyard.

Not all of these actions will be applicable to each home, and completing these steps does not guarantee the prevention of basement flooding. However, taking these steps can reduce your risk of basement flooding and lower the cost of cleanup if flooding occurs. For the more costly actions listed above, your municipality may offer flood protection subsidies to help with the cost of installation by a qualified plumber.