

Water Security for Canadians

Solutions for Canada's Water Sustainability and Climate-Related Water Crisis

This concept note outlines how the federal government can provide leadership and better exercise its jurisdiction to help prevent Canada's emerging water crisis. It proposes a number of specific and achievable activities that will position Canada as a global leader in water prediction, management and sustainability.

Modernizing the *Canada Water Act* (1970) – the federal government's primary freshwater legislation – is critical to a comprehensive approach. A modernized *Canada Water Act* will support the creation of a *Canada Water Security Centre* and a *National Water Security Commission*; support implementation of Indigenous inherent, Aboriginal and treaty water rights and roles in water governance and management; and, catalyze increased funding and capacity for freshwater monitoring, prediction, planning and effective management.

The Emerging Water Crisis

Canadians can no longer be assured our waters are abundant, safe and secure. As global temperatures continue to increase, glaciers melt, permafrost thaws, river flows become unpredictable and lakes warm and fill with toxic algae. Science is telling us that the rate at which water moves through the water cycle is accelerating, which is fundamentally changing weather and precipitation patterns. Evidence of such change in Canada is mounting, with more frequent and extreme floods, droughts, and fires. A changing climate and a disrupted hydrologic cycle also amplifies the negative effects of development and pollution on watersheds and are damaging aquatic life in our waterways from coast to coast to coast.

The impacts of these rapid changes in water availability and quality are costly. The implications include undermining the health and function of world-class parks and protected areas, traditional subsistence ways of life, built infrastructure and food and energy production. Concern and conflicts over water are central in the public's resistance and lack of trust around resource developments, with significant economic and social consequences. Meanwhile, the cost of floods and droughts for families, towns and cities, the insurance sector, businesses, and ultimately the federal government, are skyrocketing and unsustainable.

The Path to Solutions

Most water management decisions are made locally, through provincial and Indigenous jurisdictions. Yet the majority of our major river and lake basins are transboundary, involving multiple provinces, Indigenous communities and sometimes the United States in basin management. A balanced way to strengthen the health and protect the ecosystem services of these shared waters is through a more integrated approach to planning at the river basin level. This approach requires all of these orders of government to work together. Importantly, because these waters cut across jurisdictional boundaries, rights and responsibilities, this approach requires a meaningful federal role, particularly in four key areas:

- 1. Creating and mobilizing the knowledge needed to predict and respond to water problems** – by providing centralized and harmonized collection and dissemination of water information; water predictions including flood and drought forecasting; and decision-support services through a *Canada Water Security Centre*.

- 2. Strengthening transboundary water management and cooperative federalism** – by prioritizing healthy and intact river basins, as well as capacity and commitment to anticipate, investigate, avoid and resolve disputes through a *National Water Commission*. The *Commission* would also guide water management and water-related climate adaptation strategies through the 21st century. This effort to strengthen management and cooperative federalism would include focused efforts to understand and make recommendations regarding evolving public opinion and best international practices, including fiduciary duty and public trust concepts articulated in a modernized law.

3. Strengthening reconciliation with Indigenous peoples – by ensuring the *Canada Water Act* is consistent with the *United Nations Declaration on the Rights of Indigenous Peoples* and adopting a consent-based, co-drafting approach to renewing the *Canada Water Act* in partnership with Indigenous governments. This includes reaching agreement on the policy objectives and goals of the Act, and how these support Indigenous peoples goals and rights to self-determination, and implementation of Indigenous inherent, Aboriginal and treaty water rights and roles in water governance and management.

4. Improving collaborative river basin planning – by building durable partnerships for water management and decision making with provinces, territories and Indigenous governments with a clear outcome of building resilience to extreme events, identifying priority areas for watershed restoration, and ensuring effective environmental flow regimes are in place across all levels of jurisdiction and authority.

Conclusion

Enabling these specific water solutions can save Canada billions of dollars by preventing damage to infrastructure and ecosystems and reducing disaster payments. The federal government can carefully target existing expenditures and realize new efficiencies between federal departments with water portfolios to financially support changes to a modernized *Canada Water Act*.

The solutions identified here will make our industries, communities, and the places we live more resilient and less vulnerable to climate change and will make Canada a leader on the global stage by showing the world how to build lasting water security in an increasingly uncertain world.

Canada Water Security Initiative

The Canadian Water Security Initiative is a collaboration of scientists and policy experts who have come together to analyze Canada's emerging water crisis, and to chart a path forward to ensure water security for all Canadians. Drawing together a wide range of experience from across the country, the Initiative leverages world class science and policy expertise to propose solutions that strengthen cooperative federalism in the context of water governance and management, with specific attention to enhancing the role of the federal government.

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