

## **A Canada Water Agency: International Opportunities and Responsibilities**

*International Opportunities and Responsibilities for the Canada Water Agency* was a virtual webinar on March 8, 2021 which discussed how the new Canada Water Agency can support not just better management of water domestically, but also Canada’s international development responsibilities and cooperation and economic development opportunities.

The event attracted 350 registrants from 12 countries and participation from notable national and international water and sustainable development agencies, private sector industries and firms, First Nations’ organizations and governments, university researchers, and many ministries within Canadian federal, provincial and territorial governments. This document is a summary of the discussion including the key opportunities and responsibilities for Canada under the leadership of the new Canada Water Agency.

### **Capacities, Needs and Opportunities for Canada to Contribute Internationally on Water** Global Water Futures Programme & Massey College, EPCOR, UN University and Tribhuvan University

People around the world are calling on governments to “build back greener” and in Canada, we have an opportunity to “build back bluer”, with water central to sustainability plans. In getting our own “water house” in order, we can develop the knowledge, expertise, and processes that can be provided to other parts of the world. Through the Canada Water Agency, Canada can proactively address the kinds of new and intensifying water challenges we know will demand new approaches to freshwater management for the rest of this century.

Enabling water solutions can save Canada billions of dollars by preventing damage to infrastructure and ecosystems and reducing disaster payments. Domestically and internationally, water is also a powerful lever for achieving the Sustainable Development Goals (SDGs). It is also important to draw attention to the role of water in equity – and gender equity specifically - around the world.

A UN report *Water in the World We Want*<sup>1</sup>, which presaged the launch of the 2030 UN’s Sustainable Development Agenda in 2015, surveyed ten countries to assess national capacities and needs. Six years later, they are still relevant. They called for harmonised national water policies and enhanced knowledge, information, and data sharing, especially in transboundary contexts. The report also identified capacity needs both within the water sector and within supporting sectors, governments, and the public.

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<sup>1</sup> Schuster-Wallace and Sandford, 2015. Water for the World We Want. UNU and UNOSD. Available at: <https://inweh.unu.edu/water-in-the-world-we-want/>

The report found that Canada is home to water-related research capacity, expertise, technologies, and industries that are key to solving the water crisis and achieving sustainable water management in Canada, but which can also support other nation states to sustainably manage their water resources for the economy, healthy populations, and the environment. Opportunities also exist to export made-in-Canada solutions through trade and international development. Global Water Futures (GWF) is one of many current Canadian examples that demonstrates the water leadership Canada has which can be applied to other regions of the world.

Canada can re-invent itself on the world stage by using what we know about treating and managing water as a vehicle for expanding trade, while at the same time use our expanding expertise to model Canada's diplomatic and international development objectives. Through the increased convening, coordination and implementation capacity of the new Canada Water Agency, Canada will be uniquely poised to contribute to the world in variety of ways, including:

- Centres of excellence in water science and technology for observing, understanding and predicting future changes in water, including new integrated global water modelling.
- Lessons learned from a federal structure for transboundary water management.
- Solutions to addressing Indigenous rights to water in transboundary water management systems that address the UN Declaration on the Rights of Indigenous People.
- Post-secondary education, continuing education and training of water scientists and professionals.
- Approaches to knowledge mobilization for meaningful translation of scientific findings into policy opportunities.
- The example of a century of successful joint management of international North American waters, the Canada-US International Joint Commission, which can be applied to transboundary water management.
- Provision of expertise from top-ranking engineering firms and environmental consultants that can respond to international needs to adapt water infrastructure to address climate change and development issues.
- A coordinated framework that champions Canada's culture of environmental innovation and supports and sells our experiences, skills, capabilities and expertise in the water sector.

As Canada finds solutions to the problems of managing and conserving the ecological integrity of a vast amount of the world's water under rapid climate change, increasing development and with complex international, Indigenous and provincial and territorial interjurisdictional issues, there is the opportunity to share these solutions with other countries. This can make Canada not just a country with one of the largest freshwater reserves, but a country with the best and most extensive freshwater solutions.

In 2018, UN member states committed to a Decade of Action on Water for Sustainable Development to accelerate progress towards water-related SDG targets. The huge strength and moral authority of the global UN system now needs to be cultivated to achieve the goals of the Decade. To that end, GWF has officially launched a [Canada Water Decade portal](#) to provide an opportunity for people in Canada to share resources, ideas, and solutions that they have enacted towards water sustainability both in Canada and in the rest of the world.

## **UNESCO-Canada Cooperation in Water**

**Dr. Shamila Nair-Bedouelle, Assistant Director General for Natural Sciences, UNESCO**

Global progress to date on SDG 6 is alarmingly off track. Today there are 2.2 billion people around the world who still lack drinking water on their premises; 785 million without basic drinking water; and while the population using safely managed sanitation services has increased from 28% in 2000 to 45% in 2017, 4.2 billion people worldwide still lack safe sanitation.

In essence, the United Nations 2030 Agenda for Sustainable Development is a moral, biological and hydrological obligation. The SDGs form an organic whole and water flows through each. In a 2020 UNESCO report<sup>2</sup> water was identified as the climate connector – most climate change impacts are manifest through the water system. Water allows for collaboration and coordination across the majority of the Targets. Therefore, streamlining water into global climate, sustainable development and risk reduction processes is a very important means of connecting the impact of climate change on all the other SDGs.

UNESCO promotes peace through education, culture, science, and communication, and since 1946 has been promoting water cooperation between nations to promote peace. UNESCO's intergovernmental hydrological program (IHP) has at its heart promoting access to the latest science of water, innovation, and modelling to enable water professionals at different levels across the world to acquire the necessary competencies and skills to be able to advise governments on how to manage water effectively for a water secure world.

The UNESCO water family covers 193 member states and aims to promote hydrological knowledge by supporting scientific research programs and building capacities through:

- Highly specialized hydrological committees that advise countries and governments on quality, access, knowledge of water, and understanding projections of water futures.
- A world water assessment program mandated on behalf of the UN water family to produce annually the world water development report looking at trends of water across the world.
- Sixty-five university chairs across the world, recognized for their competencies and expertise in water ranging from flow regimes to global networks on water in arid areas, groundwater resources, and transboundary water cooperation.

The IHP is in the process now of developing the IHP IX 2022-2029 strategy which will focus on scientific research and innovation; bridging the data and innovation gaps; water education in the fourth

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<sup>2</sup> UNESCO, UN-Water, 2020: United Nations World Water Development Report 2020:Water and Climate Change, Paris, UNESCO. Available at <https://en.unesco.org/themes/water-security/wwap/wwdr/2020>

industrial revolution; inclusive water management; and water governance based on the latest science and technology for mitigation, adaptation, and resilience.

UNESCO congratulates the Government of Canada in promoting the Canada Water Agency, and encourages the Agency to collaborate with UNESCO on international cooperation through:

- A new framework-the SDG Accelerator Framework-that brings together all of the UN family to deliver as one and to ensure that every agency is able to contribute its expertise.
- The participation in the UN conference focused on the comprehensive review of the implementation of the International Decade of Action for Water for Sustainable Development in New York in March, 2023.
- An MOU with GWF in regard to its Planetary Water Prediction Initiative to set the international agenda on glacier and high mountain snow and hydrological prediction programs building on successful partnership on The Andean Glacier and Water Atlas, and now in Central Asia. Through the Planetary Water Prediction Initiative, there is further opportunity to collaborate on water equity issues; world water balance and the water resources of the earth; hazard mapping of the glaciers; science policy; and, Indigenous water issues.
- Continuing to support the Recommendation on Open Science to share access to the latest science and technology, data and information which will become one of the biggest contributions in decreasing the knowledge gap.
- A UNESCO-Canada Trust Fund for Water whereby Canada could join other countries and governments such as The Flanders Trust Fund, a multi-partners trust fund for the UNESCO international environmental experts network launched by Italy, and others that bring together like-minded people to promote collaboration, cooperation, and sharing of information.
- UNESCO-Canada international water conferences, science policy outreach and promotion regarding developments in early warning systems, the role of mountains, and the importance of sharing scientific information.

Given the expertise maintained by Canada and its various institutions, UNESCO looks forward to working with Canada moving forward, with a goal of contributing to a water secure world for every child across the world.

## **Canada can Rise to the Challenge**

**The Honourable Bob Rae, Canadian Ambassador to the United Nations**

The combination of a post-COVID world, not just in Canada, but globally, and the growing recognition of the importance of climate change and its impact on fresh water supplies around the world provides is a unique opportunity to bring together what is an extraordinarily rich set of skills and experience, but which thus far have been relatively uncoordinated in Canada.

Canada has an opportunity to organize more effectively than has been possible thus far, and to recognize that the richness of skillsets in Canadian universities, cities, Indigenous communities, and within

provincial and territorial jurisdictions, are not yet sufficiently coordinated to achieve what is necessary in Canada and then to be able to engage much more effectively at the global level.

The federal government needs to, in cooperation with the provinces and territories, harmonize efforts while more actively engaging with the global community on this ever-increasing crisis and challenge. COVID has knocked the world badly off course and deaccelerated the attainment of all the SDGs. This is going to be a challenge for the entire UN system.

Canada has great experience in water management as it relates to international development and the increase in conflicts over water. Canada has developed international regimes on managing international waterways in British Columbia, Manitoba, Saskatchewan, Alberta, Ontario and Québec. In the last five years, Canada has also launched a broad national effort to ensure safe water supplies for the Indigenous people living in Canada, which remains a central challenge interconnected with governance, training, and self-government. There is a lot to learn, but also a lot to teach and share.

The most effective way to achieve this is by creating a Canada Water Agency that can play an important coordinating role in Canada. The idea of the Agency coordinating and working in cooperation with UNESCO is essential in aligning the way Canada perceives itself globally and proper investment here at home and around the world.

Author bios and full recordings of this event, and others in support of the Canada Water Agency, can be found at: <https://gwf.usask.ca/outputs-data/major-outcomes/water-security-4-canada.php>

This webinar is part of the Water Security for Canadians Initiative



Water Security for Canadians

