



**CANADIANS USE
343 LITRES OF
WATER PER
PERSON, PER DAY.**

Down the Drain

It's the land of majestic mountains, lavish terrain and plentiful waters. For Canadians today, their perception of the natural bounty that surrounds them knows no bounds. But in light of recent water contamination tragedies such as Walkerton and North Battleford, Canada's most vital resource is proving that it is not as bountiful – or safe – as it seems. Dr. Karen Bakker, Director of UBC Vancouver's Program on Water Governance, is setting her sights on debunking the myths surrounding the abundance of Canada's water and hoping to incite the need for change in Canadian water governance on both the provincial and federal level.



“WE TEND TO THINK CANADA HAS 20 OR 30 PER CENT OF THE WORLD’S ANNUAL RENEWABLE FRESH WATER SUPPLY. IN FACT, WE HAVE ONLY 6.7 PER CENT.”

Photos > CP Images/Kevin Frayer

frontier: *Why did you establish the Program on Water Governance at UBC?*

Karen Bakker: I set up the Program on Water Governance at UBC to bridge the gap between academia, policy-makers and practitioners. That means we focus not only on basic academic research but also on translating what is most innovative about that research beyond the university – to industry, government and civil society. It is the only water-related program I know of in Canada which links people doing basic research to people dedicated to translating that research to applied innovation that can be taken up beyond the university – policy makers, water managers, government officials. I don’t think our model is innovative for the university sector as a whole but it is unique to the water management community. A lot of the water research that has gone on in Canada has been fragmented and has not been directed on governance issues.

f: *Why is water research in Canada so fragmented?*

KB: Water by its nature is something that affects a variety of different users and communities. For example in Canada, 19 federal departments have some responsibility for water issues. That kind of fragmentation is mimicked in universities – where water research is often carried out in up to a dozen different departments. One of the first things we did in the Program on Water Governance was to create a directory of people who are working on water issues at UBC. Because water has so many facets and so many different uses from the microbiological to the macro issues, you go from biomedicine to civil engineering to history, politics and geography. When the research is done, we tend to transmit the results but there is barely any communication with end users that might enable them

to make the links (which are critical to safe water) between different types of research results. So our program tries to play an integrating role.

f: *You recently published the book *Eau Canada: The Future of Canada’s Water*. What has been the feedback?*

KB: Canadians tend to assume that we’re gentle, kind and good stewards of the environment. We assume that our water is abundant and not threatened. The arguments from this book lay out some pretty strong evidence to contradict those myths. Water is much more scarce than Canadians believe it to be, its quality is much more threatened than we understand it to be and we’ve done a poor job of managing our water resources. The response to that message has been one of concern but also support for the final message of the book. We’ve received feedback and messages of support from federal and provincial politicians, senior water managers and many water managers and non-governmental organizations (NGOs).

f: *What is Canada’s policy on water governance?*

KB: There is no policy on water governance per se. The federal government has water legislation, the Canada Water Act of 1970, and has a water policy which was last updated in the 1980s. This lack of attention is a huge problem because many new issues have come to the forefront since the 1980s. Because there is very little information sharing across the provinces, we have one of the weakest, most fragmented approaches to water quality governance of all developed countries with predictable outcomes: a very high number of water boil advisories in BC every year and incidences like Walkerton and North Battleford. This lack of a coherent approach to water governance in Canada is at the root of the problem.

f: *What is one thing people should know about water governance in Canada?*

KB: Water in Canada is not abundant. We tend to think Canada has 20 or 30 per cent of the world’s annual renewable fresh water supply when in fact; we have only 6.7 per cent, most of which is in northern Canada and far away from centres of population. Much of the southern parts of Canada, where most Canadians live, are significantly drier than the continental US. The US has the same amount of annual renewable fresh water as we do.

f: *Is there a global water crisis?*

KB: You often hear statistics that one billion people do not have access to sufficient amounts of safe water in the world. This is true. But the causes can usually be found in the water management framework that has been adopted. It is not a scarcity problem; it is a problem of competent management and appropriate governance. Most of these problems are of our own making and entirely within our control. There is no global water crisis but there are localized water crises and some of them are here in Canada but the solutions aren’t as far off as the term global water crisis might make you think.

f: *Why should the public care about water governance issues?*

KB: Healthy water is at the heart of healthy communities. If you don’t have healthy water, you don’t have healthy people and you don’t have healthy environments in which people live, work and gain both economic and spiritual benefits. Because water seems to be so abundant in Canada, we tend not to worry about it and assume it’s there for us. But it is already negatively affecting our health in some communities, and this is likely to worsen given increasing demand and also threats to supply, such as climate change.

f: *What can we do collectively or as individuals to help conserve water?*

KB: Personal action on water stewardship doesn’t only mean turning off the tap when you brush your teeth. It also means thinking very carefully about the ways you use water and how you dispose of things into the aquatic environment. Think of yourself as a source for pollutants that go into the environment and try to limit those pollutants, in addition to conserving water. Collectively, pressure on federal and provincial governments – directly or via NGO campaigns such as those being led by the Council of Canadians and Sierra Club – is a really important means of attempting to get water back on the political agenda. Provincial governments are doing what they can in their areas of responsibility but without some kind of broader coordination and federal action, those efforts are limited.

f: *What interests you about your research?*

KB: The endless variety and diversity of approaches to water management in the world. I do a lot of work in developing countries and the often ingenious ways people have come up with dealing with water management issues always remains a source of fascination.

Dr. Karen Bakker is an Associate Professor in UBC’s Department of Geography and Director of UBC’s Program on Water Governance where she regularly acts as a consultant to governments, NGOs and international development organizations. She has received funding from the Social Sciences and Humanities Research Council (SSHRC), the Canadian Water Network, the UBC Hampton Fund, Infrastructure Canada, the Walter and Duncan Gordon Foundation, the British Academy and the European Union for her research. ■