Program Overview

The Program on Water Governance (PoWG) conducts cutting-edge research and fosters dialogue on water policy with communities and decision-makers. The Program is co-hosted by the University of British Columbia’s Department of Geography, and the Institute for Resources, Environment, and Sustainability (IRES).

Who We Are
Dr. Karen Bakker, the Director of PoWG, is a Professor in the Department of Geography and an Associate of IRES. She holds a Canada Research Chair in Political Ecology.

Dr. Leila Harris, the Associate Director of PoWG, is an Assistant Professor in IRES and the Institute for Gender, Race, Sexuality and Social Justice, and a Faculty Associate in the Department of Geography.

Gemma Dunn is a Research Associate and Policy Outreach Coordinator with the Program on Water Governance.

In 2011, the PoWG research group included 4 Masters students, 3 PhD students, 2 post docs, a research associate and a research assistant. (http://www.watergovernance.ca/about-us/powg-team/)

Activities
The Program’s activities reflect its outreach-focused mandate. The Program regularly sponsors academic conferences and workshops, to which senior academics and policy makers are invited. PoWG publications include Working Papers, Briefing Notes, and Newsletters, all of which are available on our website: www.watergovernance.ca. Additional resources (such as interactive maps and databases) are also housed on the website. The PoWG provides its research materials free of charge.
Ongoing debates over water quality and safety in Canada and abroad were the focus of much debate this year. In Canada, flooding in Manitoba, increasingly heated debate over hydro-fracking, and continuing concerns about water quality on First Nations reserves, were some of the top water news stories of the year. Debate heated up over the C.D. Howe Institute’s February 2011 report, which warned that Canada’s approach to drinking water management is fragmented and makes smaller communities vulnerable to future water-quality failures. The Institute’s report argued that the key to reducing vulnerability isn’t technology, but rather training, resources, and adequate pay for professional managers. We would agree—and add a call for effective regulation, monitoring, and enforcement—based on our ongoing research into water security assessment, some of the results of which were published this year, as discussed below. In more international news, issues related to the human right to water, extending water access to underserved communities, and ongoing privatization of water provision remain key concerns. Our research in Latin America, Africa and the Middle East directly tackles these questions. With the 2015 target for the Millennium Development Goals nearing, underserved communities, and ongoing privatization of water provision remain key concerns. It is our goal to further develop the international agenda of the PoWG over the next two years, and we look forward to engaging with our network on these and other topics in the future.
PoWG Announcement:
Dr. Leila Harris as Associate Director of the Program on Water Governance

It is our pleasure to announce the appointment of Dr. Leila Harris as Associate Director of the Program on Water Governance. Dr. Harris brings a wealth of international, interdisciplinary research experience on water, gender, and the environment. We look forward to her playing a leading role in the Program’s international work. Welcome, Leila!

Leila Harris is currently Assistant Professor with the Institute of Environment, Resources, and Sustainability, and the Centre for Women’s and Gender Studies at the University of British Columbia. Her work examines social, cultural and political economic dimensions of environmental and resource issues, especially in developing contexts. She comes to the Program on Water Governance with long held interest in water politics and governance, with much of her earlier work highlighting water politics, use, and access associated with large-scale transformations of the upper Tigris-Euphrates basin as part of Turkey’s GAP project. Leila has analyzed a range of issues linked to these ongoing changes, from gender and ethnic inequalities in relation to water use and access, to scalar narratives, to linkages between water-related development and state building in the politically marginalized southeastern Anatolia region. With respect to water governance, she is interested in comparative evaluation of recent water governance trends across sites, from democratized water governance, to privatization and commodification trends, with particular interest in these processes in South Africa, Ghana and Turkey. Leila is also working with students with funding from SSHRC, UBC’s Bridge program, and other sources, on issues such as comparative water governance in Africa; multiple use water in Bolivia; gender and wastewater management in Buenos Aires; and gender and fisheries in the Philippines.
Water supply privatization was emblematic of the neoliberal turn in development policy in the 1990s. Proponents argued that the private sector could provide better services at lower costs than governments; opponents questioned the risks involved in delegating control over a life-sustaining resource to for-profit companies. Private-sector activity was most concentrated—and contested—in large cities in developing countries, where the widespread lack of access to networked water supplies was characterized as a global crisis.

In *Privatizing Water: Governance Failure and the World’s Urban Water Crisis*, Karen Bakker focuses on three questions: Why did privatization emerge as a preferred alternative for managing urban water supply? Can privatization fulfill its proponents’ expectations, particularly with respect to water supply to the urban poor? And, given the apparent shortcomings of both privatization and conventional approaches to government provision, what are the alternatives?

In answering these questions, Bakker engages with broader debates over the role of the private sector in development, the role of urban communities in the provision of “public” services, and the governance of public goods. She introduces the concept of “governance failure” as a means of exploring the limitations facing both private companies and governments. Critically examining a range of issues—including the transnational struggle over the human right to water, the “commons” as a water-supply-management strategy, and the environmental dimensions of water privatization—Privatizing Water is a balanced exploration of a critical issue that affects billions of people around the world.

*Privatizing Water* has been awarded the Urban Affairs Association Annual Book Award (Honorable Mention) and the SPE-Rik Davidson Studies in Political Economy Book Prize.
Water Security Project

Defining Water Security

In 2008, the Canadian Water Network (CWN) awarded Dr. Karen Bakker (UBC) and Dr. Diana Allen (SFU) a four-year grant to lead a team of researchers from 8 Canadian universities, and 20 project partners from across Canada, on a project to improve water security in Canada. The overall objective of the project is to create tools for communities to improve water security in Canada and improve governance for source protection and land use.

Water security is an emerging concept, which has gained increasing attention over the past five years. For example, in 2009, the World Economic Forum described water security as “the gossamer that links together the web of food, energy, climate, economic growth and human security challenges that the world economy faces over the next two decades” (World Economic Forum 2009).

We define water security as “sustainable access on a watershed basis to adequate quantities of water, of acceptable quality, to ensure human and ecosystem health”. This definition sets baseline requirements for water resources management in a watershed on a continuous basis; there must be access to adequate quantities of acceptable quality of water for both humans and the environment.

Water security is an overarching conceptual framework that articulates the desirability of balancing competing land and water-use practices. It takes a broad look at all demands placed upon
a watershed, including quality, quantity (including climate change and allocation), aquatic ecosystem health, human health, risk and adaptive governance. Water security demands a greater priority for water. As such, it is a broad concept of integrated water management that balances resource protection and resource use. It is important to measure water security because this approach examines the watershed as a whole. Setting a goal of water security could enable decision-makers to effectively assess and mediate between conflicting demands for water use and minimize potentially adverse impacts from land and water management practices.

Canada is not alone in dealing with water quality and water quantity concerns. Water, by its very nature, presents managers with three issues that are difficult to resolve: (1) competition between users of water resources; (2) vertical coordination of the multiple levels at which water is used and managed; and (3) the mismatch between geopolitical and administrative boundaries, on the one hand, and hydrological boundaries on the other. These issues flow, in part, from the fact that water is a multi-purpose resource, with multiple sets of users operating at different scales. In turn, this creates competing uses and diverse views of stakeholders within the policy debate.

This project has been developed in two case study communities: the Grand River Conservation Authority, Ontario and the Township of Langley, British Columbia. In addition to numerous project related journal publications and conference presentations, the team has made knowledge translation a key priority to ensure that the research benefits water managers, policy makers and community watershed groups. We introduced the concept of water security to a broad public audience through the publication Water Security: A Primer (2010) http://www.watergovernance.ca/wp-content/uploads/2010/04/WaterSecurityPrimer20101.pdf and Water Security Briefing Note (2011). The research project culminates in the Water Security Guidance Document published in March 2012 http://www.watergovernance.ca/projects/water-security/water-security-manual-2/. For further information, including a complete list of the project publications, please visit the project website: www.watersecurity.ca
As a research organization, PoWG is engaged in wider academic dialogues on water governance through book chapters and peer reviewed journal articles. The following articles and chapters were published in 2011 and address issues relating to our central research streams: Water in Canada, Water Security, US-Canada Transboundary Water, Water & Development, and Water Privitization.

**Academic Publications**

**Articles and Book Chapters**


Outreach is a critical part of the Program on Water Governance mandate. Accordingly the PoWG team works to disseminate our research results, raising awareness of water governance issues in Canada through workshops, events and various public speaking engagements.

Policy Publications


Water Security Project Presentations


Presentations & Speaking Engagements

The following list highlights key speaking engagements and presentations by PoWG team members in 2011.


AAG Conference Sessions, April 2011

Emma Norman, Christina Cook, and Karen Bakker hosted 3 sessions on Water governance and the politics of scale: A critical examination of water governance in a multi-scalar environment at the AAG annual meeting on Thursday April 14th 2011 in Seattle, WA.

The very well-attended special session brought together the discussions of “politics of scale” and “governance” to offer a more nuanced approach to governing flow resources such as water. The presenters explored how we might forge new research directions that address questions regarding governance of flow resources, such as water, and the politics of scale.


World Water Day March 2011

In March 2011, Dr. Karen Bakker made several media appearances to mark UN World Water Day:

March 18, 2011
CKNW “The World Today”
hosted by Jon McComb

March 20, 2011
Radio Canada, Television
Interview (in French)

MP Breakfast Connections: Joyce Murray, Member of Parliament for Vancouver Quadra

On January 28th 2011, Dr. Karen Bakker was the guest speaker at “MP Breakfast Connections: the Most Important Meal of the Month” with Joyce Murray (MP for Vancouver Quadra). Karen presented “Five Myths About Canada’s Water”.

Photo: Joyce Murray, MP (left) and Dr. Karen Bakker (right)

http://www.flickr.com/photos/mpjoycemurray/sets/72157625925838828/with/5396353738/


**Research Team**

Karen Bakker (Ph.D. Oxford, B.A.&Sc. McMaster University) is a Professor in the Department of Geography, a Canada Research Chair, and the Director of the Program on Water Governance at the University of British Columbia.

Committed to interdisciplinarity, Dr Bakker collaborates with natural, social and medical scientists across a range of disciplines. Her current research focuses on water governance, the political economy of environmental change, and environmental politics. She has published research in geography, urban studies, development studies, and environmental studies, as well as water specialist journals. Dr Bakker also regularly acts as an advisor to governments, NGOs, and international organizations.

Dr Bakker is the recipient of numerous awards, including a Rhodes Scholarship and a Canada’s Top 40 under 40 award.
Alice Cohen joined PoWG in 2006 as a Masters student. She completed her M.A. in 2007, and subsequently her Ph.D. in Resource Management and Environmental Studies at the Program on Water Governance in December 2011. Her dissertation, entitled *From Water to Watershed* focused on rescaled water governance initiatives in Canada. Alice is a former Gordon Foundation water policy fellow, and during her time at UBC was a scholar in the Liu Scholar Program. Prior to her graduate work, Alice completed a B.A. (hon) at McGill University in international development and political science.

She is currently a SSHRC postdoctoral fellow in the geography department at Clark University in Worcester, Massachusetts where she continues her work under the supervision of Dr. James McCarthy on the relationships between water and boundaries of all kinds (political, hydrologic, and social). Alice remains connected to the PoWG in her capacity as co-editor of *Water Without Borders*.

Christina Cook joined PoWG in 2007 where she has worked on the “Water Security” and the “Water in Canada” projects.

Christina completed her Ph.D. in Resource Management and Environmental Studies in December 2011. Her dissertation, entitled *Putting the pieces together: Tracing jurisdictional fragmentation in Ontario water governance*, examined the challenges of jurisdictional fragmentation and multi-level governance in water. Prior to commencing her doctoral studies, Christina practiced law at a large full service western Canadian firm and worked in project finance in the resources sector in the Middle East.

Currently a Research Associate in the Faculty of Medicine, Department of Pathology at UBC, Christina works at the BC Centre for Disease Control on an interdisciplinary project regarding the development and regulation of molecular tests for microbial water quality.
Gemma Dunn joined PoWG in 2008 as a research associate and the policy outreach coordinator for the CWN funded water security project. Her research includes developing the first Canadian inventory of fresh water-related indicators; and the design, development and testing of the Water Security Status Indicators (WSSI) assessment method. Gemma is currently researching the variation in uptake of drinking water guidelines across the Canadian provinces and territories.

Leila Harris (PhD and MA Geography, University of Minnesota-Twin Cities, BA University of California-Berkeley) is an Assistant Professor with the Institute for Resources, Environment, and Sustainability (IRES) and the Center for Women’s and Gender Studies (CWAGS) at UBC.

Her current research focuses on the intersection of environmental issues and inequality / social difference (especially gender and ethnicity), water governance (particularly issues associated with ongoing neoliberalization shifts), and water politics and conflict (particularly in the Middle East and Turkey).

Related to water governance and politics, she is particularly interested in gender dimensions of recent water governance shifts (Gender, Place, and Culture, 2009), differential effects of water related changes for different populations (e.g. World Development, 2008) and across Northern and Southern contexts (review in Annals 2009), issues of scalar politics related to water resources (e.g. Political Geography, 2010), and narrative and discursive dimensions of water-related changes (e.g. Local Environment, 2009). Her new project also investigates privatization and commodification of water governance shifts comparatively, in Turkey, Ghana and South Africa, with particular attention to narrative, identity, citizenship, and sense of belonging in relation to varied geographies of water access and changing water governance practices.

Helen Lui, a senior undergraduate student at the University of British Columbia, joined PoWG in January 2011 as a research assistant. Having completed an English language major, she is currently pursuing a second major in Geography in the Environment and Sustainability program. She is currently researching issues related to water quality, governance and enforcement in Canada.
Andrea Marston is a Master’s student in Geography. Her M.A. research examines community water governance in peri-urban Cochabamba, Bolivia, looking specifically at the friction between supposedly post-neoliberal politics and actually existing governance practices. Andrea is also continuing a research project that she began as an undergraduate that examines certification processes for Fair Trade crafts in relation to the needs and resources of rural craftswomen in Latin America. Andrea graduated from Duke University in 2009 with a B.A. (Hon) in International Comparative Studies and Environmental Science and Policy. Her past research experience has taken her to Panama, Mexico, Ecuador, and Argentina, and has focused mostly on craft-based livelihoods and gendered resource access.

In September 2012, Andrea will be starting her PhD in Geography at the University of California at Berkeley, where she was awarded a five-year Berkeley Fellowship. For her doctoral studies, she will be turning her attention to the relationship between water governance and mining cooperatives in Bolivia.

Cynthia Morinville is a Master’s student working with Dr Leila Harris at the Institute for Resource, Environment and Sustainability. Her research looks into water governance at the community level in urban Accra, Ghana. More specifically, she is looking at underserved communities’ engagement, participation and negotiation around water access; as well as implications for questions of citizenship and democracy.

Cynthia holds a Bachelor of Arts with a double major in Environmental Studies and International Studies from York University (2009), as well as a Certificate in Communication and Media Studies from Université du Québec à Montréal (2010).

Dr. Maria Cecilia Roa Garcia is a post-doctoral researcher studying the way in which the principles of equity and efficiency permeate water policies and regulations in five Andean countries: Bolivia, Chile, Colombia, Ecuador and Peru; in what practical ways they are sought after, what evidence there is of their fulfillment, and whether there is enough information to monitor their performance. With an inter-disciplinary background, BSc in Industrial Engineering (Universidad Javeriana), a MSc in Development Studies (London School of Economics) and a PhD in Resource
Dr. Norman was a postdoctoral fellow with the Program on Water Governance from 2009-2011; in addition she was affiliated with PoWG as a doctoral student with the Geography Department at UBC (2003-2009). She is currently a faculty member at Northwest Indian College in Bellingham, Washington (US), where she teaches courses in environmental governance and policy. Her research interests are at the nexus of environmental and political geography, with a particular interest in water governance, border studies, and environmental justice issues.

Dr. Norman has published in a wide range of journals including the *Annals of the Association of American Geography*, *Geoforum*, and the *Canadian Water Resources Journal*. Beyond academe, she has written numerous policy reports, briefing papers, and book chapters that aim to translate her research to a wider audience. A current project is the co-edited volume, *Water without Borders?: Canada, the U.S. and Shared Waters* (aimed for publication in 2012 with University of Toronto Press). In addition, she recently co-edited a special issue of the journal *Water Alternatives* (http://www.water-alternatives.org/index.php?option=com_content&task=view&id=19&Itemid=27) on water governance and the politics of scale.

In addition to her work on Canada-U.S. water issues, Dr. Norman has a diverse range of experience working with international resource issues. Examples of previous projects include: investigating the role of civil society at the Johannesburg World Summit on Sustainable Development; assessing the community health impacts of the flower industry in rural Ecuador; and working in Malawi as an environmental educator through the U.S. Peace Corps.
Lyudmila (Lucy) Rodina is a Masters student, working with Dr. Leila Harris on water governance and the human right to water in South Africa. She has a BA in International Relations from the University of British Columbia (2010).

Before starting her Masters, Lucy was involved in a development project in Nepal. In 2010, during two volunteer trips, she worked with a local village development committee in Lahachawk, Nepal, in building irrigation canals and shaping strategies for future water development projects. Currently, Lucy is a Steering Committee member of the International Development Research Network at UBC and a member of the EDGES research collaborative.

Lucy’s research is focused on the lived experiences of residents of informal settlements in Cape Town with policies that realize the human right to water. In addition, she is interested in investigating the engagement of these communities with formal and informal water governance.

Having graduated in 2004 from the University of Manchester (UK) with a geography degree (BA Hons), Julian Yates worked in the international development sector for the UK-based international NGOs of Practical Action and the International HIV/AIDS Alliance. He followed this by completing an MA in geography at the University of Victoria, and working as a research assistant for the Participatory Sustainable Waste Management project. Most recently, Julian carried out research for Practical Action in relation to livelihood adaptation to climate change in rural Nepal. At UBC, Julian will be working with Dr. Karen Bakker on issues of resource governance in Latin America, paying particular attention to the ways in which indigenous rural communities in the Andes are adapting their livelihoods and resource-management regimes in response to changing governance contexts.
Ongoing Advisory Roles

The PoWG team members also serve in a variety of advisory roles, including the National Round Table on Environment and Economy, the United Nations Office of the High Commissioner for Human Rights and Environment Canada. These advisory roles are an essential part of fulfilling our mandate, which is to support informed public debate over water resources in Canada and around the world.

Karen Bakker
- Federal - National Round Table on the Environment and the Economy
- International - Department for International Development: Member, Stakeholder Group, Water Advisory Review
- Senior Editor, WIRES Water (a new, interdisciplinary water journal created by Wiley)

Alice Cohen
- Federal - National Round Table on the Environment and the Economy
- National - Contributor to online policy database at www.waterpolicy.ca

Christina Cook
- National - Canadian Water Resources Association- Canada-Wide Water Strategy working group (2010-2011)
- National – SFU Adaptation to Climate Change Team, water governance working group

Gemma Dunn
- Federal - Member of Environment Canada’s Water Availability Indicator (WAI) Interdepartmental Working Group (2010 – ongoing)
- Federal - Provided advice on fresh-water indicators to National Round Table on the Environment and the Economy Water Use Round Table (2010-2011)

Leila Harris

Emma Norman
- Regional - Canada West Foundation’s Richardson Roundtable Policy Forum on Water Governance. Panelist, Victoria, BC (March 2011)
Awards

Dr. Karen Bakker awarded “Top 40 Under 40”
In April 2011, Karen Bakker was awarded one of the Canada’s “Top 40 Under 40” awards – she is one of the only social scientists ever to receive this award! Since 1995, Canada’s Top 40 Under 40 recognizes the best and the brightest in Canadian Business and Social Services from coast to coast. She was also named a “Water Champion” by Water’s Next, in the ‘People’ category (2012).

Alice Cohen received a postdoctoral fellowship from the Social Sciences and Humanities Research Council (SSHRC); she is currently working with Dr. James McCarthy at Clark University on questions relating to the rescaling of environmental governance.

Corin de Freitas received a University of British Columbia Koerner Affiliated Fellowship and the Walter W. Jeffrey Memorial Scholarship.

Leila Harris was awarded an Early Career Fellowship at the Peter Wall Institute for Advanced Studies, UBC.

Andrea Marston received the SSHRC Joseph-Armand Bombardier Canada Graduate Scholarship.

Cynthia Morinville received the SSHRC Joseph-Armand Bombardier Canada Graduate Scholarship, as well as the Tri-Council Michael Smith Foreign Study Supplement Canada Graduate Scholarship.

Emma Norman was named a finalist for the (2011) Nystrom Paper Competition at the Association of American Geographers for her paper: “Governing the Salish Sea U’wq “United”: Cultural Politics in Transboundary Water Governance.”

María Cecilia Roa-García received a postdoctoral fellowship from the Social Sciences and Humanities Research Council (SSHRC) to compare the principles of equity and efficiency in water allocation in five of the Andean countries (working with Leila Harris). Along with her team in Colombia, María Cecilia Roa-García also initiated in January 2011 a research project funded by the International Development Research Centre (IDRC) to investigate the role of multi-scale water governance in climate change adaptation of rural communities. Progress can be seen at: http://www.landfood.ubc.ca/swc/projects/ACCCR/

Julian Yates received the tri-council Vanier Canada Graduate Scholarship, as well as the Izaak Walton Killam Memorial Doctoral Fellowship (latter in name only, due to Vanier CGS). At the annual conference of the Association of American Geographers, he won the Cultural and Political Ecology (CAPE) specialty group Outstanding Student Paper Award and the Gary Gaille Travel Award from the Development Geography Specialty Group (DGSG).
Workshops

May 16, 2011 – Water Without Borders?
Canada, the U.S. and Shared Waters Authors Workshop

In May 2011, the Program on Water Governance hosted a workshop on Transboundary Water at UBC. This workshop is part of a broader project entitled Water Without Borders? Canada, the U.S. and Shared Waters, which brings together cutting-edge scholars and practitioners working on Canada-US transboundary water issues. The end result of the project is a book, co-edited by Drs. Emma Norman, Alice Cohen, and Karen Bakker, to be published by the University of Toronto Press in late 2012.

The May 2011 workshop brought together chapter authors to share their writing and expertise with each other and with key decision-makers on either side of the border. The editors and authors are currently creating policy briefs based on the chapters, which are scheduled for release in spring 2012. Many thanks go to the Walter and Duncan Gordon foundation for their ongoing support of this project.
Policy reports

*Water Security Guidance Document*
Release date: March 2012

The Water Security Guidance Document is the final product of the four-year (2008-2012) Water Security project. This free document has been developed for small communities to assess risk to water security in their watershed, but many of the concepts and issues are applicable at larger scales. The Water Security Guidance Document contains a broad range of information for both experts and non-experts. The *Water Security Guidance Document*:

i) defines the concept of water security, and document multiple perspectives on this concept (Part I)

ii) presents methods for small water system managers to assess potential risks to water security (Part II)

iii) presents possible responses to these risks, focusing on governance-based strategies (Part III)

Books

Release date: Late 2012

For more information refer to “workshop” section in this report.

Book Chapters


Articles


Thank You to our Funders

PoWG research activities are made possible through the generous support of our funders. We would particularly like to thank Canadian Water Network (CWN), Walter and Duncan Gordon Foundation (GF), Social Sciences and Humanities Research Council of Canada (SSHRC) and the Center for International Governance Innovation (CIGI) for their generosity and continued support.

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