

Watershed Governance Concept Backgrounder
Water Sustainability Project
University of Victoria -- POLIS Project on Ecological Governance

By Oliver M Brandes¹
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“Water will become Canada’s foremost ecological crisis early in this century”²

Background

In Canada, as in much of the world, the era of virtually unlimited water supply is ending. Water supply issues are generating concern across the country. In recent years people from various sectors and disciplines and across the decision-making spectrum are beginning to pay attention and to mobilize.

This attention stems from an emerging understanding of the complex interconnections between water and almost every other major issue of the day, including energy, climate, economic development, environmental health, peace and security. In this current period, whether water is viewed as part of a shared cultural identity, a fundamental human right, a central focus of our landscape or an essential part of our economic well-being, water is increasingly recognized as a critical part of Canadian society.

Opportunities to have lasting impacts on water governance in Canada are now emerging. An appetite for solutions and a demand for water security are mounting. Factors such as continued aquatic ecosystem degradation, climate change, regional water scarcity and increasing water demands driven by population and economic growth will only increase the urgency. This emerging understanding that better water governance is critically needed to entrench robust and beneficial options complements the search for solutions.

Current water policy opportunities

Over the years, interest in water policy and governance in Canada has ebbed and flowed. The mid 1980s with the federal water review and the establishment of the federal water policy remains the most recent high-water mark of interest. The 1990s, on the other hand, can be characterized as a period of reduced attention to water-related issues (some might even suggest neglect) and a significant retreat in emphasis and resources by senior government. Currently, interest in water as an important political and strategic resource is once again on the rise.

Efforts to modernize water management and policy, especially at the community and provincial level are becoming increasingly evident, such as Alberta’s *Water for Life Strategy*

¹ Senior Research Associate and Water Sustainability Project Leader – POLIS Project on Ecological Governance, University of Victoria, British Columbia. Website www.waterdsm.org Email omb@uvic.ca Tel 250 721 8193.

² Schindler, D. “The cumulative effects of climate warming and other human stresses on Canadian freshwaters in the new millennium,” *Canadian Journal of Fisheries and Aquatic Science*, 58 (2001): 18-29.

and Ontario's new water source protection regime. These developments suggest a trend toward a more distributed form of water governance where government, civil society and private interests collectively play a significant role in decision making.

With this renewed focus on water comes an opportunity to address critical issues of water governance in Canada. Water policy windows are opening and significant interest exists to address emerging challenges such as transboundary and interjurisdictional fragmentation, water allocation in the face of scarcity and ecologically sustainable water management. Opportunities to begin experimenting with different styles of decision making that embrace this more distributed form of governance are also becoming apparent.

Senior governments are grappling with the institutional and legal mechanisms to begin addressing a new paradigm of water management – a paradigm that is less about managing ecosystems and promoting endless supply expansion to one that emphasizes designing with nature, managing demand, and decision making situated at the watershed scale and that involves broader societal participation.

Most senior governments have only just begun many of the reforms needed to implement effective water management in the 21st century. Learning from and adapting the experiences of other Canadian and international jurisdictions can provide useful models to effectively influence the current process of water policy modernization. However, moving away from the historical default position of crisis management toward a more proactive focus on water governance and sustainable water management requires considerable effort.

About The POLIS Project on Ecological Governance

The POLIS Project on Ecological Governance was established in the year 2000, with a mission to cultivate ecological governance through innovative research and policy advocacy. As an organization, it consolidates the diverse research projects being conducted under the auspices of the Eco-Research Chair of Environmental Law and Policy since 1995.

The POLIS Project on Ecological Governance seeks to discover and implement solutions to pressing issues than can build healthy and sustainable communities. Among the many research centres investigating and promoting sustainability worldwide, POLIS is unique in its focus on multidisciplinary research and action – a successful blend of academic research and community engagement.

Water Sustainability Project at POLIS

To tackle some of these identified water concerns and help steer Canadian water policy onto a more sustainable path, The POLIS Project on Ecological Governance at the University of Victoria, initiated the Water Sustainability Project (WSP) in 2003 (originally launched as the Urban Water Demand Management Project). Since its inception, the WSP has developed a strong reputation for informed policy development on urban water management and gained recognition as a source for innovative water management alternatives. The Eco-Research Chair is committed to maintaining the WSP as a part of its ongoing research and advocacy focus. The initial goal is to develop a comprehensive legal and policy framework for sustainable water management including detailed action plans for federal, provincial, municipal and aboriginal governments, and enhanced civil society engagement.

Overall project objectives:

1. To craft innovative governance options that promote sustainable water management, including the specific exploration and implementation of “watershed governance” as an alternative to current more centralized, hierarchical and sectoral approaches to water governance in Canada;
2. To develop policy decision-making tools that promote sustainable water resource management, long-term integrative community-based planning, and regulatory mechanisms (including legal and institutional reform) to enable ecologically-based water allocations;
3. To create a national network of experts and others interested in the new paradigm of sustainable water management to contribute to and use these models as practical tools for policy and institutional change;
4. To continue to examine urban and emerging water issues in Canada, including a survey of “best practices” in demand-side management (DSM) both in Canada and abroad; and,
5. To increase public awareness around the importance, and limits, of water in Canada, thereby ensuring that the above happens as part of a larger cultural change.

The foundation of research

The water project team has researched and published four in-depth reports on demand management for urban water (all available at www.waterdsm.org). The first two reports (*Flushing the Future?* and *What the Experts Think*) laid out the examination and diagnosis of Canada’s ailing urban water management system. *The Future in Every Drop*, the third report, provides the prescription – practical action plans for all levels of government to implement demand management for urban water in Canada.

The fourth report, *At a Watershed: Ecological Governance and Sustainable Water Management in Canada* represents the culmination of this substantive research. This report has been the foundation of a variety of spin off efforts, including conferences, workshops and two other more applied POLIS publications (*The Soft Path for Water in a Nutshell* and *Thinking Beyond Pumps and Pipes*). Although *At a Watershed* further develops the action plans for the federal and provincial governments proposed in Report 3, it also goes beyond the urban water focus to seed the emerging concept of “watershed governance” and specifically addresses how these action plans can be implemented through new “ecological governance” regimes.

Watershed Governance: Introduction and concept

The water project at POLIS evolved beyond its original urban water demand management focus. The need for a deeper perspective on the emerging challenges to enable a sustainable water management paradigm has been revealed through the research, network development and advocacy efforts. This institutional learning has emphasized an important niche for the POLIS water project in exploring the kinds of institutional and governance reforms needed to begin the transition from society’s historically hierarchical, centralized and “man over nature” approach.

Originally tasked with “changing the frame of the water management debate” – moving from an exclusively supply-side engineering management focus to one that embraces decentralization and increased efficiency and conservation (a demand focus) – the water

project has specifically identified the critical role that senior government and broader pillars of governance, such as civil society, agriculture, business and industry, play in creating the environment that enhances (and embeds) a water conservation paradigm.

Watershed governance is an emerging field of action research and has evolved from this initial work. It specifically emphasizes attention to important questions of governance when considering integrated water resource management. Watershed governance addresses issues such as institutional and legal reform to re-invigorate the role of government – transforming governments from top-down managers to facilitators of local action in the context of a broader public trust. Watershed governance specifically recognizes the critical importance of civil society as key facilitator of change and innovation.

Watershed governance embraces the idea that the watershed is the starting point for sustainable water management – addressing the challenges of integration and holistic resource management at the watershed scale. In this context, watershed governance addresses four specific themes that have significant policy implications:

1. ***A new view of water infrastructure*** – that goes beyond the physical infrastructure of concrete and steel and moves along a spectrum of water management to include a focus on decentralized technologies, pricing and “social infrastructure” such as citizen engagement, long-term water-centric planning and managing demand as core water management functions;
2. ***Conservation as a foundation for water management*** – requires that limits are established and ecosystems are recognized as legitimate “users” of finite water resources, and that water is recognized as a critical public good;
3. ***Moving from ecosystem management to ecosystem-based management*** – entails starting “at the source” by investigating why (and how) current approaches to water allocation (including groundwater) must evolve to address scarcity, uncertainty and complexity inherent in natural systems, and must protect ecosystems to ensure lasting social and economic prosperity; and,
4. ***Governance and institutions that integrate at the watershed scale*** – help balance conflicting values, interests and priorities about water management and require that water governance progress beyond fragmented sectoral approaches. This progression necessitates that effective institutions and “good” governance – including transparency, accountability and protection of the broad public interest – are situated at an appropriate social and ecological scale.

Watershed governance is an ecosystem specific manifestation of the broader concept of ***ecological governance***. It encompasses the institutional and legal shift toward ecologically based water allocations, ecosystem-based land and water use decisions, comprehensive demand management and soft path approaches. And it promotes nested and holistic watershed planning and decision-making frameworks. The overarching goal of watershed governance is to provide alternatives and opportunities in the current landscape of water governance in Canada. As an applied concept, it can help guide senior government in their efforts to develop water sustainability – through institutional, legal and governance reform.