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Investing in Sustainability for Canadian Watersheds

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Despite being one of the few relatively water rich nations of the world, Canada's freshwater resources are under threat from many sides. Pollution, wasteful habits, poor management, increasing urbanization and the looming spectre of climate change conspire to create scarcity.

According to Environment Canada, one in four Canadian cities has reported recent water shortages.

Water quantity – not necessarily quality – is the issue in many communities. Yet, despite growing concern, action is taken only when a crisis forces the issue. Conservation efforts are ad hoc and short-term, not resolving the long-term "unsustainability" of Canadian water use..

To effectively change societal attitudes and instill a Canadian "water ethic," the federal government must take the lead. Working with other levels of government and involving all stakeholders, they can initiate a fundamental shift in water management – from an approach that continues seeking supply to one that sees conservation as the best source of "new" water.

At a Watershed

Canada stands at watershed concerning freshwater management. And it's only by "thinking like a watershed" that sustainable water management will become a reality. This means securing the long-term health of local ecosystems with a clear national strategy that makes ecosystem health a central consideration in all decision making.

In some parts of the country, municipalities facing water shortages are taking aggressive measures to secure supplies. Fear of an arid future is beginning to wake Canadians up. But the myth of abundance runs deep in our nation's consciousness and is reinforced by low water prices, lack of public awareness and insufficient long-term planning. Ineffective policies and regulations ensure the status quo and contribute to a "bewilderingly complex administrative galaxy" of water management where various public agencies and jurisdictions share authority over water without proper coordination.

The result: tapped out ecosystems, environmental damage and overburdened municipal water budgets drained from the high cost of supply-driven infrastructure development.

Investing in sustainability

Water allocation in Canada provides the most compelling example of why good water management begins at the source. Currently, the process of permitting and regulating the withdrawal of water for cities, industry, power production and irrigation for farms has little or no regard for the health of the watershed. Sometimes, water allocations even exceed the amount of water in a river. This approach runs down our "natural capital" when we should be living on the "interest." Any financial planner would describe it as a recipe for bankruptcy.

A long-term sustainable system withdraws water for human needs only after ecological needs are met. When the ecological limit of an aquifer, river basin or watershed is reached, future water demand must be met through increased productivity – unleashing the full potential of demand management.

Most water experts agree that water savings of 20 to 50 per cent are readily available. Holistic water management can be embedded in our governance institutions. It has been done in other jurisdictions around the world and it can be done here too.

Learning from other places

In Australia and South Africa, where a "water ethic" was successfully established in the face of severe water scarcity, water allocation systems respect ecosystem needs. In both countries, watershed-based management institutions protect ecosystems – nature is recognized as a legitimate "user" of water and afforded the appropriate legal rights.

In California, conservation planning, water efficiency and improving water reuse and recycling are central to urban water management.

And in France, a "water parliament" devolves authority from centralized government control to a system of local management authorities operating on a basin-wide or watershed level. Local authorities develop plans to address basin-wide problems tailored to local conditions while government guides and supports the process on a national level.

These and other models provide signposts for Canadian authorities on the route to sustainable water management. It's a long trek from here to sustainability, but a governance regime that puts the watershed first is the starting point. The tools and models are available. What we

need now is leadership.

Water is *the* strategic resource for the 21st Century.

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