ISSUES & IDEAS

We need to value and conserve water

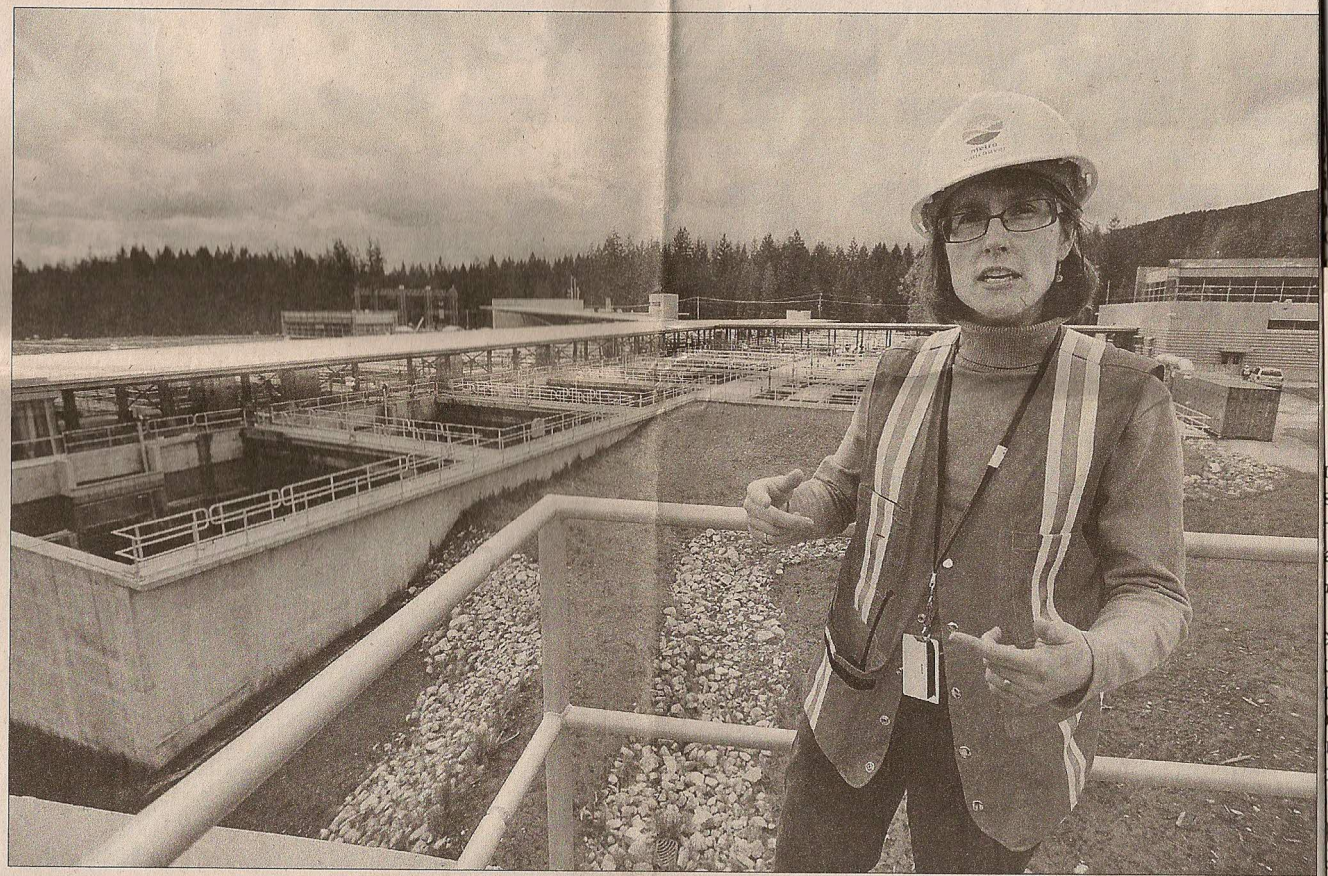
Pricing water service at closer to its true cost would help pay for infrastructure and reduce waste

BY OLIVER M. BRANDES, KIRK STINCHCOMBE AND STEVEN RENZETTIIS

Spring is supposed to be time of renewal, of optimism and joy at the prospects of hot summer days ahead. Instead, here in British Columbia, Environment Minister Barry Penner is warning us that insufficient snow pack and a dry spring may be conspiring to create potentially serious water shortages for some communities. This is a dire situation indeed and perhaps a time to take a serious look at what it will take to begin balancing our water budget and how we price this most precious of resources.

Think back to 10 years ago, when seven residents of the small, rural community of Walkerton, Ont., died, and more than 2,300 inhabitants fell ill, after a devastating outbreak of water-borne disease.

Many factors contributed to this tragedy, but a pervasive lackadaisical attitude about the value of water is prominent among them. Although many lessons have been learned since then, Canadians still largely take their water for granted. We haven't reconciled the need to properly value it to ensure lasting water security and sustainability.



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Sharon Peters, superintendent of the Seymour-Capilano water filtration plant that serves Metro Vancouver residents. Rates of per person water usage in Canada are among the highest in the world.

Canadians pay far less for water than people in most other developed countries. It's no coincidence that our per person water use is also among the highest in the world, rivalled only by the United States. With little financial incentive to conserve, we over-consume, and our over-consumption threatens water security, ecosystems and the sustainability of our water infrastructure.

Water pricing is a hot issue in communities across the country. Yet it remains an almost totally untapped option for helping ensure our water service infrastructure — the pipes, pumps and reservoirs — is well maintained and up to date. Effective conservation-oriented water pricing can also help reconcile growing communities with the health of local watersheds and engage individuals and businesses to change their behaviour and begin reducing their water footprints.

Conservation-oriented water pricing is a rate structure adopted by a water service provider where the costs of providing services are recovered; individual customers are metered and pay for the volume of water they use. A crucial element requires the per unit price charged to individuals is sufficient to affect their decisions and behaviour, thereby encouraging conservation and efficiency.

A new University of Victoria report is seeking to stimulate a national dialogue on conservation-oriented water pricing as part of a sustainable approach to management.

The University of Victoria's POLIS Water Sustainability Project's report, *Worth Every Penny — A Primer on Conservation-Oriented Water Pricing*, introduces water pricing reform options for water managers, policymakers and municipal leaders across Canada. The report makes the economic case for water conservation and sustainable water service infrastructure as a way to increase water security for communities.

Water infrastructure in many Canadian towns and cities is deteriorating, and water bills are often not high enough to even cover the costs of continuing operations. In fact, Statistics Canada figures show that the aggregate ratio of what municipal water service providers brought in (revenue) compared with what they spent (expenditure) in 2007 was only 70 per cent and is falling. In other words, water users are not even coming close to covering the full costs of the water services they enjoy — and it's getting worse.

To cover the gap, occasionally a federal or provincial government, looking to score political points, doles out money under variously branded "green" (or in this case "blue") infrastructure programs. But this is a Band-Aid solution for a geyser of a problem.

A better solution is to begin charging individuals and businesses what water really is worth, based on the volume they use. However, you can't manage what you don't measure. According to the most recent Environment Canada data (2006), over one-third of Canadian homes still do not have a water meter and the implementation of metering varies considerably from province to province. Surprisingly, only 32.6 per cent of houses are metered in B.C., 16.5 per cent in Quebec, and less than one per cent in Newfoundland, something that would be unthinkable in other basic utility services such as energy, natural gas or telephone.

A few crucially important things will happen if we start charging what water is worth. People will reduce their use simply because they know they will save money. Secondly, we'll find newer and better designs for appliances and fixtures such as toilets and washing machines, and efficiencies for businesses. Finally, municipalities and communities can start building financial programs that fully cover the costs of operating — including replacing water infrastructure — without relying on often piecemeal and generally unreliable infusions of money from Ottawa or their provincial capital.

The University of Victoria research illustrates how to implement conservation-oriented water pricing. The step-by-step plan starts with setting water rates sufficiently high to encourage conservation. Lead examples from communities on Vancouver Island and cities such as Halifax and Guelph, Ont., demonstrate successes: They have reduced water demand and improved the environmental performance of water utilities, and all without negative impacts on low-income families.

Moving to effective water pricing will take time and probably a bit of courage on the part of municipal leaders. But we need to remember that it makes sound sense from both business and environmental points of view, and it can be done without hurting low-income families. Wasting water and not being able to fund the operation of water systems are in nobody's interest. It's time Canadian communities moved to a 21st-century approach to water infrastructure planning and pricing.

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