

Worth Every Penny:

Conservation-Oriented Water Pricing in Canada



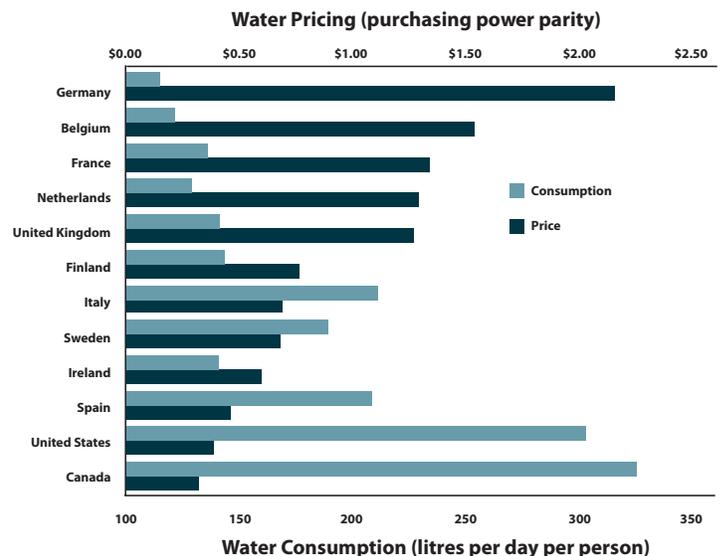
Conservation-oriented pricing is a rate structure adopted by water service providers where costs are fully recovered. Individual customers are metered and pay for the volume of water they use, and the price charged is sufficient to influence consumers' decisions about water use and to encourage efficiency.

Inevitably, society has to pay for the infrastructure and services that store, treat and distribute water to our homes and businesses. Yet, Canadians typically pay for only a portion of these costs through regular water bills. In fact, Statistics Canada figures show that, in 2007, expenditures by water service providers were on average 30% higher than revenues collected from water bills. The remaining expenditures must be postponed, leading to the deterioration of urban infrastructure and system reliability problems. Alternatively, costs must be subsidized from other sources, including infrastructure grants from provincial and federal governments or municipal government general revenue. This keeps the retail price of water artificially low.

A better approach, environmentally and economically, is to begin charging households and businesses for the real costs of water services. Most people and organizations will change their behaviours simply because they recognize that conservation will save them money. The water service provider is interested in achieving these greater efficiencies because it will mean better use of scarce operational capital, deferred future expansion costs, and reduced environmental impacts.

Moving communities to more effective water pricing will take time and courage on the part of municipal and senior government leaders. Most municipalities will want to take a gradual approach to implementing pricing improvements, sometimes over a number of years. This allows time to mitigate any potentially negative impacts and to build community support. Improving pricing makes sound sense from both business and environmental perspectives. Continuing to waste water and not generating enough revenue to fund the operation of water supply systems are in nobody's interest.

Canadians pay much less for urban water services than people in most other developed countries. We are also among the highest per capita water consumers in the world.



Source: Council of Canadian Academies. (2009). *The Sustainable Management of Groundwater in Canada: Report of the Expert Panel on Groundwater*. Ottawa.

Note: Comparing water use statistics among countries presents challenges. However, the data used above are reasonably accurate and sufficient to illustrate that Canadians use more water than people in other developed countries and that there is a strong correlation with pricing.

CONSERVATION-ORIENTED PRICING: CHANGING CHOICES THROUGH THE WATER BILL

The price charged for water services should achieve the following objectives:

1. generate enough revenue for water service providers to cover the full costs of services, including infrastructure maintenance and replacement;
2. signal the actual costs of supplying water and provide a financial incentive for customers to use it more efficiently;
3. promote innovation by encouraging engineers, inventors and investors to develop more water-efficient practices and technologies.

Preconditions for a progressive pricing system:

1. individually metered water connections;
2. volumetric charging (where users are charged for the amount of water they use);
3. a water rate that is sufficiently high to influence consumers' decisions about water use and the purchase of appliances and fixtures.

Conservation-Oriented Water Pricing

FREQUENTLY ASKED QUESTIONS

Do water systems need to be metered to introduce conservation-oriented water pricing?

Metering is a prerequisite for volume-based pricing. It is a beneficial general management practice that allows service providers to better account for water use and measure performance.

Will conservation-oriented pricing result in less stable revenues from water bills?

When a water service provider increases its reliance on volume-based pricing, its revenue may fluctuate more. Fortunately, there are many options to minimize the impacts of revenue variability and avoid budget shortfalls, including: using “rolling average” pricing, establishing reserve funds, and having part of the bill include a fixed component (a “connection charge”) that does not change with the volume consumed. Careful planning and revenue forecasting also go a long way towards mitigating this concern.

Does it disadvantage low-income families?

Low-income people spend a disproportionate amount of their earnings on water bills, so some fear that price increases will hurt them more than others. But this challenge can be minimized. Service providers can provide people in need with a low cost “lifeline block” to meet basic water requirements. Incentive programs like product rebates can be targeted to disadvantaged groups. Some low-income families may actually experience a decrease in their bills because they have more control over costs.

Do senior governments have a role?

Provincial and federal governments can provide guidelines and best practices on matters such as asset management and accounting practices. They can also provide incentives via conditions for infrastructure grants, create supportive regulatory environments, and reduce legislative barriers to how costs can be recovered.

Has anyone in North America already implemented it?

Some water utilities in the United States have used conservation-oriented pricing approaches for many years, including Seattle and San Antonio. In Canada, a number of cities have started price restructuring with good success, including Toronto, Guelph and Halifax. Information on the systems in all of these places is readily available and others can learn from their experiences.

KEY MESSAGES

- ◆ It makes sound sense from both environmental and economic points of view.
- ◆ It can lead to lower operating costs for water service providers and fewer environmental impacts because less water needs to be treated, pumped and heated.
- ◆ It can help to defer the need to construct major new infrastructure like dams and treatment plants, saving money and reducing environmental impacts.
- ◆ It can contribute to improved financial performance for service providers. The goal is to ensure that the amount of revenue from water bills is sufficient to cover the full costs of operating now and in the future.
- ◆ Potentially negative consequences for communities can be mitigated.
- ◆ It allows individuals much greater control over their water costs. Depending on how it is implemented, those who choose to conserve may actually see a decline in the amount they pay.
- ◆ It’s a question of fairness. Why should prolific water users pay the same amount as those who do their best to conserve?
- ◆ There is no evidence that it leads to privatization of water infrastructure. In fact, more effective cost recovery can actually strengthen publicly owned utilities.
- ◆ Revenue generated by conservation-oriented pricing can be reinvested in the water supply system.
- ◆ Improved pricing provides a strong incentive to innovate. When water is valued more, engineers, inventors and investors are motivated to develop more water-efficient practices and technologies.
- ◆ Many other places around North America and the world are successfully doing it.

A full-length primer on conservation-oriented pricing is available at www.poliswaterproject.org



Environment
Canada

Environnement
Canada