

Developing Water Sustainability Through Urban Water Demand Management

A Provincial Perspective

A presentation/workshop by the Urban Water Demand Management Team at
The POLIS Project on Ecological Governance
University of Victoria

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**THE POLIS PROJECT ON
ECOLOGICAL GOVERNANCE**

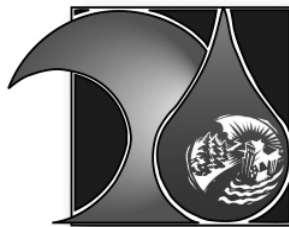
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Urban
Water
Demand
Management

Developing Water Sustainability Through Urban Water Demand Management A Provincial Perspective

Session Objectives:

1. Expose BC government water managers and policy makers to our research.
2. Facilitate discussion about adopting proposed provincial action plans in BC.
3. Information exchange to assist in the development of a Canada-wide provincial backgrounder - Developing Water Sustainability Through Urban Water Demand Management (to be released in 2005).
4. Promote collaboration and fit our ongoing research and advocacy into existing and future provincial tools and initiatives (i.e. Dealing with Drought Handbook; Water Balance Model; Water Bucket Web site etc.).

Agenda:

1. 9:00-9:05 *Introduction and overview*
2. 9:05-9:50 *UWDM – Future in Every Drop Presentation*
3. 9:50-10:00 *General questions and comments*
4. 10:00-10:05 *Quick stretch and coffee refill*
5. 10:05-10:35 *‘Making the action plans work in BC’ discussion*
 - See attached Action Plan Summary – are there any significant gaps?
 - Which action plans are the most important and feasible?
 - Rank in order of timelines and do-ability.
6. 10:35-10:50 *Where do we go from here?*
 - Brainstorm on the first steps towards adopting priority action plans.
 - Which plans are underway and what is their current status in BC?
 - Who are the contacts/ associated organizations/ consultants?
 - What can we do to help the plans move forward?
 - Is it feasible to set up ongoing collaboration between the UWDM team and the BC government?
If so, what format would work for you?
7. 10:50-11:00 *Final questions and feedback forms*
 - Please take a few minutes to complete the feedback form and return it to us.

Provincial Action Plan

- ***Review all subsidies to the water sector and link infrastructure funding to demand management***

Fiscal policies should reorient public funds away from infrastructure expansion and toward demand management programs. The provincial government can promote full-cost accounting for water utilities and ensure effective comprehensive conservation programs by reducing supply-side subsidies and promoting demand management programs directly. Linking infrastructure funding to demand management is a powerful lever of change and can be done by both federal and provincial governments.

- ***Build capacity to implement demand management***

Develop permanent budgetary allocations for demand management staff, training, planning and implementation. Dedicating financial resources to demand management recognizes its importance and acknowledges that many DSM measures – education, promoting best practices, integrating new technologies and program evaluation – must be ongoing.

- ***Initiate integrated planning for all watersheds and groundwater aquifers affected by urbanization***

By planning now, comprehensive long-term solutions can be developed.

- ***Amend building and plumbing codes to require water-efficient fixtures in all new construction and renovations***

The benefits are not immediate; however, these amendments will ensure that the residential sector incorporates high-efficiency infrastructure over time, dispersing costs and providing incentives for further conservation-based innovation.

- ***Ensure suitable ‘future proofing’ is undertaken, such as metering and research and development of reuse and recycling opportunities***

‘Future proofing’ and investing in research and development will foster widespread and cost-effective implementation of appropriate technology as conditions and circumstances warrant and as new technologies emerge.

- ***Create a water use efficiency task force to advise government on existing and emerging water management issues and to coordinate water conservation efforts***

This committee should include representation from all levels of government and diverse departments (such as environment, energy, municipal affairs, and public works), professional and industry associations, citizen groups and NGOs. This task force could promote institutional capacity to assess and implement provincial policies such as the 1998 Water Conservation Strategy for British Columbia.

- ***Improve data standardization, collection analysis and availability***

Water use data collection and analysis must be improved to understand: the nature of end use, the health of source ecosystems, minimum flow requirements for ecosystems, and water and cost savings associated with conservation measures. Improving databases (through collaboration with relevant federal departments) and providing general water withdrawal statistics are necessary first steps to improve understanding of water use and the potential for conservation.

Municipal Action Plan

- ***Create participatory decision-making and planning processes***

These processes may take many forms, such as citizen advisory committees or public forums, and are critical to ensuring that community values are expressed and citizens are engaged in finding innovative, long-term and sustainable solutions.

- ***Determine local water supply availability, including anticipated impacts of climate change, and initiate long-term, integrated planning for water management***

Knowing the short-term (e.g. 10 year) and long-term (e.g. 100 year) water withdrawal limits and ecological water requirements is critical to water supply planning. Water providers must consider DSM as integral to planning and all opportunities to cost-effectively reduce demand must be investigated prior to expansion of supply-side infrastructure.

- ***Develop permanent budgetary allocations for demand management staff, training, planning and implementation***

A Continuum of Water Management

Characteristic	Supply-Side	Demand-Management	'Soft path' for Water
Philosophy	Water resources are infinite and only limited by our capacity to access new sources or store larger volumes of water.	Water resources are limited need to be conserved and used efficiently.	Water resources are limited and we need to fundamentally re-evaluate the way we develop, manage and use water.
Basic Approach	Reactive - status quo.	Currently used as a short-term and temporary approach, however when used in comprehensive fashion represents an incremental step towards a broader 'soft path' approach.	Long-term with potential for fundamental change in resource use.
Fundamental Question	How can we meet the future projected needs for water?	How can we reduce current and future needs for water to conserve the resource, save money and reduce environmental impacts?	How can we deliver the services currently provided by water in the most sustainable way?
Tools	Bigger, centralized, expensive engineering solutions (including dams reservoirs, treatment plants and distribution systems).	Any measure that increase the efficiency and/or timing of water use (including technologies, pricing, education and policies).	Any measure that can deliver the services provided by the resource, and the resource itself, taking full costs into account.
Planning Process	Planners model future growth, extrapolate from current consumption, plan for an increase in capacity to meet anticipated future need, then find a new source of supply to meet that need.	Planners model growth and account for a comprehensive water efficiency and conservation program to maximize use of existing infrastructure. Increasing capacity would be a final option.	Planners model future growth, describe a desired future water-efficient state (or scenario), then 'backcast' to find a feasible and desirable way between the future and the present.

Source Adapted from (Gordon Foundation 2004: 8)