

## Lead-by-Example

### B. 'Soft' Conservation Measures

#### I. Federal and Provincial Initiatives

#### 4. Lead-by-Example

"Soft" conservation measures are less harsh or onerous than hard measures. Their approach to water use efficiency reflects more negotiation, conciliation, voluntarism and teaching. Soft measures include planning tools, voluntary restrictions, educational and information sharing initiatives (targeting residential, commercial/industrial and school audiences), government "lead by example" initiatives, and partnership and cooperation initiatives.

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### British Columbia Buildings Corporation (BCBC)

#### Efficient Water Use as Part of Outdoor Water Use and Landscaping

##### Xeriscaping

- In spring 1997 the corporation adopted technical standards which require increased efficiencies in irrigation and landscaping for all BCBC owned and operated buildings. Section 9.1 of the standards states "landscapes should be designed to minimize the effect they will have on the surrounding area by giving preference to regionally native plant species and the use of water conserving landscaping techniques such as xeriscaping.

##### Climate Comfort System

- BCBC has endorsed the installation of timers and sensors in landscaped areas:
  - the fountain located adjacent to the legislative buildings has been equipped with a sensor which stops water flow to the fountain when winds reach 25 kilometres per hour
  - other "climate comfort system" sensors, which turn sprinklers off when it rains
  - a water efficient government health building has been constructed in Sooke

## Water, Land and Air Protection, Ministry of

### Education Opportunities for Elected Officials

- Know H<sub>2</sub>O!
  - The Know H<sub>2</sub>O! eco-education project was developed by the Ministry in partnership with Alliance Professional Services and the B.C. Water and Waste Association. The project is being designed to inform local government administrators and elected officials about water-related issues; regulatory and non-regulatory management tools; and opportunities to maintain and enhance water management efforts at the local level.
  - The project is expected to include the production of a manual with specific water management modules and in Phase III week long seminars will be presented to local government and decision makers throughout B.C.

## Federal Government

### Efficient Water Use as Part of Outdoor Water Use and Landscaping

- The Fraser River Action Plan (FRAP) sponsored two pilot demonstration projects. Both projects were selected because of their visibility to the public and because of their innovative technologies.

In partnership with the City of Vancouver, a demonstration xeriscape garden was constructed. The garden, composed of selected native vegetation, requires no watering while providing effective landscaping. The site is regularly visited by the public and school parties.

  - 1. Xeriscape Garden**

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  - 2. Efficient Irrigation**

In partnership with the City of Kamloops, the technology of highly efficient drip irrigation systems was demonstrated at a city park.

## II. Regional and Municipal Initiatives

### 4. Lead-by-Example

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#### Capital Regional District — Water Department

##### Other

- **Conservation Information Booths**
  - Costs: \$10,000

#### Golden, Town of

##### Low-flow Fixture or Retrofit Programs

- Through the PowerSmart program

#### Greater Vancouver Regional District — Water District

##### Water-use Efficiency Applied to Operations and Maintenance

- A Lead-by-Example Program, including water audits and recommendations for improving water use efficiency is currently underway at all GVRD (including Water District, Sewerage and Drainage District and Housing Corporation) metered facilities. A total of 40 sites, with total annual consumption of almost 2 million cubic metres, throughout the region are involved.

## **Conservation Library**

- Hundreds of items have been collected over the years which relate to water conservation and demand side management. The material is currently catalogued in the GVRD corporate library and is accessible to the member municipalities and the general public. A more detailed, water conservation-specific cataloguing system is currently being developed.

## **Kamloops, City of**

The City recognizes that if citizens are to embrace the notion of water conservation, it must have its own house in order. Furthermore, substantial water savings can be realized as the City is a major user of water. The City's internal efforts continue to focus on the following:

### **Water-use Efficiency Applied to Operations and Maintenance**

- Adjusting water use practices on City parks, boulevard and road median areas and other lands and facilities
- Performing water audits on parks, and installing water meters in parks

### **Low-flow Fixture or Retrofit Programs**

- Installing low water use fixtures in city offices, arenas and other facilities

### **Efficient Water-use as Part of Outdoor Water-use and Landscaping**

- Preparing a new set of landscaping guidelines which require low water use landscaping as part of new City and private sector developments

## **Keremeos, Village of**

### **Low-flow Fixture or Retrofit Programs**

- Costs: \$500

### **Employee Education**

- Costs: \$1,000

### **Conservation Library**

- Costs: \$100

### Logan Lake, District of

#### Early Detection and Repair of Leaks

- Costs: \$5,000
- Potential Savings: \$ unlimited

#### Employee Education

- Keys to Success: participation in water courses
- Costs: \$5,000

### Lumby, Village of

#### Low-flow and Retrofit Programs

- Water saving devices were installed in the newly constructed village office.

### Nakusp, Village of

#### Water-use Efficiency Applied to Operations and Maintenance

- Costs: \$1,000
- Actual Savings (\$): 25%
- Potential Savings (\$): 50%
- Actual Water Savings: 25%
- Potential Water Savings: 50%

#### Low-flow Fixture or Retrofit Programs

- Costs: \$1,200
- Actual Savings (\$): 1%
- Potential Savings (\$): 1%
- Actual Water Savings: 1%
- Potential Water Savings: 1%

#### Efficient Water-use as Part of Outdoor Water-use and Landscaping

- Costs: \$1,500
- Actual Savings (\$): 10%

- Potential Savings (\$): 10%
- Actual Water Savings: 10%
- Potential Water Savings: 10%

### **Early Detection and Repair of Leaks**

- Costs: \$3,000
- Actual Savings (\$): 5%
- Potential Savings (\$): 5%
- Actual Water Savings: 5%
- Potential Water Savings: 5%

### **Employee Education**

- Costs: \$2,200

### **Conservation Library**

- Costs: \$200

## **North Okanagan Regional District**

### **Education Opportunities for Elected Officials**

- From January to June, 1997, an Environmental Youth Team member, hired by the North Okanagan Water Authority, produced "An Introduction to Land-Use Change and Water Quality in Greater Vernon Area". The publication will be used to educate politicians and decision makers on this issue.

## **Port Alberni, City of**

### **Conservation Library**

- Costs: \$500/yr

## **Port Alice, Village of**

### **Early Detection and Repair of Leaks**

- Keys to Success: regular maintenance program

### **Reduced Water Pressure in Buildings**

- Pressure reducing valves are used

### Prince George, City of

#### Efficient Water-use as Part of Outdoor Water-use and Landscaping

- During *Stage 1* of the three stage policy approval process, an assessment of local policy with respect to irrigation of public areas was conducted.

### Revelstoke, City of

#### Other — Electronic Water Bleeding

- The No-Freeze Sentinel system monitors the inlet water supply temperature through the use of an intelligent digital temperature sensing ("IDTS") module attached directly to the inlet water pipe inside the building at or near the service entry location. The IDTS module is designed to monitor "near-freezing" temperature changes and the "Sentinel" is designed to initiate a cyclical flow of water in accordance with programmed zone parameters.
- Implementation Costs: \$800 per unit (a total of 400 units are anticipated)

### Smithers, Town of

#### Efficient Water-use as Part of Outdoor Water-use and Landscaping

- Automatic sprinkler systems

### Sidney, Town of

#### Water-use Efficiency Applied to Operations and Maintenance

- Automatic sprinkler systems

#### Efficient Water-use as Part of Outdoor Water-use and Landscaping

- Planting native plant species

#### Early Detection and Repair of Leaks

- Through maintenance programs

### Vancouver, City of

#### Water-use Efficiency Applied to Operations and Maintenance

- In October of 1996 Water Design conducted water audits in Vancouver's three main theatres: The Queen Elizabeth Theatre, The Orpheum, and The Vancouver Playhouse. The main recommendations were: the installation of automatic flush timers in the men's urinals, and the installation of low-flow fixtures. In 1997 maintenance staff investigated various urinal valve products and fittings. Installation will be accompanied by signage to show the public that the City is leading by example.

#### Efficient Water-use as Part of Outdoor Water-use and Landscaping

- Water efficient planting and native plant landscaping is promoted through the Greenways and other City projects.

### Vanderhoof, District of

#### Efficient Water-use as Part of Outdoor Water-use and Landscaping

- Keys to Success: staff cooperation
- Potential Water Savings: 20 m<sup>3</sup>/d
- Constraints: scheduling

#### Early Detection and Repair of Leaks

- Keys to Success: staff cooperation
- Potential Water Savings: 5 m<sup>3</sup>/d
- Constraints: scheduling

#### Employee Education

- Keys to Success: staff cooperation
- Potential Water Savings: 10 m<sup>3</sup>/d

### III. Irrigation and Improvement Districts' Initiatives

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### **Rutland Waterworks District**

An integral part of Rutland's Water Smart Program is a lead-by-example philosophy. The conservation program is based on modifying water-use habits, this starts at the source, the water supplier.