

## **WATER CONSERVATION STRATEGY**

### **June 2019**

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On top of general water conservation education and outreach, the intent of the water conservation strategy is to use the demand management research and analysis to identify those components of the consumption data to target specific audiences with specific campaigns or tools, in order to be as effective as possible in reducing water demand. The strategy has historically used a variety of tools and approaches, including, regulations (bylaws), rebates, education and outreach.

The water conservation program is divided into an institutional/commercial/industrial and agricultural component and a residential component.

### **ICI WATER CONSERVATION PROGRAM**

The Institutional, Commercial and Industrial (ICI) program provides outreach, audit services and support to business sectors to influence demand from business sectors. Water conservation efforts are aligned with existing demand management analyses and will leverage relationships with the agricultural community, consultants, property managers and Capital Regional District (CRD) internal policy makers to promote targeted messaging highlighting the business case for using water efficiently.

Key components of this year's strategy include:

- working with agricultural community to promote efficient water management on agricultural land
- working with a consultant to conduct hotel water and energy use assessments (in collaboration with the Climate Action program)
- working with property managers to offer rebates to phase out the remaining once-through cooled (OTC) walk-in refrigeration units in the region
- identifying other high use ICI sectors and initiating water use assessments and education
- following up with previously assessed businesses to encourage completion of water-saving recommendations and identify barriers
- initiating the creation of a CRD policy for water conservation best practices in all CRD-owned buildings

### **Agricultural Land**

CRD staff are engaging with the agricultural community to understand current efforts by the farmers with water efficiency practices. Opportunities for engagement include agricultural fairs and working with young farmers and new farmers to the region.

Staff have initiated a review and report on current and future farm use in the region, which will be completed by Q3 2019. Based on this report, staff will engage with the farming community and develop collaborative water efficiency strategies.

### **Hotel Assessments**

CRD staff have engaged Synergy Enterprises to conduct water and energy use assessments for the hotel sector. To date, a total of 81,500 m<sup>3</sup>/yr and 42 tCO<sub>2</sub>e potential savings have been identified from 17 hotels, with one assessment pending. The program wraps up in September 2019.

### **Once Through Colling Units – Outreach**

Replacement of OTC units is a key area for ICI demand management. Although few in numbers, they run continuously and have a significant demand on the water supply. Water audits, along with education on the business case for replacing these units, will continue to be a focus of our outreach program for this sector in the short term.

In addition to outreach and education, staff will also work with property managers and building owners since they determine the percentage of the water bill their tenants' pay, and initial research indicates that many tenancy agreements often negate the benefits of the short payback for switching from OTC to air-cooled units.

### **Other Sectors**

The demand management planning team has begun analysis of the water use database to compare water consumption trends by sector and municipality to better target high use sectors by region.

"General Retail" is one of the highest users of water; however, this sector includes a wide range of operations from post offices to water bottling to malls. Based on experience gained through water assessments done to date, it is likely a large component of the water consumed by this sector is due to OTC. Additional research is required to divide this sector into smaller groupings and develop targeted strategies.

### **Internal Policy**

One of the key objectives of the demand management program is to work with internal departments to inform and support long-term strategic planning. While Integrated Water Services (IWS) Engineering continues to identify and reduce leaks and losses in the distribution system, the ICI program will develop an internal policy to increase the water efficiency consistently across all CRD-owned buildings.

## **RESIDENTIAL WATER CONSERVATION**

Since the rebate programs in the early 1990s, the program has focused on education and outreach, supported by the water conservation bylaw, to promote water conservation in the residential sector. The pace of new buildings in the region has accelerated the transition to low-flow appliances; the dropping per capita water consumption (~1%/year) is largely attributed to the renewal of building stock, despite the increasing number of residential units.

The program has developed and promoted other campaigns to assist with water conservation:

### **Leak Detection**

In an effort to reduce water waste associated with undetected leaks in homes, residential water conservation celebrated its 5<sup>th</sup> year promoting WaterSense Fix A Leak Week (March 18-24, 2019), encouraging residents to be leak detectives in their homes. Campaign elements included static displays at CRD Fiskard headquarters, IWS and Panorama Recreation, providing leak detection kits and toilet leak testing tablets. Distribution of leak detection kits were also provided to eight municipal utility locations in the region. A total of 610 kits were distributed to residents of the region in 2019. An efficient irrigation spring maintenance workshop was held to educate

homeowners with water efficiency scheduling and identifying system leaks; 34 residents attended. Social media included a Facebook contest to encourage residents to test their toilets regularly for undetected leaks resulting in an increase of our Facebook audience.

### Summer Water Use Campaigns

A shift in outdoor water efficiency programs for 2019 will highlight the region's water demand during summer months and climate and drought projections.

1. Education will be aimed at "waterwise" lawn maintenance through five efficient **irrigation systems workshops** for the residential homeowner along with the Just Takes 1 lawn watering campaign. The fall season will wrap up outdoor messaging with an additional irrigation workshop to help residents learn how to winterize irrigation systems to avoid damage and potential breaks in system components resulting from freezing temperatures.
2. Waterwise gardening with drought resistant plantings through **six native plant gardening workshops**, replacing inefficient landscaping with edible landscaping through two edible gardening workshops.
3. There will be encouragement of letting lawns **Go Golden** during summer months and reducing peak morning consumption through the Stage 1 water conservation bylaw schedule.
4. Campaigns and education will be primarily delivered through the **Environmental Ambassador Program**, targeting community events and specific neighbourhoods. The mobile drinking water cart will join 10 community events promoting our high-quality drinking water supply with additional water messaging folded into the display through engaging residents and youth with the trivia wheel.