
CITY OF KELOWNA

MEMORANDUM

Date: December 17, 2004

File No: 5600-08

To: City Manager

From: Water/Drainage Manager

Subject: Water Smart Program Overview

RECOMMENDATION:

THAT Council receive the following report outlining the 2004 Water Smart program results and the 2005 planned program as information

BACKGROUND:

The City of Kelowna Water Smart Program has completed its 2004 program. This program continues to provide education and incentives to its customers to reduce water consumption. An overall reduction in water consumption of 20% has been achieved to date, which has resulted in capital cost savings to the water utility by deferring a number of system expansions.

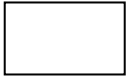
In 2004 a number of pilot program initiatives continued in an effort to reduce peak demand on the system and to reconfirm their effectiveness if they were to be implemented on a larger scale. The outcome of these is described in the attachment. Water Smart focuses on providing customer education and incentives by working directly with customers on their property to assess opportunities to reduce consumption. Program outcomes suggest that further reductions in water consumption can be achieved by expanding these pilot programs and working with customers on a broader scale.

Kelowna continues to be one of the highest per capita water users in the country. More work must be done to reduce the amount of water that is being used per capita and in particular outside water use. Reducing per capita use is accomplished in three ways; through 1) metering, 2) education and incentives, and 3) by applying a rate structure that ensures those that continue to be high consumers are assessed a higher charge thereby creating an incentive to reduce.

In 2005 the utility plans to continue with its peak reduction program by increasing the incentive and educational components and by recommending a revised rate structure that

will assist in reducing per capita use. A recent application was made through Land and Water BC's (LWBC) Drought Management program and the water utility was awarded a grant of \$50,000. These funds will be used to provide expanded educational services and materials to the community. An outline of the 2005 program is also attached.

Don Degen
Water/Drainage Manager



Approved for inclusion:
John Vos
Director of Works & Utilities

EIGHT HIGHLIGHTS OF KELOWNA'S 2004 WATERSMART PROGRAM

1. Peak Demand: Soil Amendment Program – 18.5% average reduction in water use

275 homeowners applied for the soil amendment program in 2004. In this program we top-dress lawns with organic material to increase the moisture holding capacity in the soil. With weather factored out, the top dressing resulted in an average 18.5% reduction in water consumption during July.

2. Peak Hour: Voluntary Irrigation Timer Program

In spring 2004 we asked homeowners with underground systems to voluntarily change their sprinkler start times according to their street address. The idea was to lower the early morning peak by staggering water use more evenly throughout the night. Pumping data from summer 2004 indicates that not enough residents complied with the request to make an impact on Peak Hour

3. Irrigation System and Landscape Assessments

Two summer students completed more than 100 irrigation system and landscape assessments over the summer. This is direct, one-on-one consultation with the customer, walking through their home and yard demonstrating where and how they can save water.

4. Commercial Boulevards

In 2004 we compiled a list of each commercial property on Harvey Avenue and the name of the irrigation contractor responsible for the sprinkling system. Now, if we see water being wasted, or a member of the public calls to complain, we know who to contact to correct the problem.

5. Go Natural Home Parties

The Water Smart program partnered with the Regional District to present 17 environmentally-themed home parties over the summer and fall. An individual homeowner will host the party and invite a minimum 15 guests. Water Smart and Regional staff give a one to two hour presentation on composting, water conservation, and drought tolerant landscaping

6. Valley Wide "Water Hog" Promotion

The City of Kelowna spearheaded a cooperative promotional effort between all the major water suppliers in the Okanagan. These suppliers paid into a radio and television advertising campaign designed to reduce residential irrigation.

7. Public Events

Water Smart staff attended all major public events in the city. We host children's games such as the "Water re-circulating squirt gun shooting gallery," which is a fun way to learn about water conservation. We also hand out water conservation literature and talk to people about water efficiency.

8. School Program and Mind Grind Environmental Challenge

Water smart staff made more than 50 elementary, middle, and high school presentations this year. In addition, Water Smart partnered with the Regional District and other environmental educators to host the annual Mind Grind Environmental Challenge. This is an Okanagan-wide competition that tests the environmental knowledge of school children in all grade levels.

NINE HIGHLIGHTS OF KELOWNA'S 2005 WATERSMART PROGRAM

9. \$50,000 Grant from the Provincial Drought Management Fund

The water utility applied for and received a \$50,000 grant from the Provincial Government to boost its water conservation efforts. The grant will be used for advertising, printing water conservation booklets, a direct mail program, and many other efforts. It will also be used to host intensive public, commercial, and apartment/strata meetings and consultation.

10. New Water Rates/Restrictions

In early 2005 the water utility will present to council a new, inclining block water rate and watering restrictions. The new rate will ensure that the customers with the highest water use will pay their fair share of the costs of delivering water. Restrictions are necessary because higher rates may have little effect on customers who choose to water every day (and sometimes twice a day).

11. Soil Amendment Program

This successful program continues to be a major part of summer conservation efforts. In past years the program was available only to customers in certain areas of the city. In 2005 the program will be open to all water utility customers whom, historically, consume excessive amounts of water

12. Timer Incentive Program

In 2002 the *Water Smart* program installed new, easy to program irrigation timers at a number of test homes. The results indicated that the customers could achieve reductions up to 25% simply by having a timer that is easy to program. In 2005 we will offer rebates on these timers to customers who are high water users.

13. Summer Students/Irrigation System Assessments

Two summer students will act as "water ambassadors" on the streets of Kelowna and at all public events throughout spring and summer. The students will primarily be responsible for one-on-one consultation with customers, assessing irrigation systems, performing water audits, and offering advice on drought-tolerant gardening.

14. Valley Wide "Water Hog" Promotion

The City of Kelowna will again spearhead the "Water Hog" promotion with a new television commercial in the summer of 2005. Other valley water purveyors partner in this promotion.

15. Parks Department

Water Smart staff will continue to work with the parks department, looking for ways to reduce water use while maintaining the beauty of the city's parks.

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9. Landscaping Bylaws

Water Smart staff will conduct a study of all landscaping/water conservation bylaws in communities with similar weather/geographic conditions as Kelowna. The results of the study may result in several recommendations for bylaw changes in 2005.