



CITY OF VANCOUVER

ADMINISTRATIVE REPORT

Report Date: April 28, 2006
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Meeting Date: May 16, 2006

TO: Vancouver City Council
FROM: General Manager of Engineering Services
SUBJECT: Water Conservation - Outdoor Water Saving Kits

RECOMMENDATION

THAT Council approve a program to purchase and distribute subsidized outdoor water saving kits to Vancouver residents at an annual cost of \$3,000; source of the funds to be the 2006 Waterworks Operating Budget - Water Conservation Programs.

GENERAL MANAGER'S COMMENTS

The General Manager of Engineering Services recommends approval of the foregoing.

COUNCIL POLICY

On February 18, 1993 Council approved the implementation of the City's first water conservation program. On October 21, 2004 Council approved additional drinking water conservation measures, including the introduction of an indoor water saving kit.

PURPOSE

The purpose of this report is to expand the water conservation program to include an outdoor water saving kit to reduce water consumption in the summer months.

BACKGROUND

In the Greater Vancouver Region, potential water sources are abundant, but the incremental cost of developing, treating and delivering additional supplies can be significant. Making more efficient use of existing water resources through the use of conservation measures can be an economically and environmentally responsible way to accommodate increasing water demand caused by population growth.

The City's water conservation program includes a number of effective water saving measures, including:

- Summertime outdoor water use regulations.
- "The A to Z of H2O" play and educational materials presented in all Vancouver elementary schools.
- Mandated use of low flow water fixtures for new building construction, including ultra-low flow toilets, showerheads, and aerating faucets. In addition, new cooling systems and ornamental fountains must use recirculation systems.
- A subsidized rain barrel program.
- Promotion of water wise gardening through City Farmer and a campaign on natural lawn care.

In 2005, an indoor water savings kit was introduced to reduce water consumption and greenhouse gas emissions. Over 1,400 kits have been sold at a price of \$12 each. Included in each kit are one adjustable massage spray showerhead, one kitchen aerator, two faucet sink aerators, two toilet tank displacement bags, two packages of leak detection dye tablets, and one roll of Teflon tape. Based on the estimated reduction in purchases of bulk water from the GVRD, it is estimated that the payback for the City is about \$15 per year per kit. In addition to the water savings and environmental benefits, people who purchase the kit save on their water heating bill.

DISCUSSION

Based on the success of the indoor kit, and given the opportunity to achieve further reductions in water consumption, this report recommends the implementation of an outdoor water savings kit program. Included in the proposed outdoor water savings kit are one lawn sprinkler timer, a water saving garden hose nozzle, 2 rain gauges, and 6 rubber washers. The outdoor kit will reduce water consumption during the summer peak demand period.

Components of the kit were selected based on potential water savings relative to the cost of each item. The garden hose nozzle controls the flow of water and includes a spring-loaded shut-off handle that stops the flow when not being handled. The gauge helps to avoid over-watering by allowing the user to measure rain and irrigation water. The timer ends lawn sprinkling automatically, also reducing the potential for over-watering. Water wastage can also be reduced by replacing leaking washers with replacements included in the kit.

FINANCIAL IMPLICATIONS

The outdoor water saver kit program, tailored to the flat rate residential customer base, is expected to achieve economic returns through reduced City costs for purchasing GVRD water. It is estimated that each kit will save 21 cubic meters of water per year. The value of this water, at the 2006 GVRD bulk rate of \$0.29 per cubic meter, is \$6.

The City's wholesale purchase price of the outdoor kit will be \$17.86. The proposed selling price to Vancouver residents is \$12, including an incentive subsidy of \$5.86. With the estimated value of water saved at \$6 per kit per year, it is expected that the City's cost of the subsidy will be recovered within the first year of use and economic returns are expected for each year thereafter.

Based on a sales estimate of 500 kits per year and an incentive subsidy of \$6 per kit, this program will require funding of approximately \$3,000 per year from the Waterworks Operating Budget - Water Conservation Programs.

CONCLUSION

The outdoor water savings kit will help to promote the sustainable use of water during the dry summer months, reduce water wastage, and achieve cost savings by reducing expenditures on bulk water purchased from the GVRD.

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