

## CEDAR LANE WATER SERVICE COMMISSION ANNUAL REPORT ON OPERATIONS 15 MARCH 2010

The purpose of this report is to update the residents of the Cedar Lane water service area on the state of operation of the drinking water system.

## Upgrade Project

New treatment facilities at Wells No. 1 (Mansell Road) and No. 2 (Cedar Lane) entered service in January 2009, providing reliably safe drinking water to Cedar Lane customers for the first time in several years.

In December 2009, a contract was awarded to supply and install a new 136 cubic metre (30,000 imperial gallon) storage reservoir to replace the aging original reservoir near the Cedar Lane pumphouse. The new reservoir will more than double the previous storage capacity, improving system reliability by maintaining continuous water service in the event of a drought that reduces the capacity of the wells. The new reservoir is currently under construction, and will be completed and commissioned late in March 2010. A small, temporary balancing reservoir is operating while the new tank is constructed and commissioned.

All customer water meters were replaced in February 2010 with new Capital Regional District (CRD) standard units fitted with radio reading transceivers. The new meters will ensure accurate measurement of customer water consumption, improving the accuracy of measurement of water distribution losses.

Of the \$475,000 total capital upgrade budget, \$198,160 has been expended to date and a further \$143,225 is committed. Of the remaining \$133,616, it is anticipated that roughly \$100,000 will remain unspent at 31 March 2010 when reservoir construction is complete and the provincial infrastructure grant agreement closes. The CRD has applied for an extension of the agreement to 31 March 2011 in order to enable use of the full remaining funds for additional upgrade work, and anticipates a favourable response from the province before 31 March 2010. Priorities identified by the committee include a further treatment upgrade to reduce manganese, and watermain work aimed at reducing distribution leakage.

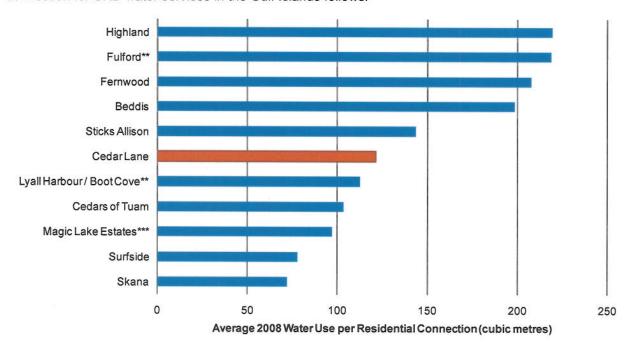
#### **Drinking Water Quality**

Drinking water quality has fully complied with Vancouver Island Health Authority (VIHA) safe drinking water requirements since the treatment systems were commissioned in January 2009. The boil water advisory was removed late in 2009 after final acceptance by the VIHA Public Health Engineer of the new treatment systems.

The well water at Cedar Lane contains iron and manganese in concentrations near the Canadian Drinking Water Guidelines aesthetic limits. These constituents do not pose a health risk, but can cause nuisance problems such as staining of light coloured fixtures and discolouration of white laundry. Some customers have noticed visible solids in the water from time to time, and rapid clogging of household (point of use) filters. These conditions likely result from a chemical oxidation reaction as groundwater containing dissolved iron and manganese comes in contact with oxygen and chlorine. As the water is oxidized, solid iron and manganese compounds gradually form in the water, and accumulate at points in the system of watermains where flow velocity is low, such as dead ends. Frequent flushing is required in order to reduce the nuisance caused by these solids.

#### Water Usage

The average Cedar Lane account used 130 cubic metres of water in 2009, which is roughly two-thirds of the average CRD residential water account on Salt Spring and half of the Canadian average. Although water use in the Cedar Lane area increases in summer, this seasonal increase is much smaller than in most other CRD water service areas on Salt Spring Island. Several Cedar Lane residents employ rainwater harvesting systems with sufficient storage capacity to eliminate the need to use drinking water for irrigation. A comparison of 2008 average annual water consumption per residential service connection for CRD water services in the Gulf Islands follows:



<sup>\*\*</sup> Residential is unmetered - residential demand estimated based on assumption of 30% non-revenue water

\*\*\*Consumption data is based on 288 accounts measured for a partial year

#### Financial Report

A statement of financial activities for the year ended December 31, 2009 for the Cedar Lane water service is attached. Revenues consisted primarily of \$18,470 from parcel taxes for capital cost recovery and \$35,009 from user fees to recover operating costs. Expenditures consisted of \$48,128 for operation, maintenance and debt servicing; and \$2,126 for financial services.

Lower than expected costs for operation, maintenance and debt servicing resulted in a surplus of \$3,437 in 2009 that was transferred to the reserve fund established for the Cedar Lane Water Service in 2008. The resulting balance in the reserve fund at December 31, 2009 was \$56,172.

Colwyn Sunderland AScT

Local Services Engineering Coordinator

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# **CAPITAL REGIONAL DISTRICT**

# WATER REVENUE FUND STATEMENT OF FINANCIAL ACTIVITIES (UNAUDITED) For the year ended December 31, 2009

	Cedar Lane
REVENUES  Transfers from government Sale of services Other revenue from own sources: Interest earnings Other revenue Grants in lieu of taxes	\$ 18,470 35,009 3 768 11 54,261
EXPENDITURES  General government services Grants in aid Other Salaries and wages Other fiscal services Recovery	570 - 48,128 - 2,126 - 50,824
NET REVENUES (EXPENDITURES) Transfers to own funds: Water Capital Fund Reserve Funds Equipment Replacement Fund Transfers from own funds: Reserve Funds	- 3,437 3,437
CHANGE IN FUND BALANCE Opening balance CLOSING BALANCE	- - -