



Making a difference...together

**STICKS ALLISON WATER LOCAL SERVICE COMMITTEE
2009-2010 OPERATIONS REPORT
21 AUGUST 2010**

The following is provided for information to residents and users of the Sticks Allison water service.

Operations

The Sticks Allison water system has operated reliably within the past year. Replacement of aging water meters with new units that include backflow prevention and are capable of being read by radio is now completed.

Water Supply and Demand

Total annual water production since 2005 is shown in Figure 1, and water production by month is shown in Figure 2. A total of 6,157 cubic metres (m³) of water was abstracted from the Sticks Allison well in 2009, 19% less than in 2008, which is inconsistent with the longer-term trend of increasing water production since 2003. Total water demand in 2009 was 5,246 m³ based on metered usage, down 3.4% from 5,431 m³ in 2008.

The difference between production and total metered consumption is termed as non-revenue water. In 2009, 911 m³ or 14.8% of the total water drawn, was lost due to distribution system leaks, fire fighting activities or system flushing. 2009 showed a 58% decrease in non-revenue water from the previous 2,185 m³ in 2008. In 2009, a significant leak in the 100mm (4") main on the west leg of the system, and six leaking meter assemblies were repaired, resulting in the reduction in distribution system loss.

Figure 1. Well Production by Year 2005-2009

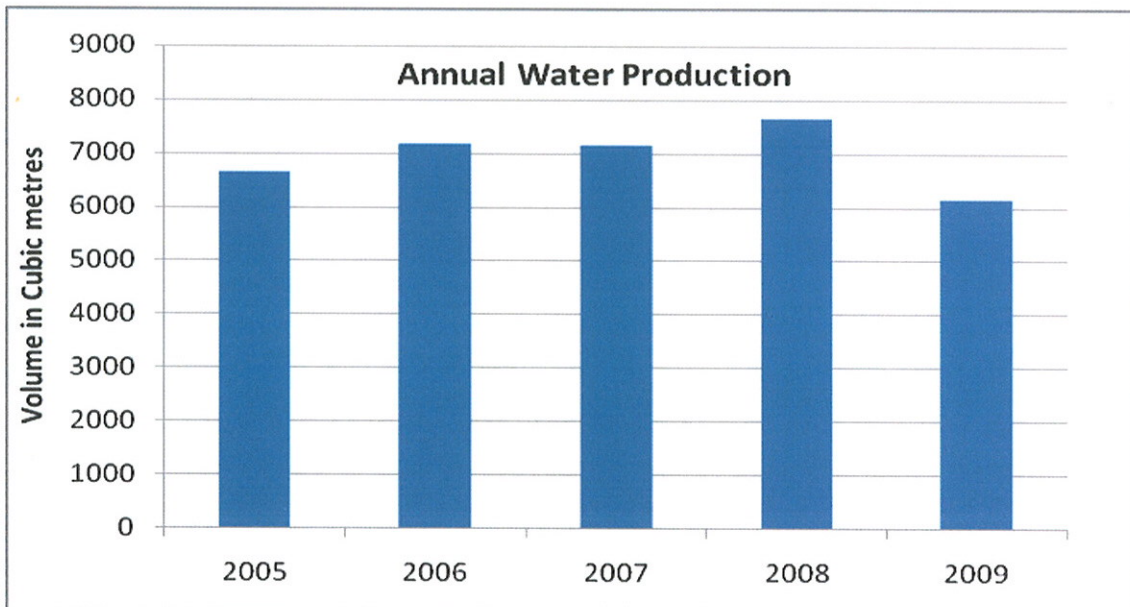
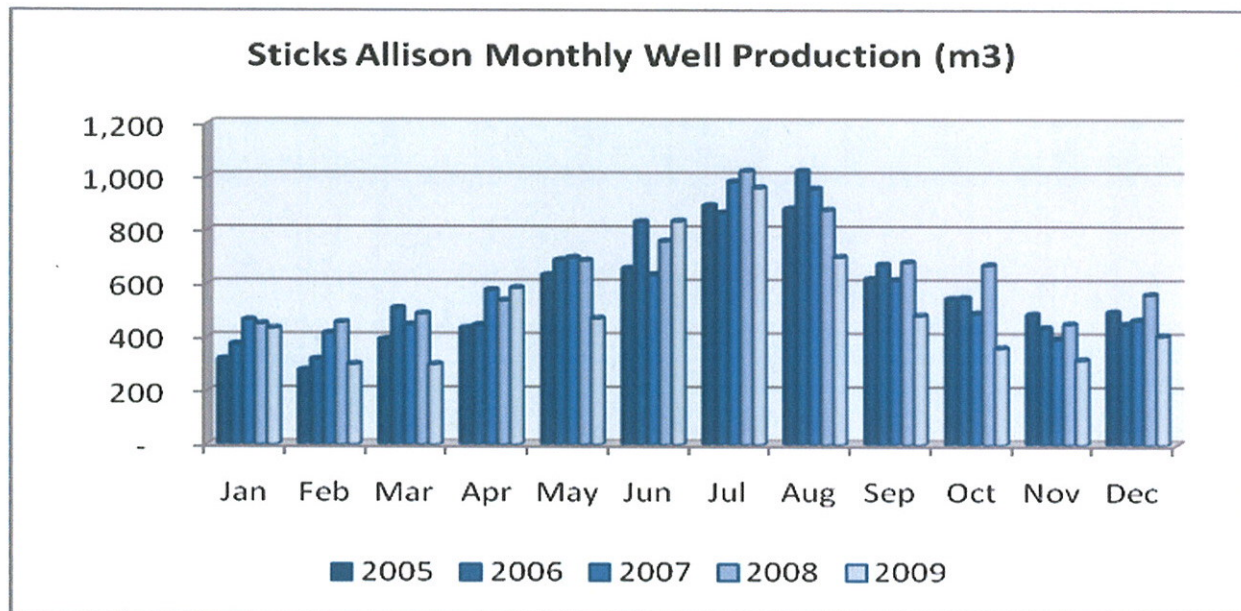


Figure 2. Water Production by Month, 2005-2009



The Sticks Allison customer's median annual consumption in 2009 was 127 m³, with an average household demand of 141.8 m³; down from 144 m³ in 2008, but still greater than other groundwater systems in the Gulf Islands, and roughly two thirds of that of a typical surface water system. As shown in Figure 3, there is a range of annual usage in the service area, reflecting that several dwellings are likely unoccupied for a significant portion of the year. Overall, 2009 average individual water use decreased by 1.5% from 2008.

Figure 3. Total Community Consumption Comparison 2008 - 2009

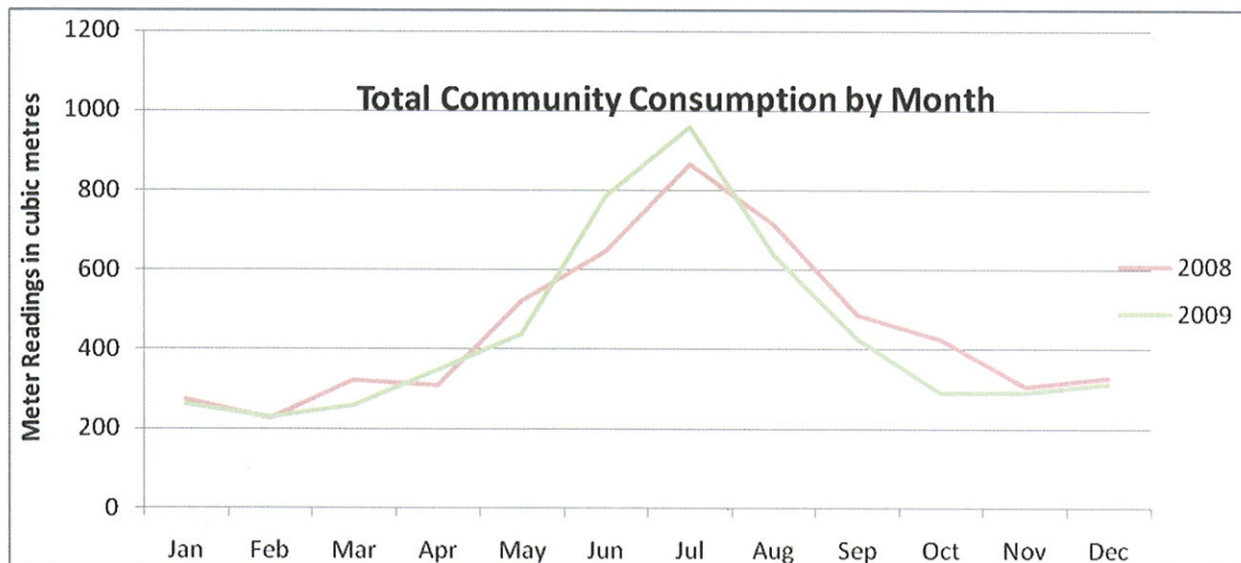
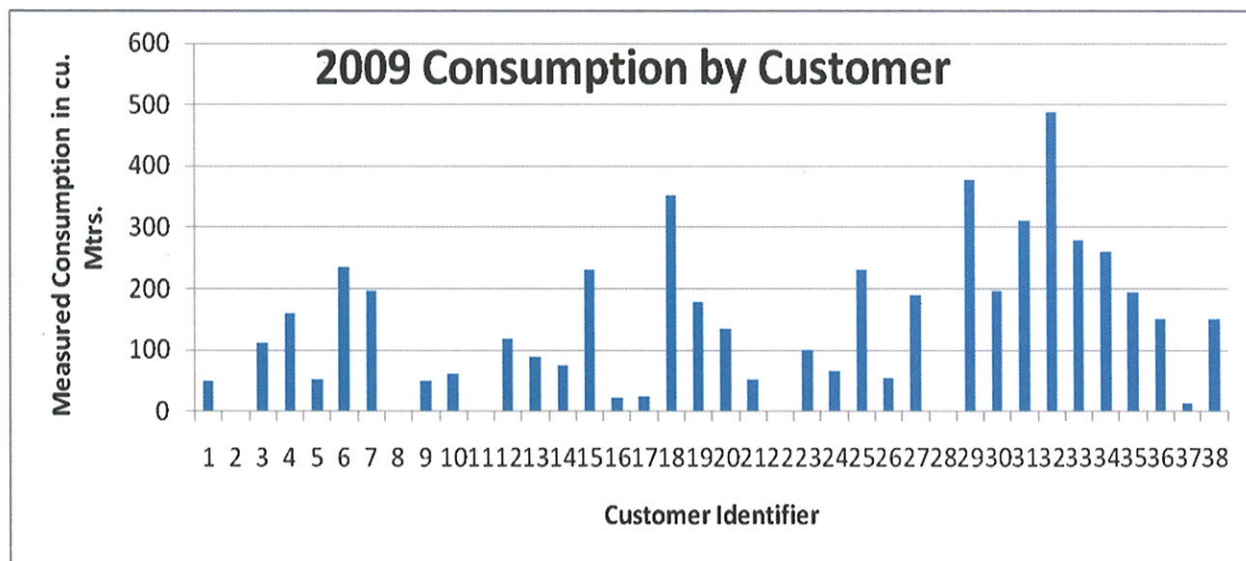


Figure 4. Water Consumption per Customer 2009



Water Quality

The Capital Regional District (CRD) operator carries out an annual sampling program including programmed weekly testing of bacterial indicators, an annual sample for metals and an annual sample for disinfection by-products. Unlike a surface water source such as a creek or lake, groundwater sources are generally less variable from season to season. Bacteria are detected from time to time in the source water. A large increase in bacteria, often following a major weather event, indicates contamination of the aquifer that is often caused by inadequate sealing of a well allowing surface drainage to enter the casing. The risk of aquifer contamination is the primary reason disinfection is provided.

Non-coliform or background bacteria are also present within the water main system. While these bacteria are not harmful to human health, when present in large numbers they have the potential to obscure other, more harmful bacteria in samples and cause errors in detection at the lab. For this reason, a maximum non coliform bacteria count of 200 colony forming units (CFU) per 100 ml is a guideline the CRD strives to maintain. A residual concentration of chlorine is maintained in the system for this purpose. A periodic high bacteria count may turn up in a section of main, especially one with very little usage, at which point, the operator flushes that portion of the main to re-establish the disinfection residual and a re-test is done to confirm acceptable levels have been achieved.

Water delivered to the Sticks Allison service area typically meets the guidelines set out in the *Guidelines for Canadian Drinking Water Quality (CDWG)*, and the requirements of the British Columbia *Drinking Water Protection Act and Regulation* as administered by the Vancouver Island Health Authority (VIHA).

Capital Projects

The 2010 meter replacement project, funded wholly from capital funds on hand, was completed for \$9,784.23; approximately 13.7% under the approved \$11,335.18 budget. Remaining available funds will be used to replace the well head meter during the well house improvements. The meter was purchased under the 2009 capital expenditures.

The planned well house improvements have started and will be completed before the end of 2010. The \$4,000 approved and committed budget from reserves remains sufficient to complete the work.

Annual Operating Budget

Attached is a copy of the *Statement of Financial Activities* as prepared by CRD Finance and Corporate Services for 2009. The statement provides an overview of the revenues and expenditures for the year. Revenues are generated primarily through parcel taxes and user fees (fixed and variable based on water use), and small amounts for interest on savings and miscellaneous revenue such as late payment charges.

Expenditures include all costs to administer the service. *General government services* are charges levied by CRD Corporate Services for the financial processing of the budget and collection of fees and charges. *Other* includes all expenses needed for the operation of the service including all CRD labour costs for day to day operations, CRD service personnel hours performing maintenance and repairs, chemicals, electricity, water testing costs, maintenance parts allowances for electrical and mechanical equipment, rental or equipment as necessary and allowances for technical and staff support to the committee, and for the payment of debt.

The difference between revenue and expense is added to any surplus or deficit carried forward from the prior year. If there is a significant surplus, funds may be transferred to a reserve or capital project account. The surplus or deficits balance after any transfers are carried to the following year. Regional District services are not permitted to plan to carry forward a deficit, so a deficit in a given year usually requires a tax or fee increase in the following year to recover costs and prevent a subsequent deficit. A tax increase can be approved at the November budget meeting whereas a fees increase must include amending the fees and charges bylaw.

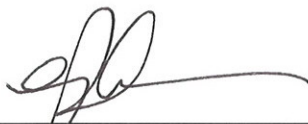
The Sticks Allison 2009 revenue of \$33,708 includes \$10,260 parcel tax and \$23,119 user fees. The *Other Revenue* is primarily late payment penalties. The total expenditures for 2009 were \$34,150, of which \$10,264 is the annual cost of borrowing for capital work, and the remainder is the cost of operation and administration of the service. A planned transfer of \$3,000 to the reserve fund was not completed, as the funds were instead used to directly fund the replacement of seven water meters from the operating budget.

The difference between revenue and expenditures in 2009 amounted to a net expenditure of \$422 at year-end. This amount, together with a deficit of \$122 carried forward from 2008, left a net deficit of \$564 which was carried forward to 2010. The current balance in the reserve fund is \$8,032, which includes a committed \$4,000 for the planned well house improvement project.

There was a decrease in the individual parcel tax for 2010 to \$339.39, down from \$415.33 the previous four years. The user charge remained unchanged at \$668.24 per Single Family Equivalent (SFE). Although the operating budget for the Sticks Allison water service has been adequate in previous years to meet immediate needs, an increase in revenue may be needed for 2011 to offset increasing costs of operation.

GP:ls

Attachments: 1



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Concurrence

CAPITAL REGIONAL DISTRICT

WATER REVENUE FUND

Statement of Financial Activities (Unaudited)

For the Year Ended December 31, 2009

		Sticks Alison Galiano Island Water Supply
Revenue		
Transfers from government	\$	10,260
Sale of services		23,119
Other revenue from own sources:		
Other licenses and permits		-
Interest earnings		1
Other revenue		313
Grants in lieu of taxes		15
		<u>33,708</u>
Expenditure		
General government services		1,610
Other		32,636
Other fiscal services		(96)
		<u>34,150</u>
Net revenue (expenditure)		
		(442)
Transfers to own funds:		
Water Capital Fund		-
Reserve Funds		-
Equipment Replacement Fund		-
Change in fund balance		
		(442)
Opening balance		(122)
Closing balance	\$	<u>(564)</u>