



Making a difference...together

**CEDARS OF TUAM WATER SERVICE COMMITTEE
2007 – 2008 OPERATIONS REPORT
MAY 22, 2008**

The following information is provided for the Cedars of Tuam water service area.

Capital Project Status

Capital Regional District (CRD) engineers have found few options to resolve the long standing issue of a secure water supply for Cedars of Tuam. In the past year, staff have not found a suitable cost affordable solution for a groundwater well to serve the subdivision. The issue is not that groundwater well sites are not available but rather the difficulty is obtaining permission to access private lands which are in close proximity to the subdivision, for purposes of establishing the new source. CRD staff has approached the Fulford water service area to determine whether or not the Cedars of Tuam water system could be connected to Fulford by underwater pipeline. Although the proposal was technically feasible, the Fulford Water Service committee is facing considerable pressure to provide water to the Fulford Village area to accommodate growth within its own service area and to lands immediately adjacent to its borders and could not in good conscience consider an application to extend service to a community so remote from the village.

As was reported at the AGM last year, other options to drilling on private lands were considered, such as Ministry of Transportation (MOT) right of way, however MOT did not support the option due to the potential for liability for well contamination from road operation and maintenance. Also reported last year, the issue of desalination was considered and also rejected owing to high energy cost and high operations and maintenance cost.

A fallback option has been trucked water. The suitability of this approach for the long term is not promising owing to the need to purchase water and the cost and time delay in arranging for the water to be trucked to the site. Without a proper access road to the existing reservoir, delivery of the water is also more complicated than need be.

Next Step

Having exhausted other options, staff are left to propose a phased approach to the project. The groundwater consultant has identified additional opportunities for groundwater location which are outside of the confines of the subdivision. Staff have begun to approach private and public property owners to secure rights for drilling and testing of a new well or wells. Based on the success of the evaluation work, a well will be completed together with the original works proposed for the existing well and reservoir site, including addressing the access issue and upgrading of disinfection and control system. It is estimated that these works can be completed within the budget of \$100,000 established for the project and for which the CRD has received grant funds from the province.

What will be missing from this project is the watermain to interconnect the well to the current distribution system. By relocating the well hundreds of metres away from the end of the distribution system, the cost to connect the well to the system will be sizable. Recent projects for watermain construction have been coming in on the island at around \$250 - \$300 per metre, with rock blasting extra. To finance the interconnection a second phase of the capital project will be needed. Until the committee can come to an agreement with the community on the need and approval for this additional project, any new well drilled under phase 1 of the program would serve only as a source of water for trucking, should the present well again fail this fall.

Phase 2 Project Costs

Until a tested well site is secured, it is difficult to develop accurately the final cost to connect the well to the subdivision. Engineers have, however, developed some order of magnitude cost estimates using current Salt Spring Island construction costs and some likely locations for new wells and it would appear that the additional cost may easily approach \$200,000. Should the committee wish to move forward on phase 2 works, the property owners in the

service area would need to petition the CRD Board to enter into a second borrowing for the utility. The committee could ask the Board to support a longer term borrowing rather than the current borrowing term of 15 years to keep annual costs lower. If the longer term is approved, the additional annual cost to a parcel owner in Cedars of Tuam would still be \$1,000 or \$84 per month.

At the present time the costs for debt servicing and operations is recovered by way of an annual user fee of \$1,115. If the new (and or existing) debt costs were collected as a parcel tax instead of a user fee, those landowners who have made an agreement with the province to defer their taxes, could also defer these costs.

Depending on the well location it may also be possible to add users along the route which would reduce unit costs for operation of the system.

Present Well Performance

The ability to extract water from the existing well was a challenge later in the summer of 2006 with water trucked in for a period of time in the fall. 2007 was a much wetter summer with less demand on the well, however a leak in a consumers service (hot water tank) went unnoticed for a short period of time resulting in an empty water tank and the need to truck water to allow the system to recover. It is evident that the present well is not really a good option for a community water supply. If a new well is located, the existing well is best used as a backup supply.

Cedars of Tuam Water Quality

The CRD carries out regular testing of the water supply to ensure water quality testing meets the guidelines set out in the *Canadian Drinking Water Guidelines (CDWG)*. Complaints on the system usually relate to high chlorine levels. The operator has adjusted the disinfection process at the well site to try and avoid high levels of chlorine entering the system. The capital budget proposed for the system includes an allowance for an upgrade to the measurement and control system which will further reduce the chances of wide variations in the chlorine residual.

Emergency Response

The division maintains emergency response plans for each of its water utilities. The plan provides for prompt action to issues which would pose an immediate concern for public health or a longer term, less acute issue which needs to be attended to. Examples would include contamination of source, loss of disinfection, main break, extended power outage etc. For those issues which are acute and which might affect public health, the system would be isolated and residents notified. If the situation is not acute, the focus of staff will be to correct the problem such that no loss of service results. Where the situation includes loss of water, residents of course will be aware, but will also be kept informed. Many water systems on the islands suffered considerable damage and loss of water through the winter of 2006/2007. The CRD has added some emergency generators to its inventory against such power outage situations.

If residents do have a concern, they should report it. Contact numbers are provided at the end of this report.

Water Consumption

Residents of the area continue to show considerable respect for their limited water supply. Cedars of Tuam always posts one of the lowest user rates for the islands, both winter and peak seasons. With renewed interest in water conservation, many other water utilities are looking to your consumption numbers as a goal to work towards. Typical annual rates of usage for the Cedars of Tuam area would be around 385 litres per day per household (85 gallons per day), an enviable rate for water districts.

Water Conservation

The regional director and the Salt Spring Island Water Council are considering a plan which would see the water council and interested Salt Spring Island water utilities joint fund a rebate program to encourage the installation of low water use toilets in the water area. Details of the project will be forthcoming as they are developed by the water council. The program is meant to be undertaken on a small scale with limited funds made available each year towards conversion of the old high water use units.

CRD staff are preparing a newsletter to be distributed to all CRD services which will provide tips for water conservation including identification of toilet leakage. CRD will be providing with the newsletter two dye tablets which can be used to identify whether water is leaking from the tank into the bowl. Look for the newsletter over the next month.

2006 2007 Annual Budget

Attached is a copy of the *Statement of Financial Activities* as prepared by the CRD Finance and Corporate Services for the year 2007. Although basic in its detail, it provides a brief overview of the revenue and expenditure balance for last year. The revenues into the water service totalled \$19,819. The revenue is generated in this utility only by user fees (sale of services) which amounted to \$19,354 and some internal, revenue, generally interest from late charges.

Against this total are the expenditures for all items in the operations budget. General services are charges levied by the CRD for the financial processing of the budget and collection of fees and charges, Other is a rather odd description for 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 total expenditures for 2007 amounted to \$15,818. The difference between the revenue and expenditures is largely related to deferred maintenance which allowed the committee to put aside funds into the capital project to offset increasing costs.

The difference between revenue and expenditures amounted to \$4,001 at year-end which was transferred to the reserve fund at year-end. With the transfer completed the 2007 budget was left with a surplus of \$2,324 after covering off a small deficit of \$101 carried forward from 2006 to 2007. The surplus from 2007 was used to offset inflation in operations costs in 2008.

CRD staff prepare an annual operating budget each September, to be passed by the CRD Board as an interim budget by year-end and finally adopted in March of the following year. The budget prepared for 2007 for Cedars of Tuam water was largely unchanged from previous years. The committee and staff have strived to maintain the user fee at a constant level and there has been no change in the rate since the CRD took over the utility in 2004. The CRD will however be suggesting to the committee that the 2008 budget consider the need to generate some additional funds to fund additional maintenance works which have been deferred to allow funds to be committed to the capital project. The likely source of additional funds would be through increases in the water consumption fees.

The fees for water use at the present time generate only \$6.25 per customer per month. An increase would be used to initiate a long term replacement program for key components of the water system such as standpipes or meters.

The committee has a small reserve of \$4,500 which should be maintained to fund the replacement of equipment in future.

Water System Problems - Who to Call:

To report any event or to leave a message for the Cedars of Tuam water system operator:

First Call: 537-4314

If you do not reach someone at 537-4314, please report emergency events directly to:

1-250-388-6275 and ask for pager 2614

When connected to the pager message system, please leave your name, your phone number, a brief description of the problem and that the problem is with the **Cedars of Tuam** water system.

Expect a phone call from a CRD duty operator within a short time.

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