

**REPORT TO CEDARS OF TUAM WATER SERVICE COMMITTEE
MEETING OF THURSDAY, 25 SEPTEMBER 2008**

SUBJECT CAPITAL PROJECT SUMMARY

PURPOSE

To provide the Cedars of Tuam Water Service committee (CTWSC) with an update on expenditures and work completed for the present capital works project and to identify a strategy to develop an alternate water supply for the community.

BACKGROUND

The Capital Regional District (CRD) has been trying to locate and develop an alternative groundwater source for the Cedars of Tuam water utility. Staff have made a number of inquiries to landowners in the general vicinity to the water area requesting permission to search for groundwater. Few residents in the immediate area have indicated willingness to assist the water utility in this regard, citing a variety of reasons, most plausible. It has come to a point when the committee may need to identify an alternate strategy to providing a water supply for their community. Staff will assist the committee in this regard through development and costing of current available alternatives.

Capital Project

A summary of revenue and expenditures to set up the capital project has been assembled for the information of the committee.

Revenue		Notes
Original capital project budget	\$24,000	Borrowing
Interest deposited	\$4,456.62	Interest on funds held from borrowing
Funds transferred from Reserve (1)	\$9,186.64	funds accumulated in operating budgets transferred
Total Revenue	\$37,643.26	

Expenditures Pre Grant	
Consultants (groundwater)	\$4,036.76
CRD staff time	\$116.24
Total Expenditures	\$4,153.00
Project funds on hand	\$33,490.26
Commitment from province	\$66,000.00
Project Budget	\$99,490.26

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Proposed Project (with Grant)		
Proposed Expenditures		Notes
1.	Consultants (groundwater)	\$1,666 Expended, Prioritize sites
2.	Upgrade disinfection system	\$6,000 Estimate, 30 September completion
3.	Immediate system maintenance	\$2,000 Estimate, Piping, strainers, 30 September completion
4.	Continuous monitoring equipment	\$12,000 Proposed, requires Fulford to be operational
5.	Improve site access	\$30,000 As per SRW with land owner
6.	Acquire new well site, drill, test	\$20,000 Proposed, dependent on acquisition of site
7.	Develop well	\$30,000 Proposed, only if testing proves out
	Total	\$106,000

Comments on Proposed Program

Items 1-5 are required to maintain the present source but do little to resolve the water shortage issue. There is an ongoing problem with intrusion of sand into the current production well which has and will effectively continue to reduce the well volume. Sand is credited with a recent pump failure. With the replacement of the pump, upgrade and reset of control points and pump elevation, the well is now performing at an optimum yield for this time of year being approximately one gallon per minute.

It is likely the sand used as a filter in the wells construction has now been fully deposited to the bottom of the well. As the well appears to be continuing to fill in, it is also likely the current sand migration is from the surrounding strata which in time will effectively reduce the volume of water available for a pump cycle. Funds could be expended to bail out and reline the well, or the adjacent well, apparently not a good producer, could also be brought on line, however production will likely remain inadequate for the communities needs.

Item 6 would be undertaken to secure an alternate groundwater source, but it would not be usable without the development of the well as per Item 7. Even with the well completed as per Item 6 and 7, there would need to be a significant expenditure to bring water from the new well to the system, unless an alternate arrangement could be worked out with the landowner. Depending on routing, there might be an opportunity to add customers to the system; however if annual costs were as high as anticipated, there may be little incentive to join the system for some years.

Although desalination has a high operating cost, the total cost to a customer might still be competitive when compared to the cost of debt servicing for new capital works. Staff are seeking quotations for the equipment and have made inquiries of operating costs. An installation would need a saltwater intake or intake well, feed pump and main to a new station on Roland Road, a return line and diffuser for waste water, the water maker installation with housing and power and a clear well and pump station into the system.

ALTERNATIVES

1. That the Cedars of Tuam Water Service committee continue to support the current program which includes upgrade of the well site infrastructure to provide more consistent disinfection and seeking agreement with a landowner in the general area to carry out drilling and testing of an exploratory well shaft.
2. That the Cedars of Tuam Water Service committee direct staff to seek another direction to solve the present water shortage problem.

FINANCIAL IMPLICATIONS

The proposed program as outlined will exhaust the present capital funds. If additional funds are required to interconnect a new well located under this program with the water system, or to develop another alternative, the committee will need to again poll the residents of the water area to approve a further borrowing.

SUMMARY/CONCLUSIONS

A number of minor but important upgrades to the well site will be completed by the end of September which will permit more consistent disinfection through the system. The next phases of the project include installation of a continuous monitoring device for the system (which will require similar equipment to be installed in the neighbouring Fulford system) and for access improvements and exploratory well drilling. The program costs may be insufficient to provide well service to the existing well shaft and it is recommended this work not be undertaken at this time.

RECOMMENDATION

That the Cedars of Tuam Water Service committee continue to support the current program which includes upgrade of the well site infrastructure to provide more consistent disinfection and seeking agreement with a landowner in the general area to carry out drilling and testing of an exploratory well shaft.



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