

Faulder Water System Update

December 2010



Where are we now?

In early 2010, the RDOS obtained a cost estimate for the proposed pipeline from the Summerland water treatment plant to the Faulder community based on a **conceptual** design. These costs were taken to the residents and consent was received for the RDOS to proceed. A request was made to the grant providers, BC and Canadian governments, to change the assignment of the two grants to the pipeline option; the initial grants were received based on a project of installing a deeper well and treatment system. Final approval is still pending for this change in grant assignment.

These initial costs are presented in the report titled "Faulder Water System (Revised)" dated March 2010 and produced by Stantec. A summary of these costs is as follows:

- 2010 Cost estimate using conceptual design of pipeline
- Capital Cost: \$1,125,000 (2008 estimate)
 - Annual homeowner cost: ± \$1,500 (2008 estimate)

In the fall of 2010, an engineering consultant was retained to produce a **detailed** design for the construction of a 5.8 km long water pipeline from the Summerland water treatment plant to the community of Faulder. During design of the pipeline, the cost estimated for the construction is significantly higher than expected. The higher construction costs were confirmed by a local respected contractor. The higher estimated costs are as follows:

- 2010 Cost estimate calculated during pipeline detailed design
- Capital Cost: \$2,164,000
 - Annual homeowner cost: ± \$2,600

The unexpected high cost led the RDOS staff to discuss and explore some other possible options. The residents of Faulder have the following options to consider:

- Continue ahead with the project to connect the Faulder water system to the Summerland water treatment plant even with the higher cost.
 - To understand the magnitude of costs involved for the pipeline option, the present value can be calculated that provides the total amount that all the future payments would be worth now if paid out in full today. Present value of \$2,600 per year for 20 years at 5% interest is about \$32,000
- Installation of a Ranney well and treatment system
 - The feasibility and cost of this option was reviewed by a local consultant and completed in early December.
 - An Environmental Assessment and a Groundwater Protection Plan would both be required and would add a substantial delay to the project.
 - Construction is challenging to achieve a long term reliable well.
 - Filtration of the water may or may not be required, but this decision cannot be made until after the well is constructed and the water has been tested. If filtration is required then the cost would be equivalent to the cost for the pipeline to Summerland.
 - The Ranney well could negatively impact the environment.
- Further investigation of the new deep well and ion exchange treatment system
 - In the January 2009 newsletter this option was estimated at \$1,006,000.
 - A consultant could be retained to carry out additional work on feasibility and costs.
- Disbanding the community water system and requiring that each residents provide their own water source to supply their own needs.
 - The issues of water quantity and quality will still remain for all residents.

The goal is to come up with the most viable, sustainable and economic solution to both the water treatment and supply issues in Faulder.

Current status of the aquifer supplying the community water system:

- From July to September 2010, recharge was measured in the well as the top of the water level rose by about 1.2m.
- Since the beginning of November, a decrease of 0.14m has been measured in the well water

Details of the pipe alignment from Summerland and its current estimated cost as well as a current report on the Ranney well option have been added to the RDOS website for your information. www.rdos.bc.ca

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What's next?

- Public Meeting will be held in late January
- RDOS will continue trying to find additional sources of grant funding



WATER QUALITY ADVISORY REMINDER

Re: Uranium in Drinking Water

The RDOS wishes to remind all Faulder Water System users that the Water Quality Advisory for uranium remains in effect until further notice.

The 2009 test for uranium resulted in a level of 0.0299 mg/L. This level continues to exceed the current maximum allowable concentration of 0.020 mg/L as defined in the Guidelines for Canadian Drinking Water Quality while remaining consistent with historical measurements.

Research has suggested that there may be kidney damage when uranium levels exceed 0.06 mg/L. Canada has adopted a safe limit of 0.02 mg/L and the United States has adopted a safe limit of 0.03 mg/L.

The Interior Health Authority has recommended that users of drinking water where uranium levels are measured between 0.02 mg/L and 0.03 mg/L be advised of the potential health concerns. Radiation from uranium at these levels of concentration is not a concern. For the community of Faulder, persons with known kidney disease and concerned individuals may wish to choose to consume an alternate source of water.

Boiling the water **will not** lower the uranium level.