

# REPORT TO WILDERNESS MOUNTAIN WATER SERVICE COMMISSION MEETING OF 28 JANUARY 2011

### SUBJECT WATER TREATMENT UPGRADE PROJECT STATUS

### ISSUE

To provide the Commission with an update on progress to complete the water treatment upgrade by the March 31, 2012 deadline for spending the Provincial grant.

### **BACKGROUND**

The Wilderness Mountain Water Service Commission, at the September 24<sup>th</sup>, 2010 meeting, approved funding of \$20,000 to hire an engineering consultant and staff time to review alternate methods of water treatment processes that would meet the requirements of the project. At the same meeting, approval was given to spend up to \$50,000 to design and install improvements in a phased approach at the existing pump house. These improvements were to include: 1) ultraviolet (UV) disinfection equipment, 2) chlorine dosing equipment, and 3) an electro-magnetic flow meter.

During the design phase for the proposed UV and chlorination upgrades at the existing pump house, it was determined that the operating pressure at the facility was in excess of the rated capacity of UV equipment and therefore, the inclusion of the UV disinfection has been deferred until the final design. However, the chlorine injection equipment and the flow meter purchase and installation is proceeding.

Following a competitive request for proposals, the engineering consulting firm of Kerr Wood Leidal & Associates (KWL) were retained to review treatment alternatives. KWL have visited the site, taken samples of the raw water and reviewed the historical data collected from the utility, including the more recent data collected by the CRD. A draft report is anticipated by late January, which will form the basis for the system upgrade works to be undertaken in 2011 and 2012. KWL have advised they are considering two alternative processes to meet legislated objectives for drinking water treatment, both of which are considered to meet the project requirements and constraints. The anticipated schedule to complete the project will be as follows:

- Receive KWL report and review Early February 2011
- Procure engineering design and construction engineering services Feb-March 2011
- Design and tender works April-July 2011
- Procure water treatment equipment and delivery July November 2011
- Construction September 2011-Feb 2012
- Commissioning March 2012

#### **ALTERNATIVES**

This report is for information.

## CONCLUSION

The phased design and construction of the treatment upgrades is in progress. Staff are preparing to install chlorination equipment and a magnetic flow meter at the existing pump house, while consultants KWL are reviewing technologies that meet the project scope while providing a viable option in both capital and operating terms.

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## RECOMMENDATION

That the Wilderness Mountain Water Service Commission receive the staff report for information.

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