Village of Montrose Water Quality Improvement Project

Presenter: Scott Wallace, P.Eng.
TRUE Consulting

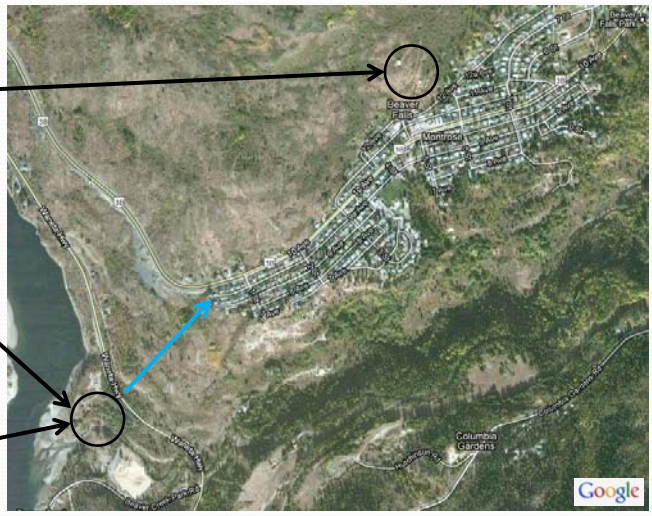
Presentation Overview

- Background - Gas Tax Fund (GTF)
- Description of existing water system
- Summary of proposed upgrades (project components)
- Project Schedule
- Conclusion

What is the gas tax fund?

- Gas Tax Fund (GTF) is the common name for the Canada – British Columbia – Union of British Columbia Municipalities Agreement on the Transfer of Federal Gas Tax Revenues
- Montrose applied for a grant through a GTF program to undertake a "water quality improvement project"
- The Village was successful in obtaining a $1.29 million grant to cover 100% of the estimated project costs

Existing Water System

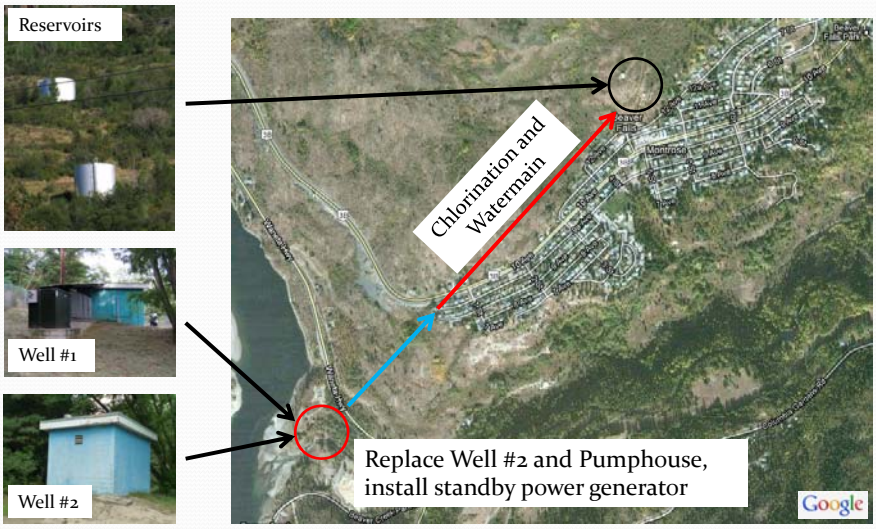


Proposed Project Components

1. Drill new community well ~ $130,000
2. Replace old pump house ~ $700,000
3. Install chlorine injection system ~ $170,000
4. Construct dedicated water supply main ~ $290,000

Total estimated project cost ~ $1,290,000

Proposed Upgrades



1. Drill New Community Well

- The Village of Montrose water supply comes from two aging wells (drilled in 1961 and 1981)
- Two separate wells needed for standby capacity
- Well capacity generally declines over time
- Both wells will eventually need replacement
- Well #2 has a number of problems. Accordingly, Well #2 has been selected for replacement at this time.

2. Replace Old Pump House

- A new pump house will be required for the new well pump and controls
- The existing pump house for Well #2 (to be decommissioned) is currently in poor condition
- Emergency back-up power (standby generator) will also be implemented

3. Install Chlorine Injection System

- Montrose has been on a Boil Water Notice since February 2011. The BWN is a result of the Village's untreated water supply, and coliform bacteria appearing in water samples.
- Implementation of water treatment, including disinfection via chlorination, will eliminate the current Boil Water Notice

4. Construct Dedicated Water Supply Main

- Currently, water from the wells is pumped directly into the Village distribution system
- Proposed upgrades would provide a dedicated supply main directly from the wells to the reservoirs
- Dedicated watermain will:
  - Provide chlorine contact time
  - Improve delivery of consistent water quality to residents

Project Timing

- The project is intended to be completed in phases with the initial focus on removal of the Boil Water Notice
- Implementation of water treatment (chlorination) is targeted for summer 2012, with the remaining project components to be completed by mid to late 2013

Summary

- The Village of Montrose has been awarded a grant of $1.29 million toward a water system improvement project
- The grant covers 100% of the estimated project costs, including design and construction
- The proposed project will be the largest capital project undertaken by the Village in 45 years since the sewage treatment plant was built