## A Primer on Water

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# District of Lake Country

Engineering Department
10150 Bottom Wood Lake Road
Lake Country, British Columbia V4V 2M1
E-mail: engineering@lakecountry.bc.ca
Telephone: (250)766-6677 Fax: (250)766-0116

The District of Lake Country is guided by our vision to ensure the ongoing supply of SAFE, sustainable water.

## What are the Issues?

### **Quantity** - Sufficient Supplies

Because of the form and character of our community we need and use a lot of water. The good news is that we have a number of robust surface sources available for supply. The District has adopted a stewardship approach to properly manage and protect our source waters. Our aim is to ensure sufficient water is available especially through drought periods and that source water quality is improved and maintained over time.

### **Infrastructure** - Reliability

Our water system infrastructure is growing and reinvestment is required to refurbish or replace pipes and facilities. The total replacement cost for District-owned water utility assets is estimated at one hundred million dollars. As a community we all have an ownership stake in District-owned assets. District staff are completing a strategy to replace infrastructure over time on a priority basis.

## **Quality** - Appropriate

The District relies entirely on surface water sources for supply drawing from Okanagan, Kalamalka, Beaver and Oyama Lakes. Water is disinfected with chlorine but no other treatment is currently provided. The Interior Health Authority has developed a directive based on the guidelines for Canadian Drinking Water Quality Guidelines requiring primary treatment in addition to chlorine disinfection. Implementing treatment is expensive and a challenge, as funding the needed capital improvements falls to the community.

## **WATER**

S safe

A affordable

F for our community and

E environment







## What Have We Done?

#### Water Master & Capital Work Plans

 Following through on the Water Master and Capital Works Plans for Okanagan, Beaver, Kalamalka and Oyama Lake sources for 1998 to 2008

#### Eldorado Reservoir Capital Work Project

- Eliminating dangerous hydraulic instability
- Improving water quality

#### Okanagan Pumphouse Capital Work Project

 Retrofitting the Okanagan Lake Pumphouse and improving supply, capacity and reliability

#### **Operator Certifications**

 Our Operators are investing significant time in training to increase skills and achieve higher certifications

#### **Water Quality Monitoring**

- Carry out comprehensive sampling within the distribution system and watershed: chemistry, bacteriological and nutrients.
- Utilizing automated computer systems, monitoring chlorine stations and reservoirs

#### **Watershed Protection**

- Completed Watershed Assessment and Protection plans for Oyama and Beaver Lakes as well as Source to Tap Protection Plans for Kalamalka and Okanagan Lake Intakes
- Continue working with other stakeholders, reducing risks and improving conditions in DLC community watersheds

## What Are We Doing?

#### **Long-term Planning - Water Master Plan**

 Undertaking a comprehensive 20-year plan addressing: water availability, growth, water quality (treatment), fire protection, agriculture and aging infrastructure

#### **Improvements**

- Striving to improve customer communications by improving our website, preparing customer mail outs and increasing utilization of the local media
- Upgrading automated systems
- Completing an implementation plan for watershed and intake protection

## Operational Improvements for the Kalamalka-Oyama Interconnect

- Undertaking a \$5 million project to improve water quality and quantity on the Oyama and Kalamalka Lake sources
- Constructing interconnect and improved pipe line to supply water from the Kalamalka Lake to Oyama Lake distribution
- Upgrading the Kalamalka Lake pump station with ultraviolet light treatment system
- Installing a new chlorination station and reservoir to increase quantity and quality





