



Deep Roots  
Greater Heights

## DRINKING WATER QUALITY AND SERVICE

### WHERE DOES OUR WATER COME FROM?

The District of Maple Ridge operates a water utility under permit by the Fraser Health Authority (FHA). The District is a distributor of water that is supplied and treated by Metro Vancouver from its Coquitlam Lake source. In 2010, the District purchased 11.2 million cubic meters of water (equal to 4,400 full Olympic sized swimming pools) from Metro Vancouver, and supplied water to approximately 69,000 of the 75,000 residents.

#### Did you know...

- The water distribution infrastructure in Maple Ridge includes 376 km of water main, over 18,000 connections, 7 pump stations, 6 reservoir sites, and 5 re-chlorination stations.
- Coquitlam Lake is the primary source of water delivered to Maple Ridge customers. In the event of disruptions at Coquitlam Lake, Metro Vancouver has the capability to transfer water from Seymour Lake and Capilano Lake to Maple Ridge.

### WATER QUALITY TESTING

Maple Ridge and Metro Vancouver conduct extensive testing of drinking water parameters for a number of objectives, including health and aesthetics, as it travels from Coquitlam Lake, through the treatment plant and finally to the furthest reaches of the distribution system within Maple Ridge.

**Microbiological quality** is determined by testing drinking water for Escherichia coli (E. coli), a bacterium that is always present in the intestines of humans and animals and that would indicate faecal contamination of the water. Source and treated water is tested daily and 18 locations within Maple Ridge are tested weekly. In 2010, all samples met BC Drinking Water Protection Regulation Standards.

The amount of **Chlorine disinfectant** present in drinking water is measured continuously at the Metro Vancouver treatment plant and weekly at over 18 locations within Maple Ridge to ensure our clean water remains safe. The District strives to maintain a free available residual chlorine concentration of 0.2mg/L.

**Turbidity**, a measure of fine suspended particles in water is measured daily at the source and treatment plant, and weekly within Maple Ridge. Turbidity was generally low in 2010.

Other **chemical parameters** including disinfectant residuals (trihalomethanes and haloacetic acids), pH, aluminum, arsenic, lead and other metals are tested for bi-monthly, quarterly or semi-annually at the source, at the treatment plant, and within Maple Ridge. The levels of these parameters were very much in keeping with Health Canada and Drinking Water Guidelines.

Sample test data is tracked by Maple Ridge and Metro Vancouver and included in Annual Drinking Water Reports.

## OUR WATER DISTRIBUTION SYSTEM

Water quality is influenced by water system maintenance and improvement strategies that are in place in Maple Ridge. The following are a few of the maintenance strategies that are implemented by the District's Operations Department.

**Unidirectional Flushing** is a method of cleaning sediment and material accumulation from the water mains. Flow velocity is increased in one direction through the pipe and the water is discharged (carrying the sediment with it) through fire hydrants or blow off points.

**Reservoirs** are sized for future growth and fire flow demands, and therefore have storage capacities that exceed normal daily demands. Reservoir levels are optimized to reduce the age of water stored and maintain acceptable chlorine residual levels.

**Pump Stations** are inspected weekly to ensure their efficiency and reliable service.

**Water main Repairs and Improvements:** Water quantity, quality and reliability can be improved through continual repairs and replacements. Computer modeling is typically used to identify deficiencies in the system and design replacement components.

The District takes great pride in providing the highest quality drinking water for consumption. For a more detailed report on how the District achieves this, refer to our Drinking Water Quality Report.

## QUESTIONS OR CONCERNS?

If you have any questions or comments about the Drinking Water Quality Report, please contact the District of Maple Ridge Engineering Department at 604-467-7339 or email us at [eng\\_enq@mapleridge.ca](mailto:eng_enq@mapleridge.ca).



### **Metro Vancouver Tap Water Campaign**

- Millions of single-use plastic water bottles (one litre or smaller) currently end up in our region's landfills.
- We want to provide a tangible way for residents to support sustainability – using refillable water containers instead of single-use plastic water bottles.
- Maple Ridge and Metro Vancouver are committed to reducing bottled water usage to reduce the environmental impact of single-use plastic bottles.

### **Tap Map**

- Metro Vancouver maintains maps (online and iPhone app) of public drinking fountains in Metro Vancouver ([www.metrovancouver.org](http://www.metrovancouver.org)).