

Water Quality and Conservation

CityPlan

Riley Park/South Cambie **RPSC**

Water Sources

The Riley Park/South Cambie neighbourhood receives its water primarily from the Seymour Reservoir on the North Shore. Rain water is collected and stored in the watershed above the Seymour Dam. From there, it is screened, treated with chlorine and transmitted through pipelines to the area.

Water Quality

Vancouver's drinking water received a FAIR-GOOD rating in the 1995 State of the Environment Report*. The problems are: cloudiness (turbidity) during heavy rainfall; bacterial growth; and natural acidity.

Consumption Rates

Water conservation received a POOR-FAIR rating in the 1995 State of the Environment Report Card. Vancouver has a higher per capita water consumption than most other North American cities with similar climates. However, since 1990 per capita consumption has been decreasing, largely due to the summer drought in 1991, and subsequent water conservation programs. This trend is expected to continue as water conservation has become an increasingly important issue.

The average daily City consumption in 2002 was 365 litres per day, or 630 litres per person per day. Per capita consumption has dropped nearly 20% since the introduction of water conservation initiatives. Lawn and garden sprinkling, and car washing typically accounts for 40% of summer household water use. Consumption is generally lower in areas which have smaller lots (no exact figure available) due to smaller outside area, and, less demand for outdoor water use.

Water Rates

Water use is funded through user fees, not taxes. Currently in the City, 97,000 single family homes and duplexes are charged a flat rate of \$271 per year or \$0.74 per household per day. All other serviced customers are charged based on their metered use at a rate of \$1.311 per 100 cubic feet (2,831 litres) of water.

In 2002 the City spent \$54 million on waterworks capital improvements, operations, and the GVRD water bill. The City's \$24 million share of GVRD costs is based on the City's percentage of water used. The City's 2003 - 2005 Capital Plan includes \$43 million for waterworks maintenance and upgrading.

Government Roles

In simple terms, the GVRD supplies the water to each municipality which is responsible for delivering it to users.

Federal Government:

- establishes drinking water quality guidelines.

Provincial Government:

- responsible for the public use of our shared water resources and public health.

Greater Vancouver Water District (GVWD):

- operates under provincial legislation;
- delivers bulk water supplies to the City; and,
- responsible for the watersheds treatment and transmission system, which convey water to the City's distribution system.

City of Vancouver:

- operates under Provincial

legislation; and,

- responsible for the distribution system from greater Vancouver Water District connections to customer property lines.

City & Community Initiatives to Improve the System

Water Conservation:

- Summer sprinkling restrictions are in effect from June 1 to September 30 each year.
- The City sells rain barrels so that people can collect rain water which would otherwise go into the sewer system and use it to water their gardens and lawns. For more information, phone the Water Conservation Hotline: (604)873-7350
- The City supports public and school education programs on water conservation.
- The plumbing code has been changed to incorporate water conserving fixtures and devices.
- City Farmer programs to encourage water conserving landscaping. The commercial water rate structure has been changed to encourage water conservation.
- The City has a program to upgrade water mains and detect and repair leaks.

Emergency Planning:

- Construction of a Dedicated Fire Protection System to provide post-seismic fire protection to parts of the City.
- Development of ground water supplies to provide alternative potable drinking water.
- Development of shoreline access for Fire Department to use river water for alternative fire fighting supplies.
- Emergency planning and training

initiatives for waterworks personnel.

Construction:

- Exploring use of "trenchless technologies" to reduce construction costs and neighbourhood disruptions.
- Increased communications with neighbourhoods affected by construction activities.
- Increased co-ordination of construction activities with other utilities and streets to minimize costs and disruptions.

Water Quality:

Actions now underway through the GVRD's Drinking Water Quality Improvement Plan include filtration, ozonation, rechlorination, and corrosion control treatment. Five new rechlorination stations began operating throughout the GVRD in 1998. Corrosion control facilities now operate at Seymour reservoir.

The City is increasing its monitoring, and water main flushing programs.

Sources

City of Vancouver:
Engineering Dept., Waterworks

Office of the Environment
1995 State of the Environment
Report, with staff updates.

*The 1995 State of the Environment Report is an accounting of where the City of Vancouver is in the stewardship of our natural environment. The report identifies a number of key indicators to chart the City's progress in protecting the environment.