City of Bellevue
Drinking Water Quality Report

Water testing performed in 2004

June 2005

PWS ID#: WA5305575
Your Water is Safe

Based on rigorous testing performed throughout 2004, your drinking water continues to meet or exceed all state and federal drinking water standards. The City of Bellevue is pleased to provide you with the 2005 Water Quality Report, in accordance with the federal Safe Drinking Water Act. Drinking water is our most precious resource, and we are committed to delivering safe water of the highest quality to your home or business. We encourage you to use water wisely, and we appreciate your conservation efforts, especially as we respond to the drought that is affecting our entire state.

Where Does My Water Come From?

Bellevue’s drinking water comes from the Cedar and Tolt rivers in the Cascade Mountains. Customers who live in the Enatai, Somerset, Woodridge or Meydenbauer neighborhoods typically drink Cedar River water. If you live in other areas of Bellevue, your water comes from the Tolt River.

The Cascade Water Alliance is a regional water supplier composed of cities and water districts working to meet water supply needs. As a member of Cascade, Bellevue has an ownership interest in water supplies and a voice in future water supply decisions that affect you, the customer.

Although Cascade is currently purchasing all water from the City of Seattle, members are exploring new water supply sources to ensure that customers will have enough drinking water to meet projected growth demands. Regardless of source, all supplies will continue to meet or exceed state and federal water quality requirements.
From the Environmental Protection Agency

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

- **Microbial Contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

- **Inorganic Contaminants**, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

- **Pesticides and Herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

- **Organic Chemical Contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;

- **Radioactive Contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA’s Safe Drinking Water Hotline at (800) 426-4791.
Frequently Asked Questions

Is Bellevue’s drinking water hard or soft?

Your water is soft. Hardness comes from two minerals in the water—calcium and magnesium. The range of hardness for the Tolt and Cedar supplies is 1.69 to 1.73 grains per gallon—some of the softest water in the country. Since soap lathers easier in soft water, you may find you need to use less.

What exactly is a cross-connection?

A cross-connection is a connection between your drinking water plumbing and a potential source of contamination. An example would be a landscape irrigation system or a hose-connected applicator for fertilizer. Without proper backflow protection, the contaminated water in these systems can be suctioned backward into your drinking water. This cross-connection can occur if there is a drop in supply pressure due to nearby firefighting, repairs, or a break in the water main.

Will Bellevue test the water in my home if requested?

Bellevue’s water is tested frequently at the source and in our main pipes. You can get water from your tap tested by a private water-quality testing lab for a fee. Please call (206) 684-7801 for a recorded listing of Puget Sound area labs.

What can I do to save water during the drought?

A community effort to save water now leaves water in the reservoirs for summer and may help us avoid the need for further restrictions later on. Here are a few things you can do to make every drop count and save money at the same time:

**Indoor water-saving tips**

- Replace old water fixtures and appliances with water-saving models.
- Wash only full loads of laundry. Match water level to size of load.
- Avoid using the toilet for trash disposal.
- Turn the water off while saving or brushing teeth.
- Run the dishwasher only when full.
- Check for and repair leaky toilets and dripping faucets.
- Take shorter showers.

**Outdoor water-saving tips**

- Tune up watering systems. Repair leaks and broken or misaligned spray heads.
- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Add organic matter to improve soil’s moisture-holding ability.
- Repair leaky faucets and hoses.
- Use water-saving hose end shut-offs to reduce waste.
- Visit the Water-wise garden at the Bellevue Botanical Garden for ideas or plant lists.

For the latest news on water supply conditions, local water use restrictions and more water-saving ideas, visit our Web site at www.cityofbellevue.org/utilities or call Bellevue Utilities at (425) 452-6932.

Lead in Drinking Water

The water you receive does not contain lead or copper. However, pipes in your home or business can affect the quality of water coming from the tap. Of particular concern is copper pipe with lead solder, found primarily in homes plumbed with copper pipes prior to 1985 or in homes that do not meet the plumbing code. If you live in such a home, let the water run rapidly a few seconds or until cold to the touch before using it for drinking or cooking. (You can save the flushed water for watering plants.) Letting water run is especially important if it has not been used for six hours or more. Bellevue Utilities included information about lead in drinking water with your bill in 2004. If you would like a copy, please call (425) 452-2030.
How Your Water Is Treated

Water is treated to ensure that it is safe and to improve taste and odor. Treatment for the Tolt River supply includes ozonation, coagulation and filtration, chlorination, fluoridation and corrosion control. The Tolt treatment plant was constructed to improve water clarity during fall and winter storms.

The new Cedar treatment facility is now in full operation. Treatment for the Cedar River supply includes ozonation, ultraviolet-light disinfection, screening, fluoridation, corrosion control and disinfection with chlorine. The new treatment process improves the taste and odor of Cedar water and increases public protection by disinfecting against Cryptosporidium.

Cryptosporidium in Drinking Water

Cryptosporidium parvum is a disease-causing organism commonly found in the natural environment throughout the United States. In the Tolt and Cedar river watersheds, Cryptosporidium sources include deer, elk, and voles. Chlorination is not effective against Cryptosporidium; however, ozone disinfection, conducted at both the Cedar and Tolt treatment plants, is very effective at destroying Cryptosporidium and other microbes. There have been no disease outbreaks associated with your drinking water.

In accordance with federal requirements, your water was monitored for Cryptosporidium for the Cedar River supply in 2004. Cryptosporidium was detected in 1 of the 33 samples collected from the Cedar supply, with a maximum concentration of 2 organisms per 100 liters. These levels are very low compared to typical rivers and streams throughout the country. Cryptosporidium samples were not collected from the Tolt supply due to removal and inactivation of Cryptosporidium by the Tolt Filtration Plant.
What's in My Water?

Your water is monitored every day of the year and tested regularly to ensure that it is safe. In 2004, water delivered to your home or business met or exceeded all state and federal drinking water requirements.

The EPA sets standards to ensure your water is safe. Although all of the substances listed in the following table are below the EPA's Maximum Contaminant Level (MCL) allowed, we feel it is important that you know what was detected in your water and how much of the substance was present. Your water is tested for more than 100 compounds, but the table shows only those detected. For a list of compounds that were monitored but not detected, call the Utilities Drinking Water Quality Office or visit our Web site at www.cityofbellevue.org/utilities.

### DETECTED COMPOUNDS

<table>
<thead>
<tr>
<th>DETECTED COMPOUND</th>
<th>UNITS</th>
<th>EPA's Allowable Limits</th>
<th>Levels in Cedar Water</th>
<th>Levels in Tolt Water</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turbidity¹</td>
<td>NTU</td>
<td>NA</td>
<td>0.8</td>
<td>0.03-0.66</td>
<td>No</td>
<td>Soil runoff</td>
</tr>
<tr>
<td>Fluoride</td>
<td>ppm</td>
<td>4</td>
<td>1.0</td>
<td>0.8-1.1</td>
<td>No</td>
<td>Water additive that promotes strong teeth</td>
</tr>
<tr>
<td>Bromate</td>
<td>ppb</td>
<td>0</td>
<td>ND</td>
<td>ND</td>
<td>No</td>
<td>By-product of drinking water ozonation</td>
</tr>
<tr>
<td>Total Coliform</td>
<td>% positive samples</td>
<td>0</td>
<td>Highest month = 2%</td>
<td>Highest month average = 0.85</td>
<td>No</td>
<td>Naturally present in the environment</td>
</tr>
<tr>
<td>Chlorine</td>
<td>ppm</td>
<td>MRDL=4</td>
<td>22.1</td>
<td>14.9-57</td>
<td>No</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>Total Trihalomethanes</td>
<td>ppb</td>
<td>0</td>
<td>Highest month = 2%</td>
<td>Highest month average = 0.85</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>HAA</td>
<td>ppb</td>
<td>NA</td>
<td>21.4</td>
<td>0.5-34.7</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>Sodium</td>
<td>ppm</td>
<td>No EPA limit set</td>
<td>1.9</td>
<td>1.02</td>
<td>No</td>
<td>Naturally present in the environment</td>
</tr>
</tbody>
</table>

¹ Turbidity is a measure of cloudiness of the water. It is monitored because it is a good indicator of water quality. 99.95% of the samples from the Tolt Treatment facility were below 0.3 NTU for each month in 2004.

High risk homes in Bellevue and other local cities are tested for lead as part of a regional program. Although there was no lead in the water delivered to these homes, lead solder and copper pipes can dissolve lead and copper into the water coming from the tap (especially in homes built before lead solder was banned in 1985). Below are the 2004 sampling results of 375 homes, 50 in Bellevue. All were built prior to 1985 with copper pipes. Six percent of the homes had lead levels above the Action Level; copper was not a problem. The Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

### LEAD AND COPPER REGIONAL MONITORING PROGRAM RESULTS

<table>
<thead>
<tr>
<th>PARAMETER AND UNITS</th>
<th>MCLG</th>
<th>ACTION LEVEL</th>
<th>RESULTS OF 2004 SAMPLING¹</th>
<th>HOMES EXCEEDING ACTION LEVEL</th>
<th>SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead, ppb</td>
<td>0</td>
<td>15</td>
<td>10.3</td>
<td>24 of 375 (6%)</td>
<td>Corrosion of household plumbing systems</td>
</tr>
<tr>
<td>Copper, ppm</td>
<td>1.3</td>
<td>1.3</td>
<td>0.26</td>
<td>0 of 375</td>
<td>Corrosion of household plumbing systems</td>
</tr>
</tbody>
</table>

¹ 90th Percentile: Ninety percent of the samples were less than the values shown.

### Table Definitions

**AL (Action Level):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG (Maximum Contaminant Level Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**MRDL (Maximum Residual Disinfectant Level):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

**NA: Not applicable**

**ND: Not detected**

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.