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# Drinking Water Quality Report



## *In This Issue:*

- ▲ Where Your Water Comes From
- ▲ How Your Water is Treated
- ▲ What is in Your Drinking Water



# Your Water is Safe!



*Tom Thetford*

**W**e are pleased to provide you our Annual Drinking Water Quality Report. This report summarizes the findings of the City of Everett's 2005 drinking water quality testing program. Why are we sending this information to you? The federal Safe Water Drinking Act requires water systems to provide their customers annual reports on the quality of their drinking water. We are happy to comply because we support your right to know about the water you drink.

The City of Everett operates a first-class water system. We're proud of the system and welcome this opportunity to tell you about it. We want you to know where your drinking water comes from and how it is treated. More importantly, we want you to know your water is safe to drink and meets or exceeds all government standards. This information allows people, particularly those with special health needs, to make informed decisions about their drinking water.

We have tried to make this report as easy to understand as possible. However, drinking water quality is a complex issue and some of the information is technical. If you have questions, please contact our water specialist, Mark Weeks, at 425-257-8800. You can also obtain more information about our water system online: [www.ci.everett.wa.us/pw](http://www.ci.everett.wa.us/pw).

A handwritten signature in black ink that reads "Tom Thetford". The signature is fluid and cursive.

*Tom Thetford,  
Everett Utilities Director  
June 2006*



# Drinking Water Source

Your drinking water comes from Spada Reservoir, located about 30 miles east of Everett at the headwaters of the Sultan River. Spada Reservoir was created in 1964 in partnership with the Snohomish County PUD as part of the Jackson Hydroelectric Project. This 50-billion-gallon reservoir serves as a collecting point for rain and snowmelt from the Cascade Mountains.

Spada Reservoir is located in the Sultan Basin Watershed, an area covering over 80 square miles. A watershed is a geographic area where all precipitation drains into a single body of water. The Sultan Basin Watershed is one of the wettest watersheds in the continental United States. The average rainfall there is about 165 inches—five times the rainfall in Everett.

To protect the naturally pristine water in Spada Reservoir, water quality in the Sultan Basin Watershed is carefully monitored. The watershed is patrolled and human activities are limited to minimize the impact on water quality. While there have been no threats to the City's water supply system, we continue to evaluate and adjust our security measures.



Spada Reservoir

# Drinking Water Treatment

From Spada Reservoir, the water travels through a pipeline to Chaplain Reservoir. This is where the City's water treatment facility is located. Chaplain Reservoir holds about 4.5 billion gallons of water and, on average, about 50 million gallons of water is treated each day at the water treatment facility.

Your drinking water is treated with advanced filtration and disinfection. First, agents are added to the water that cause particles to coagulate. Next, the water passes through huge filters that remove the particles. These particles can include sediment and natural materials as well as viruses, bacteria and other disease-causing organisms. Finally, chlorine is added to the water to eliminate any organisms that were not removed by the filtration process.

During the treatment process, several things are added to the water. Polymers are added as part of the filtration process, fluoride is added for dental health purposes and sodium carbonate is added to adjust the pH level of water so it is less corrosive on pipes and plumbing fixtures. These additives are carefully monitored and the water is continually tested to make sure it is safe to drink.

*"We are committed to providing you the very best drinking water possible. We are continually upgrading our facilities to make sure your drinking water meets or exceeds all government regulations." – Tom Thefford, utilities director*

# Water Quality Data

In 2005, your drinking water was tested for over 100 possible contaminants. The following tables list the substances detected and levels found. What this data indicates is this: your drinking water meets or exceeds all state and federal safety standards and is perfectly safe to drink.

## Regulated Contaminants

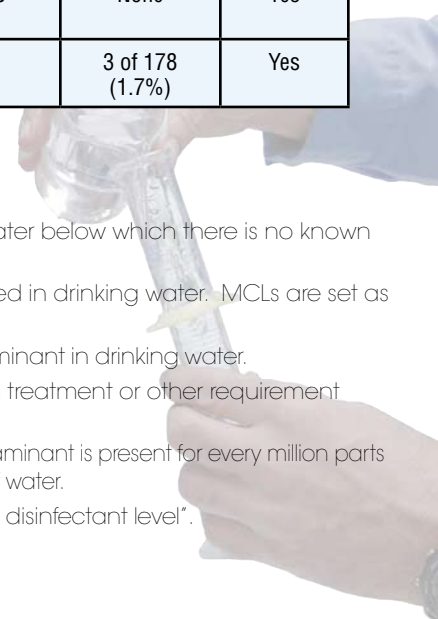
| Parameter                                   | Major Source                              | Units      | EPA Regulations         |                         | Everett Water Results |                           |         |
|---|---|------------|-------------------------|-------------------------|-----------------------|---------------------------|---------|
|   |   |            | Ideal Level/Goal (MCLG) | Maximum Allowable (MCL) | Range or Other        | Average or Highest Result | Comply? |
| Fluoride                                    | Dental health additive                    | ppm        | 2                       | 4                       | 0.8 - 1.2             | 1.0                       | Yes     |
| Haloacetic Acids (5)                        | By-product of drinking water chlorination | ppb        | N/A                     | 60                      | 7.9-35.0              | 26.9                      | Yes     |
| Nitrate                                     | Erosion of natural deposits, animal waste | ppm        | 10                      | 10                      | 0.049-0.125           | 0.097                     | Yes     |
| Residual Disinfectant Level (free chlorine) | Added as a drinking water disinfectant    | ppm        | 4.0 (MRDLG)             | 4.0 (MRDL)              | 0.1-1.0               | 1.0                       | Yes     |
| Total Coliform Bacteria                     | Naturally present in the environment      | % Positive | 0                       | 5% Positive per Month   | 0%-1.8%               | 1.8%                      | Yes     |
| Total Trihalomethanes                       | By-product of drinking water chlorination | ppb        | N/A                     | 80                      | 29.9-46.7             | 37.5                      | Yes     |
| Turbidity                                   | Soil erosion                              | NTU        | N/A                     | TT                      | 100%                  | 0.09                      | Yes     |

## Lead and Copper

| Parameter | Major Source                          | Units | EPA Regulations         |                   | Everett Water Results |                        |         |
|-----------|---------------------------------------|-------|-------------------------|-------------------|-----------------------|------------------------|---------|
|           |                                       |       | Ideal Level/Goal (MCLG) | Action Level (AL) | 90th Percentile Level | Homes Exceeding the AL | Comply? |
| Copper    | Plumbing, erosion of natural deposits | ppm   | 1.3                     | 1.3               | 0.068                 | None                   | Yes     |
| Lead      | Plumbing, erosion of natural deposits | ppb   | 0                       | 15                | 3                     | 3 of 178 (1.7%)        | Yes     |

Here is an explanation of the **key terms** used in the tables:

- ▲ Maximum contaminant level goal (MCLG) – 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.
- ▲ Maximum contaminant level (MCL) – 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.
- ▲ Treatment technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.
- ▲ Action level (AL) – The concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which a water system must follow.
- ▲ Parts per million (ppm)/parts per billion (ppb) – A part per million means one part of a contaminant is present for every million parts of water. Similarly, parts per billion indicates the amount of a contaminant in a billion parts of water.
- ▲ MRDLG is the “maximum residual disinfectant level goal,” MRDL is the “maximum residual disinfectant level”.
- ▲ Not applicable (NA) – Means EPA has not established MCLGs for these substances.



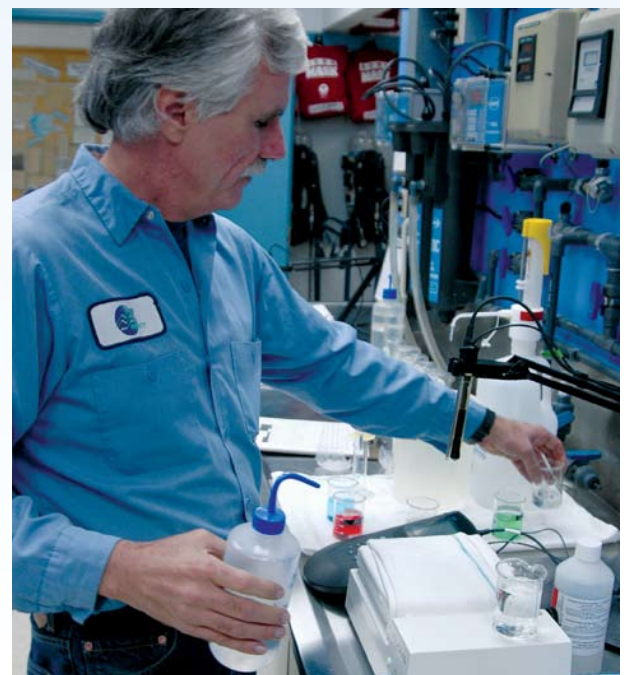
# Unregulated Contaminants

| Parameter                     | Units | Ideal Level/Goal (MCLG) | Everett Water Results |               |
|-------------------------------|-------|-------------------------|-----------------------|---------------|
|                               |       |                         | Range Detected        | Average Value |
| Bromodichloromethane          | ppb   | 0                       | 1.3-2.4               | 1.8           |
| Chloroform (trichloromethane) | ppb   | 300                     | 28.6-44.0             | 35.5          |
| Dichloroacetic Acid           | ppb   | 0                       | 4.3-17.7              | 11.7          |
| Trichloroacetic Acid          | ppb   | 300                     | 12.0-17.1             | 14.7          |

These substances are disinfection by-products that must be monitored but have no MCL or AL.

## Additional Information

- ▲ Trihalomethanes (THMs) are a by-product of the chlorination process used to kill disease-causing organisms. Some have suggested THM levels above the EPA standard of 80 ppb may be a concern for pregnant women. The level in your drinking water is significantly below that threshold.
- ▲ Turbidity is a measure of the amount of particulates in water measured in Nephelometric Turbidity Units (NTU). These particulates can include bacteria, viruses and protozoans that can cause disease. Turbidity measurements are used to determine the effectiveness of the treatment process to remove particulates. Each month no more than 95 percent of the samples can exceed the EPA treatment limit of 0.3 NTU. Our water complies with the Washington State Department of Health's stricter standard of 0.1 NTU. The 0.09 result is the highest single turbidity measurement in 2005.
- ▲ Lead and copper are measured at household faucets every three years. The data reported is from 2003. These results indicate there is virtually no lead or copper in the water you are provided. However, household plumbing may contribute to the presence of lead and copper at your faucet.
- ▲ *Cryptosporidium* is a microscopic organism that, when ingested, may cause diarrhea, fever and other gastrointestinal distress. It can be found in all of Washington's river and streams and comes from animal waste in the watershed. *Cryptosporidium* is eliminated by effective treatment including filtration, sedimentation and disinfection. Your water is tested regularly for the presence of *Cryptosporidium*. No *Cryptosporidium* oocysts were detected in the monthly raw source water intake samples collected in 2005.
- ▲ Arsenic in drinking water has been the subject of considerable media attention. EPA has established an MCL of 10 ppb for arsenic. No arsenic was detected in your water in 2005.
- ▲ EPA sets limits on the type and amount of polymers that can be added to enhance water filtration and remove particles. The State Department of Health also requires that all polymers be certified as safe for potable water use by an independent testing organization (NSF). Only NSF-approved polymers are added and at levels far below EPA standards.
- ▲ For a complete listing of the substances that were tested for, contact us at 425-257-8800.



Lowell Lorenz,  
water plant operator

# General Information

All water sources (both tap water and bottled water) contain impurities. As water flows over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

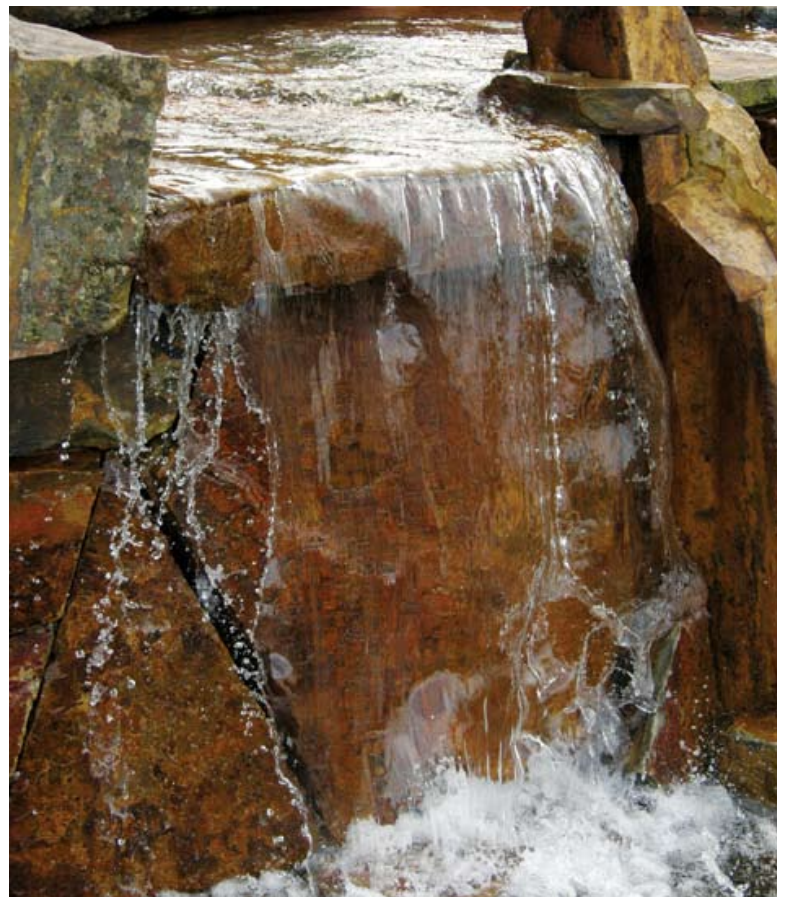
- ▲ Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- ▲ Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or 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 may also come from gas stations, urban stormwater runoff and septic systems.
- ▲ Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

# Other Data

This information describes additional characteristics of your drinking water. We are not required to report this information, however, some water users may find it useful.

| Parameter                      | Units | Everett Water Results |                  |
|--------------------------------|-------|-----------------------|------------------|
|                                |       | Range Detected        | Average Value    |
| Alkalinity                     | ppm   | 19-26                 | 22               |
| Aluminum                       | ppb   | 10-32                 | 17               |
| Arsenic                        | ppb   | N/D <sup>1</sup>      | N/D <sup>1</sup> |
| Calcium                        | ppm   | 3.1-3.6               | 3.3              |
| Free Chlorine Residual         | ppm   | 0.1-1.0               | 0.6              |
| Magnesium                      | ppm   | 0.60-0.70             | 0.65             |
| pH                             | s.u.  | 7.3-9.3               | 8.5              |
| Sodium                         | ppm   | 7.8-9.5               | 8.5              |
| Total Hardness                 | ppm   | 10.3-14.6             | 11.9             |
| <sup>1</sup> ND = Not Detected |       |                       |                  |

Note: USEPA advises individuals on restricted sodium diets of 500 mg per day should consume water containing 20 mg/L (ppm) or less of sodium.





## Information From EPA

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) 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 contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

## Next Steps

**For More Information** about drinking water quality, please contact:

**City of Everett Water  
Quality Office**

Phone: 425-257-8800

Website: [www.ci.everett.wa.us/pw](http://www.ci.everett.wa.us/pw)

**Environmental Protection  
Agency (EPA):**

Phone: 1-800-426-4791

Website: [www.epa.gov/safewater](http://www.epa.gov/safewater)

**State Department of Health (DOH):**

Phone: 1-800-521-0323

Website: [www.doh.wa.gov/ehp/dw/](http://www.doh.wa.gov/ehp/dw/)

**To Get Involved** in decisions affecting your drinking water, attend and comment at Everett City Council meetings, Wednesdays in the City Council Chambers at 3002 Wetmore Ave. Meetings begin at 8:30 a.m., except the third Wednesday of each month which is an evening meeting beginning at 6:30 p.m. Agendas are available on the City's website at [www.everettwa.org](http://www.everettwa.org).

### **City of Everett Elected Officials**

**Mayor:**

Ray Stephanson

**City Council:**

Arlan Hatloe, Ron Gipson,  
Paul Roberts, Mark Olson, Drew  
Nielsen, Brenda Stonecipher and  
Bob Overstreet.



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# A Precious Resource

**A** bundant, available water is a quality of life issue that our community depends on. It's easy to take water for granted with our plentiful rainfall, but it is very important that we each do our part to use water wisely. Doing so benefits our community because it delays the need for costly upgrades of the water system. It also benefits the environment and the plants, wildlife and fish that depend on water for their survival.

Saving water is simple and inexpensive—just a little common sense goes a long way. Conserve inside. Take shorter showers and repair leaky toilets and faucets. This can save thousands of gallons of water a year. Conserve outside. Choose drought-tolerant plants, add mulch to your planting beds and water wisely. One inch of water a week, including rain, is all your lawn needs.

For more water saving tips, visit our website:  
[www.ci.everett.wa.us/pw](http://www.ci.everett.wa.us/pw).

**Contributors:** Editor: Greg Moore • Water Quality Specialists: Mark Weeks and Julie Sklare  
Layout & Design: Libby Allen, Allengraphics • Photography: David Johansen Vasquez, Big Picture Photography



**City of Everett**  
**Public Works Department**

3200 Cedar Street  
Everett, WA 98201

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