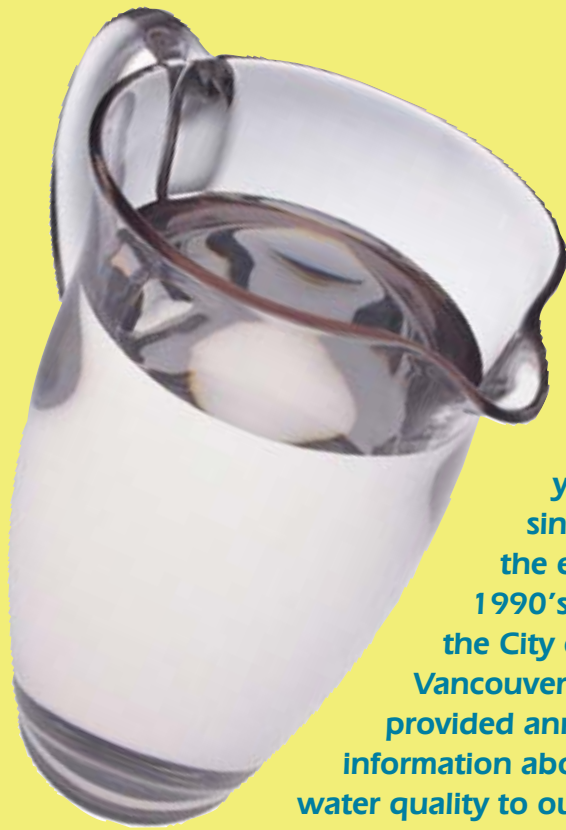


# City of Vancouver 2002 Annual Water Quality Report



Each year since the early 1990's, the City of Vancouver has provided annual information about water quality to our customers.

## Why?

It's the law. The Federal Safe Drinking Water regulations enacted by Congress and the Environmental Protection Agency (EPA) require us to send information to you each year about your drinking water. At the City of Vancouver, we are proud of the high quality and safety of the water we provide to over 200,000 people in the Vancouver area, and work very hard to maintain and provide safe water for your consumption and use.

The quality and safety of drinking water is defined by the results of a series of bacteriological, chemical, physical and radiological tests conducted by chemists, microbiologists, and water technical specialists.

So read the good news about your Water Utility. Learn where your water comes from, what's in it and how it compares with standards set by the Washington State Department of Health and the Environmental Protection Agency (EPA). The good news? You will find that the City of Vancouver supplies safe, high-quality well water that meets or is better than all federal and state standards.

**"The water system is extremely well-operated and in good condition."**

*State of Washington Dept. of Health, after conducting its five-year Water Utility Sanitary Survey for the City of Vancouver in 2001.*

## Questions about this report?

Please call us with questions about the quality of your drinking water, or about this report, at 360-696-8177. For more detailed information about safe drinking water, call the Environmental Protection Agency (EPA) Safe Drinking Water Hotline, 1-800-426-4791

Or e-mail us at:  
[norm.kramm@ci.vancouver.wa.us](mailto:norm.kramm@ci.vancouver.wa.us)



City of  
**VANCOUVER**  
WASHINGTON

# Water Quality Summary

The City of Vancouver has its water analyzed for over 238 different substances, some regulated and some not regulated. The substances listed below are REGULATED and were in Vancouver's water during 2002. All samples taken are from treated water that is delivered to the distribution system. All are below levels allowed by federal and state agencies. Additional information on this chemical analysis of your water can be obtained by calling City of Vancouver Water Operations at 696-8177.

## ◆ Health Related (Primary) Standards

Primary standards are intended to protect public health against substances in the water that may be harmful to humans if consumed for long periods of time. EPA standards are set at levels that protect our most sensitive population, such as infants and the elderly.

Contaminant	Highest Level Allowed (MCL)	Highest Level Detected	Range of Level Detected	Ideal Goal MCLG	Potential Sources of Contaminant
<b>Inorganic Compounds</b>					
Barium (ppm)	2.0	0.02	0.0-0.02	2.0	Erosion of natural deposits
Copper (ppm)	AL=1.3	0.05	0.0-0.05	1.3	Erosion of natural deposits, corrosion of plumbing systems
Fluoride (ppm)	4.0	1.32	0.0-1.32	4.0	Water additive which promotes strong teeth
Total Nitrates(ppm)	10.0	4.33	0.0-4.33	10	Fertilizer, animal waste, septic systems, sewage
Sodium (ppm)	<sup>1</sup> 20	<sup>2</sup> 24	5.0-24.0	<sup>1</sup> 20	Erosion of natural deposits
Maximum Total Trihalomethane (ppb)	80.0	28.1	7.4-28.1	0	By-product of disinfection with chlorine combined with organic matter
Potential					
Zinc (ppm)	5.0	0.04	0.0-0.04	NA	Erosion of natural deposits
<sup>1</sup> A recommended level of concern for those on diets with daily sodium intake restrictions <sup>2</sup> This "highest level detected" result was measured in only one of many samples taken throughout the water system.					

## Volatile Organic Compounds

1,1,1-Trichloroethane (ppb)	200.0	1.7	0.0-1.7	200	Discharge from metal degreasing sites and other factories
1,1-Dichloroethylene (ppb)	7.0	0.7	0.0-0.7	7.0	Discharge from industrial and/or commercial sites
Tetrachloroethylene PCE (ppb)	5.0	0.3*	0.0-.3*	0	Discharge from industrial and/or commercial sites
Total Trihalomethane (ppb)	100.0	16.6	0.0-6.6	0	Chlorination by-product caused by the reaction of Chlorine with organic matter
Trichloroethylene TCE (ppb)	5.0	0.3	0.0-0.3	0	Discharge from metal degreasing sites and other factories
* estimated by Laboratory - below detection limits					

## Physical Characteristics

pH	6.5-8.5	8.33	6.86-8.33	6.5-8.5	Natural occurring or treatment additive
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## Bacteriological

Total Coliform Bacteria	Less than 5%	0%	0%	0%	Contamination by mammals
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## Radionuclides

Gross Alpha (pci/L)	15.0	1.8	1.0-1.8	NA	Natural occurring
Radium 226 (estimated)(pci/L)	3.0	0.2	0.2-0.2	NA	Natural occurring

## ◆ Aesthetic (Secondary ) Standards and Other Characteristics

Secondary standards are established to ensure aesthetic qualities of water such as taste, odor or clarity. These standards govern substances that may influence consumer acceptance of water, rather than health related effects.

<b>Inorganic Compounds</b>					
Sulfate (ppm)	250.0	14.0	0.0-14.0	NA	Natural occurring
<b>Physical Characteristics</b>					
Conductivity (umhos/cm)	700.0	316.0	176.0-316.0	NA	Natural occurring
Total Dissolved Solids (ppm)	500.0	216.0	129.0-216.0	0	Natural occurring
Turbidity (NTU)	1.0	0.8	0.3-0.8		Natural occurring

## ◆ Special Information Is Available

Some people may be more vulnerable than the general population to contaminants in drinking water. Immuno-compromised people, such as those with cancer undergoing chemotherapy; people 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 from their health care providers about drinking water. Guidelines from the EPA and Centers for Disease Control, on appropriate means to lessen the risk of infection by bacterial contaminants, are available from the Safe Drinking Water Hotline at 1-800-426-4791.

### The results below are not required by law but are presented for your information.

Contaminant	Test Results	Results Range
Alkalinity (ppm)	125.0	5.58 - 125.0
Aluminum (ppm)	83.0	0.0 - 83.0
Ammonia (ppm)	0.05	0.0 - 0.05
Boron (ppm)	0.03	0.0 - 0.03
Bromodichloromethane (THM) (ppb)	7.9	0.0 - 7.9
Bromoform (THM) (ppb)	5.1	0.0 - 5.1
Calcium (ppm)	32.6	0.0 - 32.6
Chloroform (THM) (ppb)	10.7	0.0 - 10.7
DCPA acid metabolites (A) (ppb)	0.13	0.0 - 0.13
Dibromochloromethane(THM) (ppb)	7.4	0.0 - 7.4
Gross Beta (pci/L)	10.0	2.40 - 10.0
Hardness (ppm)	122.0	50.20 - 122.0
Magnesium (ppm)	24.0	6.13 - 24.0
Potassium (ppm)	4.3	1.94 - 4.3
Radon 222 (pci/L)	663.0	0.0 - 663.0
Surfactant, Foaming Agents (ppm)	0.15	0.00 - 0.15
Uranium (pci/L)	0.0004	0.0003* - 0.0004
*less than		

## Terms and Definitions

**AL:** Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow. **EPA:** United State Environmental Protection Agency. This federal agency enforces the Safe Drinking Water Act nationwide. **WDOH:** Washington State Department of Health. This state agency enforces the Safe Drinking Water Act within the State of Washington. **MCL:** Maximum Contaminant Level. The highest level of a contaminant allowed in drinking water. MCL's are set as close to ideal levels as current treatment technology allows. **ppb:** Parts per billion. One ppb equals one milligram per 1000 liters. **ppm:** Parts per million. One ppm equal one milligram per liter. **THM:** Trihalomethanes is the total concentration of a series of chlorinated organic compounds. These disinfection byproducts are unavoidable and are caused by a chemical reaction between chlorine and naturally occurring organic matter in the water. **MCLG:** Maximum Contaminant Level Goal. The level of contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety. Only Primary Standards have MCLG's because Secondary Standards are not set for health reasons. **pCi/L:** picocuries per liter. The unit of measurement for radionuclides. **NTU:** Nephelometric Turbidity Unit. The unit of measurement for turbidity. **umhos/cm:** Ability of water to conduct electricity based on mineral content and temperature of water.

## It's Your Water!

### Steps to take in your home and business to keep contamination out of our water supply

Intentional or accidental spills of chemicals and other hazardous materials onto the ground can lead to contamination of the aquifers that provide our drinking water. Concerns about water resources degradation has led to the passage of an ordinance to protect water within the city limits and to provide educational and technical assistance programs. We take seriously the concept of environmental stewardship, and have worked hard with our business and industry representatives, engineers, concerned residents, city and county staff, and the Washington State Department of Ecology to develop our **Water Resources Protection Ordinance**. Some simple practices that residents can do to protect groundwater include:

- Take precautions to prevent accidental releases of hazardous substances into stormwater systems, drywells and septic systems.
- Eliminate or minimize applications of fertilizers and pesticides.
- Contain and clean up any spills of hazardous materials to the ground.
- Wash and rinse your car in the yard, in an open field, or in an enclosed space where the water cannot drain to the storm system.



## Help, Please!

### Dispose of Your Hazardous Waste Materials Safely

Paint, solvents, cleaners, car batteries, used oil, antifreeze, pesticides, poisons, spray cans, mercury-added items can find their way into our drinking water if disposed of improperly. Residents of Vancouver and Clark County can find convenient, free opportunities to dispose of this "hazardous waste" by calling **360-397-6118, ext. 4016**. Learn the locations, times and other specifics on how you can help keep our water safe and clean!



### Be a Wise Water User...

Use these tips to save money while conserving our water supply.

- Shorten showers by one minute and take a shower rather than a bath. (A bathtub holds up to 50 gallons of water while a typical shower uses less than 20 gallons.)
- Wash only full loads of laundry in your washing machine and dishes in your dishwasher. (Save water and energy.)
- Do not let the water run while shaving, brushing your teeth or hand-washing dishes. Try not to use faucets at full pressure.
- Flush less often (Region wide, flushing one less time each day can save millions of gallons of water. For older homes, consider converting to a water-efficient toilet. The new low-flow models use 1.6 gallons per flush while older models may use 3 to 7 gallons.)

## Where does Vancouver get its water?



## Planning for Emergencies, Ready, Set, Go!

The City of Vancouver has been planning and working to ensure the safety of your water supply in the event of an earthquake, environmental or intentional contamination, or any other event that may leave the City's water system vulnerable. Protection of the City of Vancouver's essential water supply is our top priority.

## Want to know more?

### EPA – Safe Drinking Water Hotline

800-426-4791

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

### City of Vancouver, Water Information

360-696-8177

[www.ci.vancouver.wa.us/opcenter/water/index.html](http://www.ci.vancouver.wa.us/opcenter/water/index.html)

[www.ci.vancouver.wa.us/watercenter/wrec/ourenvironment.htm](http://www.ci.vancouver.wa.us/watercenter/wrec/ourenvironment.htm)

[www.ci.vancouver.wa.us/solidwaste/index.htm](http://www.ci.vancouver.wa.us/solidwaste/index.htm)

### Free Disposal of Hazardous Waste Materials

360 397-6118, ext. 4016

## Q&A: About Your Water

### What is the hardness of the City's water?

The hardness of water can be measured in milligrams per liter (mg/L) or grains per gallon. Vancouver's water is moderately hard, about a 110 mg/L or 6.5 grains/gallon.

### Why is my water brownish when I first turn it on in the morning or after I've been away for awhile?

Discoloration is probably due to rust from old galvanized plumbing in your home or building. Running the water for a short period of time should clear it up.

### Does Vancouver fluoridate our drinking water?

Yes. In the late 1960's the citizens of Vancouver voted to add fluoride to the drinking water. The water is fluoridated to a level of 1 milligram per liter. Fluoride helps reduce dental disease.

### Why is chlorine added to the water I drink?

Chlorine is used to destroy illness-causing organisms which might find their way into the water. Regulations require the addition of chlorine to the water.

### Can I get rid of the chlorine taste and smell?

Yes. Fill a pitcher with water and let it sit in the refrigerator for several hours prior to drinking. Chlorine reacts with air and will evaporate from the water.

## Attention: Non-English speaking customers

This report contains important information about your drinking water. Translate it, or speak with someone who can translate it for you.

**Russian** – Этот документ содержит важную информацию о Вашей питьевой воде. Пожалуйста, переведите этот документ или обратитесь к кому-нибудь, кто сможет объяснить его Вам.

**Spanish** – Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo o hable con alguien que lo entienda bien.

**Vietnamese** - Bản tường trình này bao gồm tin tức quan trọng về nước bạn uống. Xin vui lòng dịch ra hoặc nói với người có thể giải thích cho bạn.

VANCOUVER CITY COUNCIL: Mayor Royce E. Pollard • Pat Jollota • Dan Tonkovich • Jeanne Harris • Jeanne Lipton • Jeanne Stewart • Tim Leavitt • City Manager Pat McDonnell



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