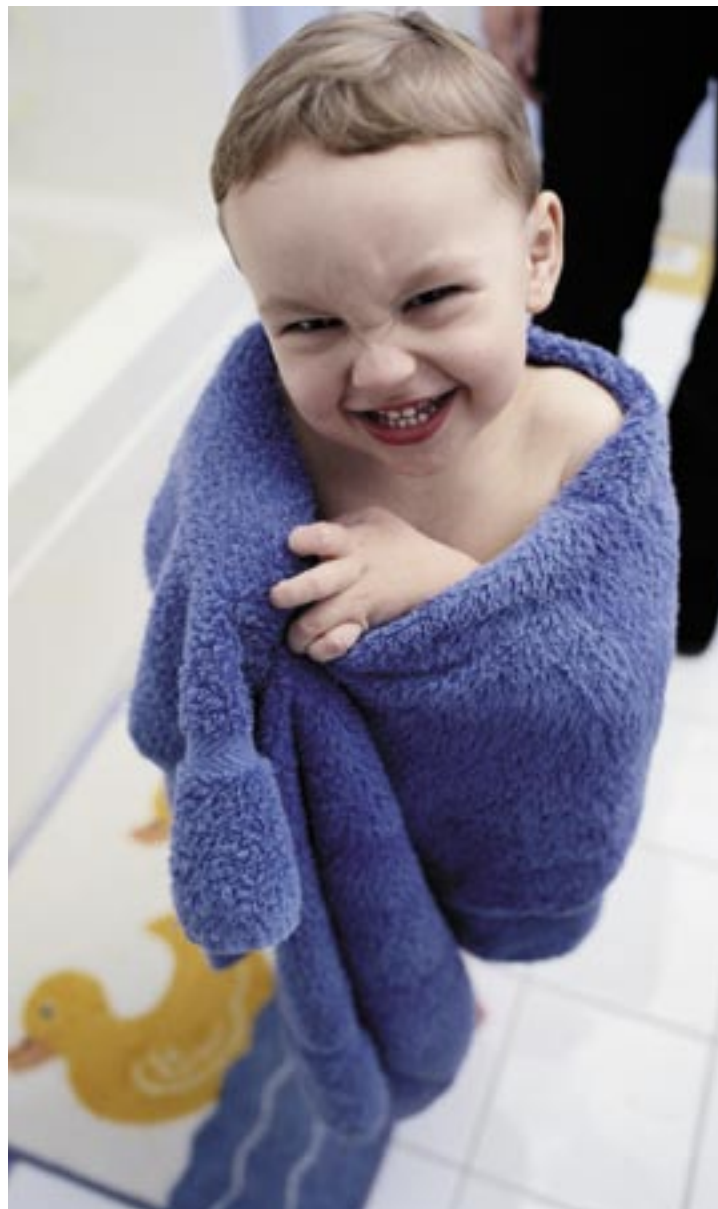


What's in your water?



We can think of some clear reasons why you would want to know.

You drink it, you cook with it, you shower and bathe in it. And that's just the start. Water plays an important role in our lives each and every day. At the City of Vancouver, we take your health and that of your family very seriously. We are proud of the high quality and safety of the water we provide to nearly 200,000 people in the Vancouver area. Our water not only meets all state and federal requirements, it frequently exceeds them.

Why are we sending you this report? Because the Federal Safe Drinking Water regulations enacted by Congress and the Environmental Protection Agency (EPA) require us to inform you each year about the quality and safety of your drinking water. These are defined by results of a series of bacteriological, chemical, physical and radiological tests conducted by chemists, microbiologists and water technical specialists. Inside this report, you will 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).

Please pour over the information inside. Find out more about what's in your drinking water.



2004 Annual Water Quality Report

Water Quality Summary

The City of Vancouver has its water analyzed for more than 238 different substances, some regulated and some not regulated. The substances listed below are REGULATED and were in Vancouver's water during 2004. All samples taken are from treated water that is delivered to the distribution system. All are below levels allowed by federal and state agencies.

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 (unit)	Highest Level Allowed (MCL)	Highest Level Detected	Lowest Level Detected	Ideal Goal MCLG	Potential Sources of Contaminant
Inorganics					
Fluoride (ppm)	4.0	1.06	0.00	4.00	Water additive which promotes strong teeth
Total Nitrates (ppm)	10.0	4.31	0.00	10.00	Fertilizer, animal waste, septic systems, sewage
Sodium (ppm)	¹ 20.0	² 23.00	5.00	20.00	Erosion of natural deposits and pH adjustment

¹A recommended level of concern for those on diets with daily sodium intake restrictions ²This "highest level detected" result was measured in only one of many samples taken throughout the water system.

Organics					
1,1,1-Trichloroethane (ppm)	0.200	0.0012	0.0000	0.200	Discharge from metal degreasing sites and other factories
1,1-Dichloroethylene (ppm)	0.0070	0.0005	0.0000	0.0070	Discharge from industrial and/or commercial sites
Tetrachloroethylene PCE (ppm)	0.0050	0.0002	0.0000	0.0000	Discharge from industrial and/or commercial sites
Total Trihalomethane (ppm)	0.0800	0.0117	0.0013	0.0000	Chlorination by-product caused by the reaction of chlorine with organic matter
Trichloroethylene TCE (ppm)	0.0050	0.0002	0.0000	0.0000	Discharge from metal degreasing sites and other factories

Physical Characteristics					
pH	6.5-8.5	7.78	6.79	6.5-8.5	Natural occurring or treatment additive

Bacteriological					
Total Coliform Bacteria	Less Than 5% of Monthly Samples	1.4%	0%	0%	Contamination by mammals

Radionuclides					
Gross Alpha (pci/L)	15.0	1.3	0.0	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.

Inorganic Compounds					
Sulfate (ppm)	250.00	13.000	0.0	NA	Natural occurring
Manganese (ppm)	0.05	0.023	0.0	0.0	Natural occurring
Physical Characteristics					
Conductivity (umhos/cm)	700.0	342.0	172.0	NA	Natural occurring
Total Dissolved Solids (ppm)*	500.0	210.0	120.0	0.0	Natural occurring
Turbidity (NTU)	1.0	0.4	0.0	0.0	Natural occurring

* 2003 result. Not measured in 2004.

More About Your Water

Testing above and beyond

At the City of Vancouver, simply meeting water quality regulations is not enough. We aim higher, putting our drinking water through far more stringent tests than U.S. and Washington laws require. Under federal and state regulations, water utilities must test for fewer than 100 different substances in drinking water once every three years. The City of Vancouver's water utility, however, tests for more than 225 different substances in our water every year. We take a proactive approach, testing for contaminants found in drinking water in other areas of the United States long before regulations might mandate such testing.

What you won't find in your water

In the past couple of years, arsenic, perchlorate, methyl-t-butyl ether (MTBE), and hexavalent chromium have hit the headlines when discovered in drinking water supplies in the region. Be assured, none of those chemicals have been found the City of Vancouver's drinking water. We have been testing for these chemicals for years, just as a precautionary approach, and we are glad to tell you that these test results to date have been negative. Now that's good news!



Disinfection Byproducts

In 2004, the City of Vancouver Water Utility completed testing of our potable drinking water in accordance with the Stage 2 Disinfectant Byproduct Rule passed by Congress as part of the 1996 Safe Drinking Water Act Amendments. This testing focuses on public health protection by limiting exposure to disinfection byproducts, which can form in water through disinfectants used to control microbial pathogens. The City's potable water is in compliance with the regulation, as shown by the testing results below.

Contaminant (unit)	Highest Level	Lowest Level	MCLG
Ttl Trihalomethane	11.7 ug/L	1.3ug/L	80 ug/L
5 Halo-Acetic Acids	1.3 ug/L	0.0	60 ug/L

The following test results are not required by law, but are presented to keep you well informed.

Contaminant	Highest Test Results	Lowest Test Results
Alkalinity (ppm)	111.0	66.0
Bromodichloromethane (THM) (ppm)	0.0016	0.0000
Bromoform (THM) (ppm)	0.0011	0.0000
Calcium (ppm)	33.0	12.0
Chloroform (THM) (ppm)	0.0021	0.0000
DCPA acid metabolites (A) (ppm)	0.00019	0.0000
Dibromochloromethane (THM) (ppm)	0.0018	0.0000
Gross Beta (pci/L)	4.4	0.0
Hardness (ppm)	124.0	55.0
Magnesium (ppm)	11.0	6.0
Potassium (ppm)	3.0	2.0
Radon 222 (pci/L)	537.0	<100.0
Maximum Total		
Trihalomethane Potential (ppm)	0.0242	0.001
Uranium (pci/L)	0.002	< 0.001*

*2003 Result. Not measured in 2004.

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 undergoing chemotherapy for cancer treatment; people who have had organ transplants; people with HIV/AIDS or other immune system disorders; some elderly; and infants may 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 for lessening the risk of infection by bacterial contaminants are available from the Safe Drinking Water Hotline by calling toll-free to 1-800-426-4791.

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. **<:** Less than. **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.

What a Deal!

Compare prices for a gallon of these products to a gallon of your tap water from the City of Vancouver.

Cost per gallon*:

Chanel No. 5 Parfum:	\$45,056.00
Revlon Nail Enamel:	\$ 983.04
Vicks 44D Cough Syrup:	\$ 96.67
Evian Bottled Water:	\$ 21.19
Snapple:	\$ 10.32
Tide Liquid Detergent:	\$ 8.39
City of Vancouver Water:	\$.00178

*Source of product prices: American Water Works Association

How Much is That?

Most water quality reports refer to parts per million or parts per billion. What does that mean? Here are some measurements to compare:

One part per million equals:

- One inch in 16 miles
- One minute in two years
- One cent in \$10,000

One part per billion equals:

- One inch in 16,000 miles
- One second in 32 years
- One cent in \$10 million

Water Center Offers Wise-Water Activities and Education for All Ages

Vancouver's Water Resources Education Center near Marine Park offers engaging interactive exhibits, activities, fish, frogs and the nearby Columbia River to teach thousands of visitors each year about the wise use and protection of water. There's something for everyone at the Water Center! Our staff is also responsible for stewardship of the 50 adjacent acres of wetlands that serve as a natural outdoor laboratory for students and volunteers of all ages. For hours and additional information, please call 360-696-8478 or visit us our web site at www.ci.vancouver.wa.us/watercenter/index.html. Try this experiment from the Water Center:



Make Your Own Incredible, Edible Aquifer

Aquifers, underground layers of rock or sand saturated with water, are the source of our drinking water. Learn how aquifers work and why it's so important to protect them with this easy and yummy experiment.

Ingredients

Clear plastic cups, drinking straws and spoons
Clear soda pop
Crushed ice or gummy bears

Vanilla ice cream
Strawberry syrup or red food coloring
Colored cake or cookie sprinkles

Your yummy aquifer

Fill a clear plastic cup about 1/3 full of crushed ice or gummy bears
Add soda to just cover
Add a layer of ice cream
Add more crushed ice
Add crushed Oreo cookies
Add green sprinkles
Add multicolored sprinkles
Add more soda
Add syrup or food coloring
Stick your straw into layers
Suck on straw
Watch the soda level through the glass
Watch the rock layers change from clear to colored layers



Your underground real-life aquifer

Gravel, sand and rocks
Ground water
Confining layer, such as clay
Porous rocks
Soil
Your lawn
Oh, oh. Chemicals on the lawn
Here comes the rain
Oh, oh. Oil spill on the ground
Drilling a drinking water well
Pump out water
Pumping lowers water table
Contaminants seep into earth

When you're enjoying your aquifer in a cup, remember that red ice cream may be tasty, but oil and other contaminants spilled on the ground can seep into our great aquifers and pollute our drinking water. Please help protect our aquifers.

Answers to Your Questions

Does my drinking water contain fluoride?

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

Does my drinking water contain chlorine?

Yes. Regulations require chlorine be added to the water. Chlorine destroys illness-causing organisms that might otherwise find their way into the water. If you want to get rid of chlorine taste or smell, just fill a pitcher with water and let it sit in the refrigerator for several hours prior to drinking. The chlorine will react with air and evaporate from the water.

Should I buy bottled water?

The EPA sets standards for public drinking water. The US Food and Drug Administration sets bottled water standards equal to those EPA standards. Keep in mind that the finished product of bottled water is not government-monitored. Some bottled water is treated more than tap water and some is treated less or not at all. Read the label carefully, says the American Water Works Association.

Home Sprinkler Requirements

Did you know that homeowners are required to install, maintain and have inspected yearly the backflow prevention devices on their home garden sprinkler systems? Here's why: The backflow devices protect against possible contamination of your public drinking water.

Without a proper backflow device, water can become contaminated, particularly if chemicals are applied to lawns and gardens.

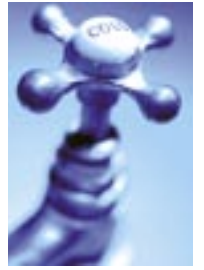


You should avoid harmful chemical pesticides and fertilizers to protect your children, pets and the environment. But even if you do, it's important to remember that backflow devices are required by Washington State Law, WAC 246-290. In addition, the law requires the annual inspection and testing be performed by a licensed tester.

A list of certified testers is available to you on the City of Vancouver's Web site at <http://www.ci.vancouver.wa.us/opcenter/backflow/Testers.pdf>. The list and additional information about backflows and testing requirements is also available to you by calling the City's Operations Center at 360-696-8177.

Use Water Wisely

Strategic planning and a sound supply system that relies on groundwater are expected to serve Vancouver water customers well this summer, despite the past dry winter. Conservation and groundwater protection are important ways to help ensure our vital water resources. Efficient water use is also a good way to help save money on water and utility costs. Here are a few tips to help:



- Fix those leaks, inside and outside, including old leaky faucets, toilets and sprinkler systems.
- Replace old fixtures and appliances. Toilets made before 1992 are major water guzzlers in the home.
- Plant native plants that don't need constant watering. If you must water, make it late at night or early in the morning, and then only about 1 inch of water per week.

Improvements on Tap at Vancouver's Water Works Park

The City of Vancouver has begun preparation of a new master plan for Water Works Park, home to Water Station No. 1, its most prolific source of drinking water.

The primary purpose of this City site has always been and will continue to be the production of potable water. Approximately one-third of the City's total water supply comes from this important site, north of Clark College at Fourth Plain Boulevard and Fort Vancouver Way. To maintain this vital water resource, the City plans to develop new facilities and upgrade aging facilities there.

The new master plan is needed before projects are designed to replace reservoirs and wells, expand capacity, delivery and address the new world of security concerns. A new reservoir, which will eliminate the amphitheater that is no longer used for the City's summer concert series, will be one of the first major new facilities constructed, according to the planning effort now under way. Plans at this time do not call for changes to the Swift Skate Park, located within Water Works Park.

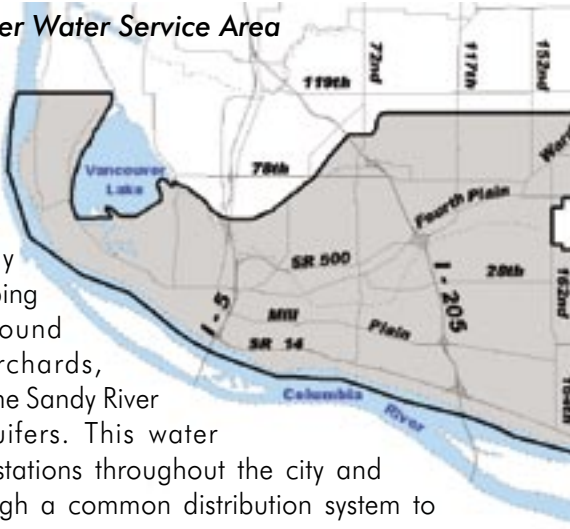
With new security measures being considered are a park perimeter security fence, which would allow the park area to be closed at night, and enhanced security for water production, treatment and storage facilities.

The Central Park Neighborhood Association, Clark College and other stakeholders have been participating in the design process. If you have questions, please call the City's Engineering Services at 360-696-8008.

Where Does Vancouver Get its Water?

Vancouver Water Service Area

The City of Vancouver gets its water supply from wells tapping three underground aquifers – Orchards, Troutdale and the Sandy River Mudstone aquifers. This water is pumped to stations throughout the city and delivered through a common distribution system to our customers.



What is an aquifer?

An aquifer is an underground layer of unconsolidated rock or sand that is saturated with usable amounts of water. Aquifers, which store and carry water, form significant natural water supplies. Recharge areas are important to a healthy aquifer. In a recharge area, water is able to seep into the earth and down to the aquifer, helping to resupply the resource. Through our City, state of Washington and U.S. federal regulations and outreach efforts, we are working to keep our aquifers safe.

Want to Know More?

For more information about water quality or this report, please call 360-696-8177, or e-mail us at norm.kramm@ci.vancouver.wa.us.

Other Water Information from the City of Vancouver:

www.ci.vancouver.wa.us/water

www.ci.vancouver.wa.us/OurEnvironment

www.ci.vancouver.wa.us/solidwaste

EPA – Safe Drinking Water Hotline

800-426-4791

www.epa.gov/safewater

Free Disposal of Hazardous Waste Materials

360 397-6118, ext. 4016

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



City of Vancouver
210 East 13th Street
Vancouver, Washington 98660

Watching over Water Resources

Since the City of Vancouver's Water Resources Protection (WRP) ordinance took effect in February 2003, our WRP Team has been busily working throughout the City, visiting more than 130 businesses and industries in an effort to prevent activities that might increase the risk of contamination of surface or ground water resources.

Our program, a leader in advancing ground water protections, focuses on education, cooperation and technical assistance. It also sets increased compliance standards for businesses and industries that manage hazardous materials and establishes Special Protection Areas around the City's water stations as an additional safeguard. The response to date has been positive.

In addition to visiting businesses throughout the City, our inspectors are available to respond to water resource concerns whenever a potential threat is observed.



To contact the Water Resources Protection Team, call the City of Vancouver's Engineering Services at 696-8008.

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.

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

Vietnamese

Tài liệu này có tin tức quan trọng về nước uống của quý vị. Hãy nhờ người dịch cho quý vị, hoặc hỏi người nào hiểu tài liệu này.

Russian

В этом сообщении содержится важная информация о воде, которую вы пьёте. Попросите кого-нибудь перевести для вас это сообщение или поговорите с человеком, который понимает его содержание.

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