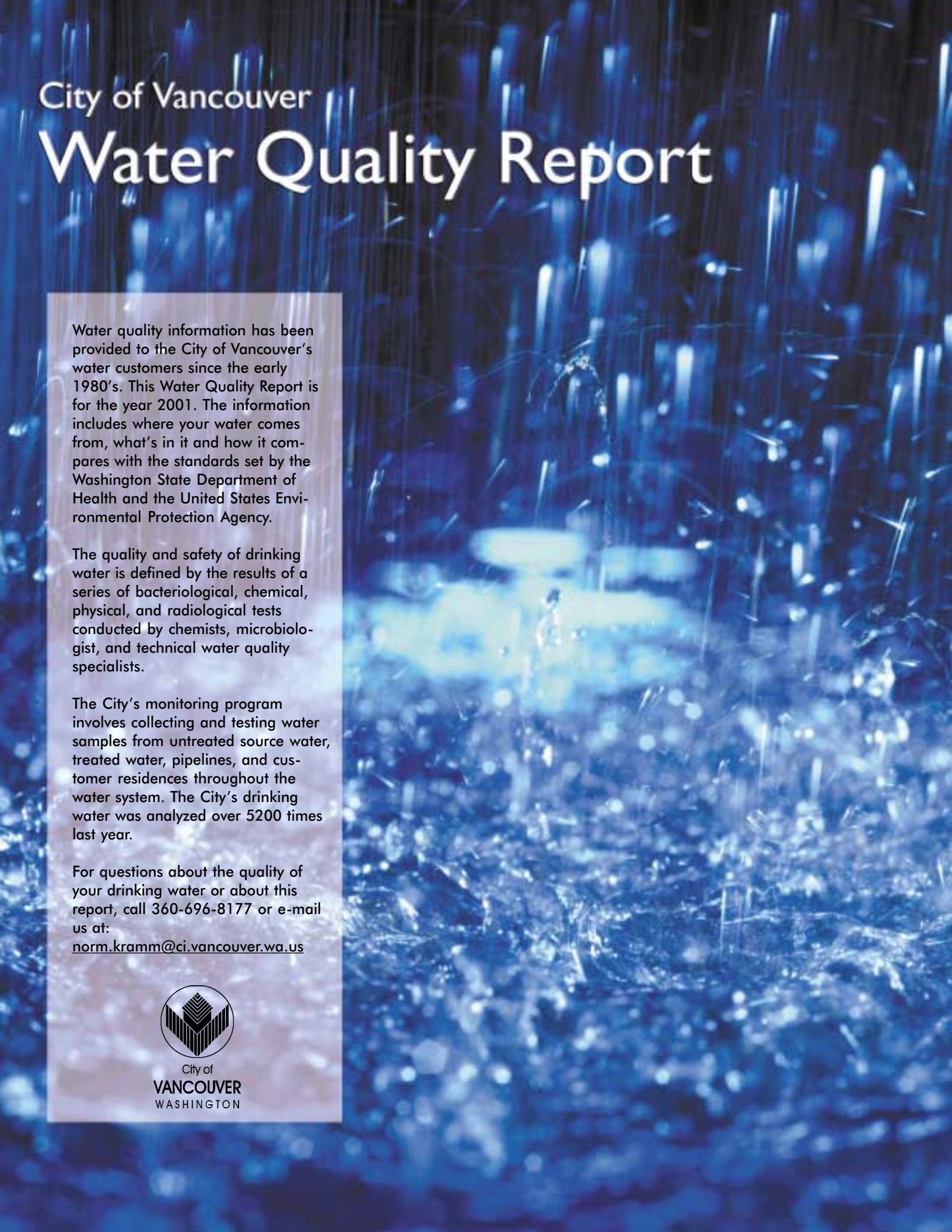

City of Vancouver

Water Quality Report

Water quality information has been provided to the City of Vancouver's water customers since the early 1980's. This Water Quality Report is for the year 2001. The information includes where your water comes from, what's in it and how it compares with the standards set by the Washington State Department of Health and the United States Environmental Protection Agency.

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, microbiologist, and technical water quality specialists.

The City's monitoring program involves collecting and testing water samples from untreated source water, treated water, pipelines, and customer residences throughout the water system. The City's drinking water was analyzed over 5200 times last year.

For questions about the quality of your drinking water or about this report, call 360-696-8177 or e-mail us at:
norm.kramm@ci.vancouver.wa.us

City of
VANCOUVER
WASHINGTON

Water Quality Summary

The City of Vancouver has its water analyzed for over 235 different substances, some regulated and some not regulated. The substances listed below are REGULATED and were found above detection limits in Vancouver's water during 2001. 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 chemicals 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
Inorganic Compounds					
Copper (ppm)	AL = 1.3	0.109	0 – 0.109	1.3	Erosion of natural deposits, corrosion of household plumbing systems.
Fluoride (ppm)	4.0	1.9	0.0 –1.9	4.0	Water additive which promotes strong teeth.
Nitrates (ppm)	10.0	4.06	0.0 – 4.06	10	Fertilizer, animal waste, septic systems, sewage
Sodium (ppm)	[1]20	10.0	5.8 – 10.0	[1] 20	Erosion of natural deposits
Maximum Total Trihalomethane Potential (ppb)	100	30.3	8.2 – 30.3	0	By-products of disinfection with chlorine, combined with organic matter.
[1]A recommended level of concern for those on diets with daily sodium intake restrictions					
Volatile Organic Compounds					
1,1,1-Trichloroethane (ppb)	200	1.9	0.0 – 1.9	200.0	Discharge from metal degreasing sites and other factories
1,1-Dichloroethylene (ppb)	7.0	0.9	0.0 – 0.9	7.0	Discharge from industrial and/or commercial chemical sites
Tetrachloroethylene (ppb)	5.0	0.2	0.0 – 0.2	0	Discharge from industrial and/or commercial chemical sites
Total Trihalomethane (ppb)	100	4.7	0.0 – 4.7	0	Chlorination by-product caused by the reaction of Chlorine with organic matter
Trichloroethylene (ppb)	5.0	0.2*	0.0 – 0.2*	0	Discharge from metal degreasing sites and other factories
*estimated by laboratory - below detection limits					
Physical Characteristics					
pH	6.5 – 8.5	8.13	7.03-8.13	6.5 – 8.5	Natural occurring or treatment additive
Bacteriological					
Total Coliform Bacteria	Less than 5% of monthly samples.	0%	0 %	0%	Contamination by mammals

✦ 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					
Sulfate (ppm)	250	14.0	0.0-14.0	N/A	Natural occurring
Physical Characteristics					
Conductivity (umhos/cm)	700	302	179-302	N/A	Natural occurring.
Total dissolved solids(ppm)	500	223	0 –223	0	Natural occurring
Color (color units)	15	6.0	0.0 – 6.0	0	Natural occurring

Unregulated Contaminant Monitoring Rule - Results

In 1996 the Safe Drinking Water Act required the Environmental Protection Agency, EPA, to establish criteria for a program to monitor unregulated contaminants. In 1999, 2000, and 2001, EPA published rules for the testing and reporting of unregulated contaminants. In 2001, the City of Vancouver completed the first of two rounds of testing for the following contaminants and did not find any of the contaminants, above the detection limits, in our water.

The results below are from tests required by law for substances which are not regulated.

Contaminant	Detection Limit	Result
Perchlorate	4.0 ppb	None Detected
2,4-Dinitrotoluene	2.0 ppb	None Detected
2,6-Dinitrotoluene	2.0 ppb	None Detected
4,4'-DDE	0.8 ppb	None Detected
Acetochlor	2.0 ppb	None Detected
EPTC	1.0 ppb	None Detected
Molinate	0.9 ppb	None Detected
Terbacil	2.0 ppb	None Detected
DCPA Total	1.0 ppb	None Detected
Methyl Tert-Butylether (MTBE)	5.0 ppb	None Detected
Nitrobenzene	10.0 ppb	None Detected

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

Contaminant	Test Results	Results Range
Alkalinity (ppm)	116	74.4-116
Boron (ppm)	0.047	0.0 – 0.047
Bromodichlormethane (ppb)	1.2	0.0 – 1.2
Bromoform (ppb)	1.8	0.0 – 1.8
Calcium (ppm)	34.8	13.2 – 34.8
Chlorodibromomethane (ppb)	1.6	0.0 – 1.6
Chloroform(ppb)	1.0	0.0 – 1.0
DCPA Acid Metabolites (A)(ppb)	0.36	0.0 – 0.36
Gross Alpha (pci/L)	1.0*	all samples
Gross Beta (pci/L)	1.0*	all samples
Hardness (ppm)	132	64.7 – 132.0
Magnesium (ppm)	13.0	7.69 – 13.0
Potassium (ppm)	4.3	2.32 – 4.3
Radium 226 (pci/L)	0.2*	all samples
Radon (pci/L)	832	167 – 832
Uranium (pci/L)	0.3*	all samples

* 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.

✦ Special Information 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.


Esther Short Park

Arsenic Update

In 2001 the Environmental Protection Agency issued stricter regulations regarding Arsenic in drinking water. The current standard lists the Maximum Contaminant Level (MCL) for Arsenic as 50 parts per billion (ppb).The new standard, which will become effective in 2006, is 10 ppb. Test of Vancouver's water performed in 2001 showed no Arsenic present at or above 10 ppb, which will be the new standard.

Hexavalent Chrome Update

For years, Hexavalent Chrome has been of concern for area residents.The City of Vancouver's water has been tested for Hexavalent Chrome. There was no Hexavalent Chrome detected.

Radon Update

Over the last several years there have been lengthy discussions between regulators, utility owners, and scientists concerning what levels of Radon are acceptable in drinking water. There has been no final decision made at this time. However, the City of Vancouver has been tracking the discussions closely and monitoring Radon levels at all water facilities in anticipation of up coming regulation changes.

Sanitary Survey

Approximately every five years State of Washington, Health Department Officials visit water utilities. This is called a Sanitary Survey. Health officials visited Vancouver's Water Utility last September. During the survey officials reviewed the utilities record keeping, reviewed programs, and made visits to many of the water facilities. The survey's written report said, "The system is extremely well operated and in good condition."

Where does Vancouver get its water?

The City of Vancouver gets its water supply from wells tapping three underground aquifers: Orchards, Troutdale and Sandy River Mudstone aquifers. The City pumps water from these aquifers at sites throughout the city and East county. Water from these facilities is then delivered to the common distribution system. In 1996, the City developed a Wellhead Protection Program as part of its Water System Comprehensive Plan. This program aims to prevent groundwater contamination. A copy of the plan is available by calling the City Operations Center Services at 360-696-8177.

Corrosion Control Program Update

The objective of the Corrosion Control Program is to reduce corrosion in private plumbing. Specifically, to decrease the amount of lead and copper measured in water taken from plumbing fixtures in a group of test homes. Initial data collected in the mid-1990s indicated two water stations were producing water that was of concern in regard to corrosiveness. The data indicated lead leaching was minimal, but copper leaching was a greater concern. Once the two water stations were identified they were removed from service until modifications could be completed. Modifications have been made, and the stations are back in service. In the first round of follow-up testing, in December of 2001, it was apparent that the modifications were working. Continued testing will be performed to ensure that the modifications continue to reduce corrosion, and that raw water characteristics do not change.

Household Hazardous Waste Disposal Options

Improper disposal of hazardous waste onto the ground can find its way into the drinking water. Please dispose of it properly. Residents of Vancouver and Clark County are provided with convenient, no fee opportunities to dispose of or recycle their household hazardous wastes such as paint, solvents, cleaners, car batteries, used oil, antifreeze, pesticides, poisons, spray cans, mercury-added items, and other materials that could pose a threat to our environment or aquifer if disposed improperly. Residents can call 397-6118 ext. 4016 to learn locations, times, and other specifics of how materials can be dropped off.

Want to know more?

EPA - Safe Drinking Water Hotline
800-426-4791 or
www.epa.gov/OW

City of Vancouver, Water Quality
360-696-8177 or
www.ci.vancouver.wa.us/opcenter/wq-pumps/index

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 вбжную информацию о Вашеи питъевои воде. Пожалуиста, переведите этот документ или обратитесъ к кому-нибудъ, кто сможет объяснить его Вам.

Spanish – Este informe contiene información muy importante sombre 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.

The Water Resources Education Center

Enjoy learning about water resource stewardship. Visitors and school groups are warmly welcomed.
Open: 9 a.m.-5 p.m.
Monday - Saturday
Admission: Free
4600 SE Columbia Way (in Marine Park)
360-696-8478

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

PRSRT STD
U.S. Postage
Paid
Permit No. 728
Vancouver, WA

ECRWSS

Postal Customer