#### Spanaway Water Co.

P.O. Box 1000 18413 "B" Street East Spanaway, WA 98387







#### WATER QUALITY REPORT – 2009

Welcome to your twelfth annual water quality report. This report presents information to you in the format prescribed by the Safe Drinking Water Act.

We continue to strive to provide you with safe, high quality water that meets or exceeds all federal and state standards. Water quality is tested daily by water company employees and on a regular schedule that includes weekly, annual, and tri-annual analysis by Washington State and EPA certified laboratories.

Spanaway Water Company (SWC) is a non-profit mutual water company owned by all the property owners (members) served by the company. SWC serves over 9,000 families and more than 330 businesses in the Spanaway Area. The company's Board of Directors are elected from and by the company membership. Therefore, you can be certain that both high water quality and reasonable prices are their top priorities.

The annual meeting of SWC is held on the second Monday of November at 7:30 p.m. Members are elected to the Board of Directors at the annual meetings. The Board of Directors meets monthly on the third Thursday of each month at 4:00 p.m. You are invited to participate at these meetings, all of which are held at the Company office at 18413 "B" St. E.

If you would like more information about Spanaway Water Company, the information in this newsletter, contaminants, or any other water issues, we will be happy to answer your questions. Please see www.spanaway-water.org or call 531-9024 and ask for Tim Tayne, Water Programs Manager, or Jeff Johnson, Manager.

Este informe contiene informaciÓn muy importante sobre su agua potable. TradÚzcalo Ó hable con alguien que lo entienda bien.

Spanaway Water Company is required by the 1996 amendments to the Safe Drinking Water Act to publish this report. It contains information about the source and quality of your drinking water.

#### Sometimes my water is discolored, is it safe to drink?

Your water is safe to drink or cook with. Manganese in pipes can be released when valves are being repaired, the system is being flushed or fire hydrants are in use. Should you experience "brown" water, letting an outside faucet run for 5 to 15 minutes should clear the problem.

Routine main flushing is done on Tuesdays. To reduce the risk of discoloring clothing we ask that you avoid washing clothes on Tuesdays.

#### **About Bottled Water:**

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

#### Special considerations for at risk people:

Some people may be more vulnerable to contamination 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 the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791).

#### HOMELAND SECURITY – A Community Concern

Like all utilities, we take security very seriously and we also rely on the public to assist in facility security. Should you notice any unusual activity at any utility facilities, including water system wells, tank sites, or fire hydrants please contact the office at 531-9024 and/or the sheriff at 911. Tampering with a water system is a federal crime with penalties up to \$1,000,000 and 20 years in jail.

#### Lead & Drinking Water

"If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Spanaway Water Co. is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at *http://www.epa.gov/ safewater/lead.*"

#### 2009 Water Use Efficiency

2009 was the second year under Washington's Water Use Efficiency Rule. Fiscal 2009 (Oct. 1, '08-Sept. 30 '09) water use was over 1.1 billion gallons, and increase of nearly 125 million over fiscal 2008 and a increase of 12.7%. This increase reflects the long warm spring and summer of 2009 with records set for yearly, monthly, weekly and daily water use. However, our water use efficiency goal is to reduce the rolling 6 year average use by at least 0.5%. Using the

rolling 6 year average balances the warm dry years with the cool wet years. Our goal for 2009 was use below 327 gallons per day/per unit (GPD/U). The actual rolling average for 2009 was 318 GPD/U well below our goal. Part of the water use was due to system leakage that increased in 2009 to 19.7% or 218 million gallons. In response the Company just finished a complete system leak detection study that identified leaks totaling about 150 million gallon per year. With these leak repairs we hope to have leakage below our and the State's goal of 10%.



## HOW AND WHY IS MY WATER TREATED



As water is pumped from each of the eleven wells, chlorine is added as a disinfectant providing extra protection to insure that no harmful bacteria are present. The minimum amount of chlorine is used to maintain a detectable level throughout the water system. Corrosion control with sodium hydroxide is also used at four wells. This treatment reduces the slight natural acidity of the water, resulting in decreased copper levels in some homes. These treatment requirements are mandated under federal law.

Four of our wells have naturally occurring manganese. Even at the very low levels found at the wells, "brown" water may occur when large flows are created in water mains, such as when fire hydrants are used for fire fighting or testing. The rushing water picks up the manganese that settles in the mains. Manganese is not a health related contaminant, rather it is an essential human nutrient with a recommended daily amount (RDA) of 2.0 mg. However, even at 0.05 mg/l (1/40th of the RDA) brown water may occur. The presence of manganese is therefore considered an aesthetic problem. Your water company has a manganese filter at well 4 with additional filters planned for the Yakima and Buckeye Grove (2010) wells.

### **HELP PROTECT YOUR WATER SOURCES**

Since Spanaway's ground water sources are located in aquifers under where we live and work, our everyday activities can contribute to the contamination of these aquifers that supply our water. Ground water is naturally purified by traveling through the soil materials below us, but if these soils become contaminated with chemicals they will also release those chemicals into the ground water. To help protect these resources, use lawn chemicals sparingly, or look for safer alternatives. Always properly store and dispose of hazardous chemicals, and do not dump anything in storm drains.

Pierce County residents can safely dispose of household hazardous waste free of charge at the HazWaste Place located at the Tacoma Landfill. HazWaste Place is open seven days a week from 8AM to 6PM. The address is: 3510 S. Mullen St. which is off of Center St between Orchard and Tyler Streets next to the Home Depot store. You can call them at 800 287-6429. Used oil recycling is available at Jiffy Lube or Shucks Auto Supply.

For more information regarding our wellhead protection program or what you can do to protect our resource, feel free to call us or visit our web page at www.spanaway-water.org.

## WHAT ARE THE SOURCES OF MY WATER?

Spanaway Water Company draws water from 11 wells located in the Spanaway area of the Chambers/Clover Creek watershed. The well depths vary from 99 to 645 feet. The water system has three tanks holding 5,100,000 gallons, one booster station serving the higher elevations at the south end of the water system, well over 120 miles of water mains, and over 740 fire hydrants. The diagram below provides an overview of the water system.



#### WATER QUALITY DATA REQUIREMENTS

The following portion of the newsletter is presented in compliance with the EPA's format and content requirements.

About Water Sources and contaminants: 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 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. Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic chemical contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides and herbicides, may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, can also come from gas stations, urban storm water runoff, and septic systems. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. 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 regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

# SPANAWAY WATER QUALITY TESTING

We sampled every source for metals, nutrients, nitrates, and bacteria, with the only detections listed in the table below, some chemicals are listed as the last detection. The finished water was tested for bacteria and disinfection by-products (DBP), the results of naturally occurring organic chemicals reacting with chlorination. The DBP's testing results were all less than 25% of the EPA's maximum contamination level. We have also included the EPA's standards and information about the contaminants that were detectable. A complete listing of all water quality testing and the highest levels ever found in the water system is available at the company office.

Co	ntaminant	s detected in 200	) with c	lesignated M	laximum C	ontaminant I evels
Compound:	MCL	MCLG	Highe	est Range of Sar	nple Year	Typical Source of Contamination
Regulated at Source						
Fluoride Nitrate	4 10	4 10	0.3 4.6	ND - 0.3 <0.2 - 4.6	2009 2009	Additive for teeth, erosion of soils, mining Runoff from fertilizer use: Leaching from septic tanks, sewage; or erosion of Volatile Organic Chemicals (all in ppb):
Regulated in Distribution System (DBP)						
Trihalomethanes (THM): Haloacetic Acids (HAA5)	80* 60*	80 60	11.5 4.3	ND - 11.5 ND - 4.3	Qtr'ly/2007 Qtr'ly/2007	Byproduct of drinking water chlorination By-product of drinking water chlorination
Compliance is determined by running annual average of guarterly sampling for subcomponents of THMs and HAA5s.						
Total Coliform E. coli Chlorine	0 0 4	0 0 1.05	0 0 0.62 -	1.05	2009 2009 Daily	Naturally occurring throughout the environment Animal Wastes Water additive used to control microbes
Radionuclides						
Analyte Gross Beta (pCi/l) Radium-228 (pCi/l)	50	50 0.8	ND ND	ND-ND ND-ND	2007 2007	Erosion of natural deposits Erosion of natural deposits
Regulated at Consumer's Tap (based on 90th % of customers tested)						
Copper (ppm) Lead (ppb)	1.3 15	1.3 / 0	0.07-1 2 - 9	.2 (0.86— 90th % (7—90th %)	) 2007 2007	Corrosion of household plumbing systems. Corrosion of household plumbing systems.

#### Terms and abbreviations used in the following table:

Minimum Detectable Level (MDA): the level of contaminant in drinking water that can be reliably detected by the laboratory. Maximum Contamination 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 Contamination 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.

Action Level (AL): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. ND: not detectable at testing limit. N/A: not applicable. mfl: million fibers per liter. ppb: parts per billion or micrograms per liter. ppm: parts per million or milligrams per liter. pCi/I: picocuries per liter (a measure of radiation)