



# WATER QUALITY REPORT 2014

Este informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

## Spanaway Water Company provides exceptional water to you!

We are proud to present our Seventeenth annual water quality report. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. We are committed to delivering the best quality drinking water. We remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

For more information, or for questions relating to your drinking water, please visit our website at [www.spanaway-water.org](http://www.spanaway-water.org). Or, you can call (253) 531-9024 for Dwayne Farmer, Water Programs Manager or Jeff Johnson, Manager.



### CROSS CONNECTION

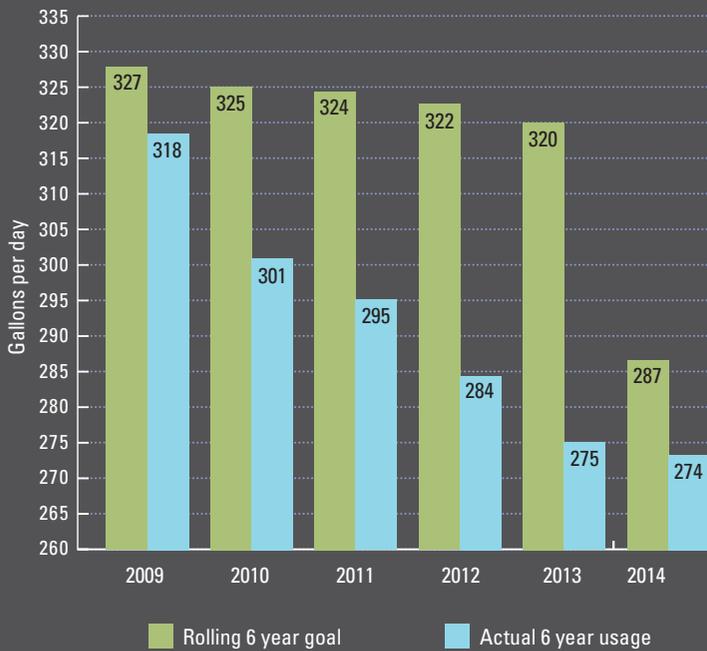
A cross connection is an actual or potential connection between potable (i.e. drinking) water and nonpotable water or other substances. The risk of contamination is due to either back-siphonage or back pressure. In either example, the pressure in the supply side is temporarily lower than the customer side. This could be due to high demands in the area, such as fire fighting or water main flushing. A common example of a cross connection is a garden hose submerged in a bucket.



### LOOK FOR LEAKS

One of the most common types of toilet leaks is a steady drip or stream from the tank to the bowl. This will not cause damage, or even a mess, but it wastes water, and could waste 300 - 600 gallons per water bill. Test this by placing a few drops of food coloring into the tank, and watch to see if the color makes its way into the bowl. If it does, you have a leaky toilet. For free toilet leak detection tablets please visit our office.

# Spanaway Water Usage 2009 - 2014



Spanaway Water Company and our customers continued to meet our conservation goals set at the 2013 annual meeting. That goal is to reduce the rolling six year average pumped water use per water service by at least 0.5% each of the next six years. The 2014 goal was 287 gallons per day (GPD) per water service – actual use was 274 GPD even with our warm, dry summer!

The Company battled unseen leaks throughout the year with system leakage just over 19% (204,167,066 gallons) up considerably from 2013 at 11% (106,942,521 gallons). Fortunately, we have located and repaired multiple leaks this past fall and winter. With these repairs we appear to have once again lowered our leakage rate. Leaks are hard to find and only rarely surface in Spanaway's soils; or rocks as many would say! If you see unexplained standing water please, give us a call – we will check it out.



## NEW! AERATION SYSTEM

As part of our effort to provide water with as few chemicals as possible, we have a proposed aeration system as part of our capital improvement program.



The EPA requires corrosion control at three Company wells. This is currently being addressed by adding sodium hydroxide (NaOH) to raise the water's pH. Using a newer technology we will be adjusting the pH at the new Well 5 using an aeration system. Rather than adding a chemical to the water, this system will remove naturally dissolved carbon dioxide (CO<sub>2</sub>) which raises the pH. Pilot tests verified that the system will also work well at our Wells 3 and 9 which currently use NaOH.

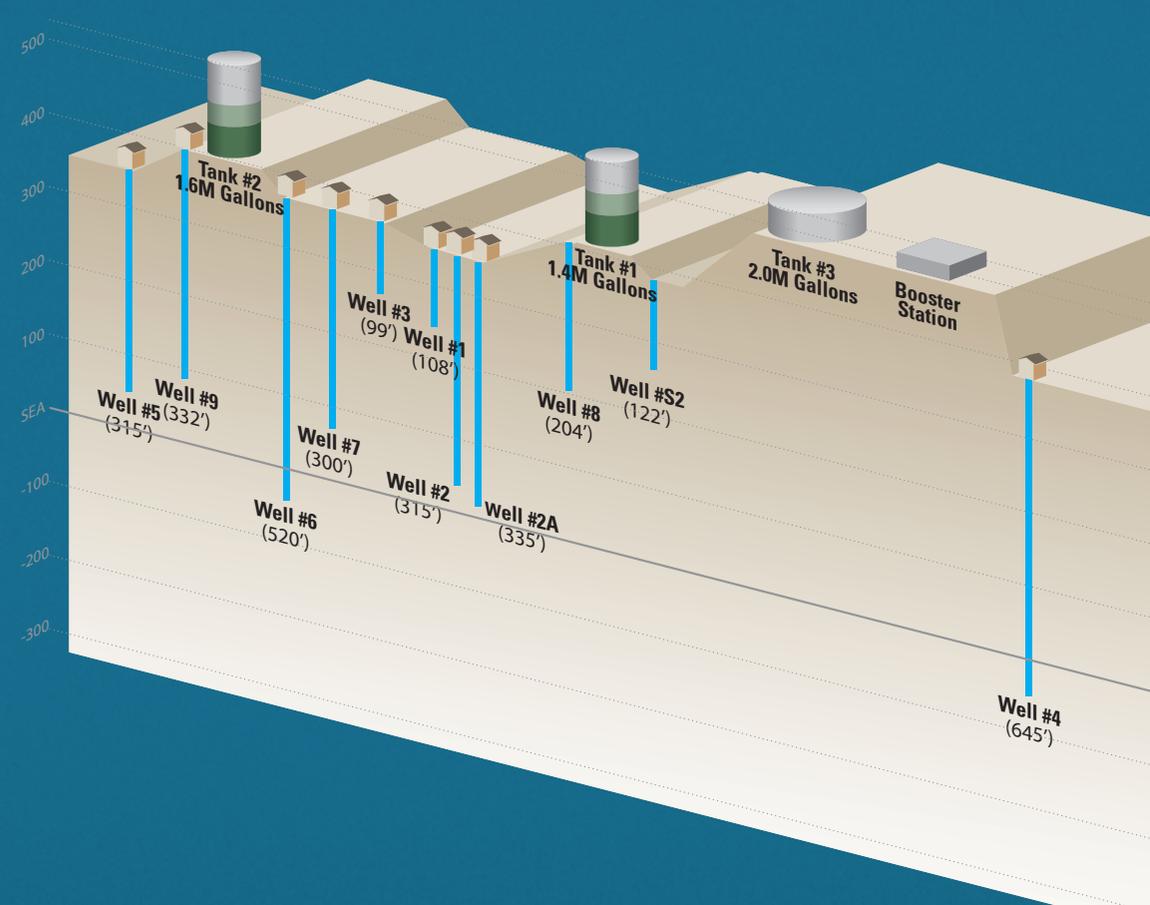
We would rather remove CO<sub>2</sub> than have to add something to the water!

## SPANAWAY WATER COMPANY

### AN OVERVIEW OF OUR WATER SUPPLY.

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 5,000,000 gallons, one booster station serving the higher elevations at the south end of the water system, well over 120 miles of water mains, and 900 fire hydrants. The diagram below provides an overview of the water system.





## Why provide a Water Quality Report?

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 similar protection for public health.

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. 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 stormwater 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 byproducts of industrial processes and petroleum production, and can 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.

## 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 a few minutes should clear the problem.

Routine main flushing is done on Tuesdays, October through May. To reduce the risk of discoloring clothing we ask that you avoid washing clothes on Tuesdays during this period.

## Community Participation

The annual meeting of SWC is held on the third Monday of November at 7:30 p.m. Members are elected to the Board of Directors at the annual meetings. You are invited to participate in these meetings. The Board of Directors meet monthly on the third Thursday of each month at 4:00 p.m. Meetings 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](http://www.spanaway-water.org) or call (253) 531-9024 and ask for Dwayne Farmer, Water Programs Manager, or Jeff Johnson, Manager.

## Message From the EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, those who have undergone 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 about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

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

The U.S. EPA Office of Water ([www.epa.gov/type/](http://www.epa.gov/type/)) and the Centers for Disease Control and Prevention ([www.cdc.gov](http://www.cdc.gov)) web sites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Washington State Department of Health has a web site ([www.doh.wa.gov/ehp/dw](http://www.doh.wa.gov/ehp/dw)) that provides complete and current information on water issues in Washington State, including valuable information about our watershed.

# Sampling Results

For 2014, we sampled every source for nitrates, bacteria, and the compounds under the EPA's Unregulated Contaminants Monitoring Rule 3. The finished water was tested for bacteria and disinfection by-products (DBP). DBP's are the result of naturally occurring chemicals reacting with chlorination. The DBP's testing results were all less than 25% of the EPA's maximum contamination level. Some chemicals are listed as of the last detection date. 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 highest levels ever found in the water system is available at the Company office.

## CONTAMINANTS DETECTED IN 2014 WITH DESIGNATED MAXIMUM CONTAMINANT LEVELS (PWSID# 82850P)

Compound:	MCL	MCLG	Highest	Range of Samples (Regulated at source)	Year	Typical Source of Contamination
Fluoride (ppm)	4	4	0.3	ND - 0.3	2009	Naturally occurring Spanaway Water does not add fluoride.
Nitrate (ppm)	10	10	3.7	<0.2 - 3.7	2014	Runoff from fertilizer use: leaching from septic tanks, sewage, or erosion.

## REGULATED IN DISTRIBUTION SYSTEM (PPM)

Trihalomethanes (THM): (ppb)	80*	80	3.5	ND - 3.5	2014 (quarterly)	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	60*	60	1.1	ND - 1.1	2014 (quarterly)	By-product of drinking water chlorination
• Compliance is determined by running annual average of quarterly sampling for subcomponents of THMs and HAA5s.						
Total Coliform	0	0	0		2014	Naturally occurring throughout the environment
E. coli	0	0	0		2014	Animal Wastes
Chlorine (ppm)	4	4	1.29	.24 - 1.29	Daily	Water additive used to control microbes

## RADIONUCLIDES

Gross Beta (pCi/l)	50	50	ND	ND-ND	2010	Erosion of natural deposits
Radium-228 (pCi/l)	—	0.8	ND	ND-ND	2011	Erosion of natural deposits

## REGULATED AT CONSUMER'S TAP (BASED ON 90TH % OF CUSTOMERS TESTED)

Copper (ppm)	1.3	1.3	.56	0.05 - .56 (0.39 - 90th %)	2013	Corrosion of household plumbing systems.
Lead (ppb)	15	0	.007	<.001 - .007 (.003 - 90th %)	2013	Corrosion of household plumbing systems.

## UNREGULATED CONTAMINANTS MONITORING RULE 3

Chromium (ppb)	100		0.47	ND - 0.47	2014	Naturally occurring & Industrial Activities
molybdenum (ppb)	Not set		1.8	ND - 1.8	2014	Naturally occurring & Industrial Activities
Strontium (ppb)	Not set		280	52 - 280	2014	Naturally occurring throughout the environment
Vanadium (ppb)	Not set		3.8	ND - 3.8	2014	Naturally occurring throughout the environment
Chlorate (ppb)	800		240	ND - 240	2014	By-product of drinking water chlorination
Hexavalent Chromium (ppb)	Not set		0.35	ND - .35	2014	Naturally occurring & Industrial Activities

## TERMS AND ABBREVIATIONS USED IN THE 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.

**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.

**MCLGs** allow for a margin of safety.

**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/l:** picocuries per liter (a measure of radiation)