

# ***SPANAWAY WATER NEWS***

*A NEWSLETTER TO THE CUSTOMERS OF SPANAWAY WATER COMPANY - Summer 2001*

## ***WATER QUALITY REPORT – 2001***

The 1996 Congressional reauthorization of the Safe Drinking Water Act required that, beginning in 1999, public water systems must provide their customers with an annual water quality report. This newsletter is your third annual report and includes information about: your water sources, how to contact your water system, public participation opportunities, and most importantly details of water quality and any detected contaminants.



We appreciate your taking the time to read this annual report and learn about your water supply and Spanaway Water Company, your water utility. We continue to strive to provide you with safe, high quality water that meets or exceeds all federal and state standards. Water quality is regularly tested 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 7,200 families and more than 200 businesses in the Spanaway Area. The company's Board of Directors is elected from and by the company membership. Therefore, you can be certain that high water quality and reasonable prices are 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 meeting. The Board meets at 7:00 p.m. on the third Thursday of each month, though occasionally the meeting is rescheduled to the second or fourth Thursday. You are invited to participate in all meetings. All meetings are held at the Company office at 17418 5th Ave. 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 ques-

## ***WHY AND HOW IS MY WATER TREATED?***

As water is pumped from each well, chlorine is added as a disinfectant. The chlorine provides extra protection and insures that no harmful bacteria are present. The chlorine added is the minimum amount needed to maintain a detectable level throughout the water system. Corrosion control treatment with sodium hydroxide began in 1999 to reduce the naturally slightly acid water from six wells. This treatment has dramatically reduced the corrosive nature of the water and has resulted in more than a tenfold decrease in the copper levels found in some homes. We do not add fluoride or any other chemicals to your water.

Some of our wells do have the naturally occurring mineral, manganese. This may, even at very low levels, cause "brown" water 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 "rust" 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, not a health issue. Your water company has installed the first of three planned manganese filters at the three wells that have naturally occurring manganese. Over the next few years the manganese filters should greatly reduce this aesthetic problem. If you should experience "brown" water, letting an outside faucet run for 5 to 15 minutes should clear up the problem. Routine main flushing to reduce the manganese build-up is done on Tuesdays. To reduce the risk of discoloring clothing we ask that you avoid washing clothes on Tuesdays. Your patience as these costly filters are

## ***WHAT ARE THE SOURCES OF MY WATER?***

The Spanaway Water Company draws water from 11 wells located in the Spanaway area of the Chambers/Clover Creek watershed. The wells are all owned by SWC and vary in depth from 99 to 645 feet. The water system has three storage tanks holding 5,100,000 gallons, one booster station to serve the higher elevations at the south end of the water system, well over 100 miles of water mains, and more than 600 fire hydrants. The diagram on the next page gives you an overview of the water system and its components.

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## ***SPANAWAY WATER QUALITY TESTING***

We are pleased to state that of the 76 primary contaminants only 7 were even detectable in our water. Of those 7, all were well below the EPA's maximum contamination level or action level. As noted earlier, the corrosion control treatment added in 1999 has greatly reduced copper levels within homes plumbed with copper pipes. The next page presents both the EPA's standards and information about the contaminants that were detectable in the water system. We should note that a complete listing of all water quality testing and the highest

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## ***WATER QUALITY DATA***

The following portion of the newsletter is presented in compliance with the EPA's very specific format and content requirements. Though some of this information may appear complex, it is because public drinking water supply has become increasingly highly regulated and complex. Please call if you have any questions or comments. It should be noted that

***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).*

***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).*



**Contaminants with designated Maximum Contaminant Levels**

Inorganic Compounds	MCL	MCLG	Spanaway Level	Range of Detection	Sample Date/s	Violation	Typical Source of Contamination
Asbestos (mfl)	7	7	0.171	0.171	9/96	No	Decay of asbestos cement water mains; Erosion of natural deposits.
Fluoride (ppm)	4	4	0.3	ND-0.3	8/00	No	Erosion of natural deposits.
Nitrate (ppm)	10	10	4.4	ND – 4.4	8/99-8/00	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposit

**Organic Compounds**

Ethylbenzene (ppb)	700	700	3.8	ND–3.8	7/98–11/00	No	Discharge from petroleum refineries.
Xylenes (ppm)	10	10	0.0199	ND – 0.0199	7/98-11/00	No	Discharge from petroleum factories; Discharge from chemical factories.

(Both of these compounds were only found when storage tank #1’s interior was repainted in early summer of 2000.)

**Contaminants with action levels rather than MCLs**

Copper	AL	MCLG	Spanaway Level	# of sites above the AL	Typical Source of Contamination
Copper (ppm)	1.3	1.3	ND-0.74	0	Corrosion of household plumbing systems.

**Lead**

Lead (ppb)	15	0	ND - 8	0	Corrosion of household plumbing systems.
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**Organic Compounds unregulated by the EPA and without MCLs**

Chloroform (ppb)	None	None	1.4	ND-1.4	7/98-11/00	No	By-product of drinking water chlorination.
Bromodichloromethane water	None	None	2.4	ND-2.4	7/98-11/00	No	By-product of drinking water chlorination.
Chlorodibromomethane	None	None	2.0	ND-2.0	7/98-11/00	No	By-product of drinking water chlorination.
Bromoform	None	None	0.5	ND-0.5	7/98-11/00	No	By-product of drinking water chlorination.

(These unregulated compounds were only found when storage tank #1’s interior was repainted in early summer of 2000.)

**Possible future contaminants with no established MCL or AL**

Radon (pCi/l)	N/A	N/A	645	170-645	1993-95	No	Erosion of natural deposits.
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**Terms and abbreviations used above:**

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

**About Radon:** Radon is a radioactive gas that you can’t see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil,

radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/l) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

**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, which 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 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, 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.

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.

## Summer Water Quality Report & Annual Water

# Drought, Conservation, and Summer Water Use

We have all enjoyed a wonderful fall, winter, and spring with far more sunny mild days than normal. But all the nice weather we have had since last fall has a price, we are now in the area's worst drought in 25 years. Seeing Governor Locke declaring a drought emergency while standing in a dry lake bed makes it obvious that things are not normal. Even with our May and June rains we are still far short of normal rain fall. This is and will continue to have a major impact, especially for surface water sources whether they are used by people, farmers, power generators, or fish.



**But does this affect people served by Spanaway Water?** Spanaway Water relies totally on ground water wells. Ground water aquifers can generally be viewed as very large, in the ground, storage tanks. These "storage" tanks fill over months and years as rain slowly moves through the multiple layers of ground. The stored rain water then provides well water and springs to fill lakes and streams during the dry summer months. In normal years, and even most drought years, the aquifers providing your well water have been only slightly impacted by the seasons or periods with little rain. This year the wells may show some lowered water levels but are expected to meet Spanaway's local water needs. However, should we have another dryer than normal fall and winter in 2001 this might change. Should this happen there is a very real possibility of an even greater water problem next year.

**Are we concerned? Yes! Should you be concerned? Yes!** Conservation now will eliminate or reduce many problems this year and into the future. Here's the water situation in a nutshell:

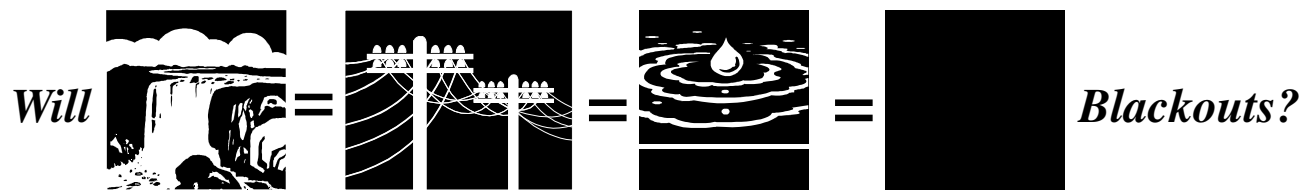
- We should have enough water for this year if people use water wisely. See the back of this sheet for a water conservation check list.
- We may be called upon to help other smaller local water systems with shallow wells this year or next.
- Efforts to restore salmon and steelhead to Chambers and Clover Creek will be hurt by the lack of water in the creeks.
- If the efforts to restore salmon both locally and state wide are hampered we will be faced with strict federal and state public water use standards.
- And finally, and this one is both a very real possibility and will probably have the greatest impact should it occur; If we continue to have dry weather, or even just normal rain, we are facing the very real possibility of power black-outs this fall and/or winter.



You may be wondering how using water in Spanaway could affect power black outs this fall or winter.

**Does water use = power? You bet!** Power is used to pump water from wells. The more water you use this summer means less power available this fall and winter. The major sources of power in the northwest are the state's hydroelectric dams, mainly on the Columbia River. As of now, the Columbia is flowing at little more than half of normal and there is not much snow pack to revive the river's flow. The less water we use, the less power we need, and the more of the river's limited flow can be stored for power later this year. We really do not want to

Trim along this line for a home walk through conservation check



**our rivers = our power = our water = Blackouts?**

***Its up to each of us this year –  
Use Water and Power Wisely!***

***When the well is dry, we know the worth of Water. - Benjamin Franklin***

Trim along this line for a home walk through conservation check list.

## **A Home Water Saving Check List:**

We ask that you take a few minutes to think about this check list, talk about it with your family members, consider how you use water, and how much more you might be able to conserve. This saves both water and your water dollars.

### **Inside Your Home:**

- We check our water meter periodically when all water is off to check for unseen leaks.
- We only run full loads of laundry and dishes.
- We turn off the water when brushing teeth and shaving.
- We turn off the water when washing dishes except for rinsing.
- We try to keep showers brief.
- We check for leaks and fix faucet/toilet leaks as soon as possible.
- We do not use the toilet as a flushing trash can.
- We have installed flow restrictors or low flow fixtures throughout the house.
- We have insulated our hot water pipes.

### **Outside Your Home:** (This might be a good year to consider letting your lawn go dormant this summer.)

- We check and repair leaking hose bids.
- We only water on even or odd days based on our house number.
- We hand water shrubs and special planted landscaped areas, or are considering installing a drip irrigation system.
- We have or are planning to landscape with rockeries and native drought resistant plants.
- We make sure that when watering, we don't water the walks or road.
- We only water the lawn with one inch of water per week.
- We turn off any sprinkler system when it rains.
- We water the lawn for less than an hour and only between 8:00 p.m. and 8:00 a.m., not during the heat of the day. (The best for the lawn is in the early morning hours.)
- We fertilize the lawn to help keep it green.
- We have or are thinking about adding top soil to our lawn areas.
- We raise the mowing height when the weather gets warmer and drier.
- We make sure the water is turned off after the children have been playing in the sprinkler.
- We use a car wash that recycles water; or use an automatic shut off nozzle when washing cars and wash the car on the lawn.
- We use a broom to clean walkways and driveways, not a hose.

Each year water use more than doubles in July, August, and September. This year more than ever we all need to work at saving water (and power).

Hopefully, this checklist will help you save water while enjoying the summer sun!