

SPANAWAY WATER NEWS

A NEWSLETTER TO THE CUSTOMERS OF SPANAWAY WATER COMPANY - Spring / Summer 2003

WATER QUALITY REPORT – 2003

Under the 1996 Safe Drinking Water Act revision public water systems are to provide their customers with an annual water quality report. This newsletter is your fifth 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 the time you take to read this annual report and learn about both your water sources and Spanaway Water Company. We always 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 7,200 families and more than 300 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 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-

HOW AND WHY IS MY WATER TREATED & WHAT ABOUT FLUORIDE??

As water is pumped from each well, chlorine is added as a disinfectant that provides extra protection and insures that no harmful bacteria are present. The chlorine used is the minimum amount needed to maintain a detectable level throughout the water system. Corrosion control treatment with sodium hydroxide is utilized to reduce the naturally slightly acid water from six wells. This treatment reduces the slight corrosive nature of the water and decreases the copper levels found in some homes. Both these treatment requirements are mandated under federal law.

Fluoride is not added to your water supply at this time. However, on October 2, 2002, the Tacoma-Pierce County Board of Health mandated water system fluoridation. SWC and several other water systems have challenged this county mandate. The challenge, currently before the state Supreme Court, strictly considers the county board of health's authority to require fluoridation and does not argue for or against fluoridation itself. It is strongly believed that fluoridation of a water system should be decided by the users of the water system. Should the board of health's fluoridation mandate be upheld by the Supreme Court, initial capital start-up cost will be approximately \$330,000 with ongoing annual costs of more than \$70,000. These costs would be reflected in an estimated three year fluoridation surcharge of \$4.25 each water bill and a \$1.75 treatment cost charge on each bill after the initial three years. We will keep you up-dated on the fluoride issue in future newsletters.

Some of our wells do have the naturally occurring 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 its first manganese filter at well 4 with additional units planned for the Yakima and Buckeye Grove wells. The company's main flushing program has greatly improved water quality and reduced brown water calls. If you should experience "brown" water, letting an outside faucet run for 5 to 15 minutes should clear the problem. Routine main flushing is

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 nearly 700 fire hydrants. The diagram below provides an overview of the water system.

SPANAWAY WATER QUALITY TESTING

We are pleased to state that of the 191 contaminants tested for, only 4 were even detectable in our water. Of those 4, all were well below the EPA's maximum contamination level or action level. 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 levels ever found in the water system is available on request at the company office.

WATER QUALITY DATA

The following portion of the newsletter is presented in compliance with the EPA's format and content requirements. Please call if you have any questions or comments. It should be

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).



Terms and abbreviations used in the following table:

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 radiation)

Contaminants with designated Maximum Contaminant Levels

Inorganic Compounds:	MCL	MCLG	Highest Level	Range of Detection	Sample Date/s	Viola- tion	Typical Source of Contamination
Arsenic (ppb)	10	10	0.7	ND-0.7	7-10/02	No	Erosion of natural deposits.
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	2002	No	Erosion of natural deposits.
Nitrate (ppm)	10	10	4.2	ND-4.2	2002	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; or Erosion of natural deposits.

Organic Compounds

Trihalomethane Potential Chlorine	80 4	n/a n/a	36.9	12.3-36.9 Daily 2001	7-10/02 No	No	By-product of drinking water chlorination. Water additive used to control microbes.
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Contaminants with action levels rather than MCLs

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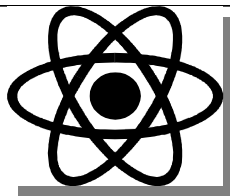
Copper (ppm)	1.3	1.3	ND-0.74	0	Corrosion of household plumbing systems.
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Lead

Lead (ppb)	15	0	ND - 1.7	0	Corrosion of household plumbing systems.
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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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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 by-products 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.



CAPITAL PROJECT UPDATE – Road Projects, Sewer Projects, and Water Mains



Once again it seems that every turn of a road in Spanaway is seeing some kind of construction. Hopefully the following update will give you a heads-up about what construction is anticipated.

The county is planning to finish the Spanaway Loop Road extension through to Pacific Ave. at 176th St. Originally planned for this spring, construction is now “anticipated” in the fall. The replacement and widening of the Spanaway Creek culvert will be completed during a 30 day complete road closure either this fall or late next summer. If you travel Spanaway Loop Rd. watch for construction and closure notices. Like prior portions of this project, the existing 8” water main must be relocated and will be replaced with a new 12” ductile iron main. As a replacement for existing system facilities not related to growth these costs will be paid from general water rates.

A major sewer extension planned for 22nd Ave. E. from 183rd to 192nd St. E. has no date set for construction but may begin this summer. It is anticipated that 22nd Ave. will be closed during this construction. Concurrent with the sewer installation, two new 12” water mains will be installed. The first will connect the existing lower pressure zone 22nd Ave main through to water storage tank 3. A second parallel upper pressure zone main will also be installed to serve the growth at the higher elevations near 192nd St.E. Because these main are related to growth, new connection fees will pay for the main extension.

Finally, the water company is beginning the design process to relocate the business office and field shop facilities to a single larger site at 18413 “B” St. E. This project is needed to permit redevelopment and capacity increase at well #5, located at the current shop site. The 1962 well is showing its age and the well site is too small under current standards to permit replacing the well while keeping the shop facilities on that site. Similarly, the current business office has designed to support about 7,500 members. We now have nearly 8,500 members with platted growth to 10,700 and Growth Management Act projections to approximately 15,000 members by 2015. The new “B” St. site will also provide an additional well site. The funding for the new consolidated office/shop site will be split between growth related capital



When the well is dry, we know the worth of Water. - Benjamin Franklin
It's up to each of us – Use Water Wisely!

2003 Annual Water Quality Report, Water Rate

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WATER RATES, LAWN CARE & CONSERVATION

Ninety degree weather in June? It's not very common, but it really highlights summer water demands. During the winter months the average home served by Spanaway Water uses about 12,000 gallons of water every two months. System wide that means about 2,000,000 gallons per day. In the summer that number jumps to 26,500 gallons every two months with some homes using more than 75,000 gallons. The 93 degree day on June 7th resulted in more than 6,180,000 gallons being used. These demands for water results in the need for "seasonal wells" and all their related costs. Hopefully the following will help you understand the changes in water rates, help keep your lawns green, and finally present some common sense tips to conserve water.



Water Rate Changes

Two changes to water rates have been approved by the board of directors and implemented. The first is a reduction in the "EPA Treatment" from \$5.00 to \$3.50 per two month bill. This fee began in 1999 and included two components, one for the one million dollar capital well improvements needed to meet the EPA's required corrosion control. The second component is for the actual corrosion control chemical, sodium hydroxide, and its related operation and maintenance (O & M) expenses. The capital funds for the well improvements have now been recovered and the "EPA Treatment" fee has been reduced to reflect actual O & M costs.

The second change in water rates reflects increases in the actual consumption rates. The last change in water rates was January 1999. The new rates reflect increases due to inflation, increased system maintenance, and regulatory requirements. The comparison below reflects both the old rates, new rates and the impacts of the changes at various amounts of water use.

1999-2002 Rate:		2003 Rate:	Resulting costs with average uses noted:			
\$14.50	Base Rate:	\$14.50	Ave. Winter Use	2002	2003	Effect:
\$ 5.00	EPA Fee	\$ 3.50	of 15.74 CCF	\$29.75	\$28.70	-\$1.05
\$.50	0-5 CCF	\$.55	Ave. Annual Use			
\$.70	6-15 CCF	\$.75	of 20.80 CCF	\$34.25	\$33.51	-\$.75
\$.90	16-25 CCF	\$.95	Ave. Peak Use			
\$ 1.10	26-40 CCF	\$ 1.20	of 35.42 CCF	\$49.50	\$50.00	+\$.50
\$ 1.10	41-75 CCF	\$ 1.30	Usage above average summer peak use:			
\$ 1.20	75+ CCF	\$ 1.50	If 50 CCF	\$65.50	\$68.50	+\$3.00
(CCF = 100 cubic feet = 748 gallons)			If 75 CCF	\$93.00	\$101.00	+\$8.00
			If 100 CCF	\$123.00	\$138.50	+15.50

As you will note, for the average single family home the water bill for most of the year will be lower (-\$1.05/bill) and be slightly higher in the summer (+\$.50). However, those homes that use more "summer" water than the average single family home will notice an increasing water bill as usage increases. Why should this be so?? First, simply put, additional wells are needed to serve those peak users. Therefore, those peak users should pay a proportionally larger share for those wells and their operational costs. Second, under direction of the Washington State Departments of Health and Ecology, water utilities have an obligation to conserve water. This includes both water system efficiencies (leak detection, etc.) and reduced water consumption by customers. Peak use is a driving factor in conservation and the need for additional wells. The rates are an effort to encourage reduced water usage.

The following two items are intended to help you in your efforts to conserve water while maintaining your lawn and lifestyle.

WSU Recommended Lawn Care

1. Give your lawn some fertilizer. Lawns provided four slow release rate fertilizer applications of one pound of actual nitrogen per 1,000 square feet will keep lawns green throughout the growing season. A 3-1-2 fertilizer ratio of nitrogen (N), phosphorus (P2O5), and potassium (K2O) is best. Recommended fertilizing times are April, June, September, and November/early December. The addition of moss control products with iron as the active ingredient will also help provide a deep green lawn.

2. Raise mowing height. Mowing height affects water use. Using a higher mowing height deepens root systems, strengthens lawns and reduces water loss through evaporation.

3. Control thatch build-up. When thatch is greater than one-half inch dethatching is needed. This is best done in early spring or early fall.

4. Aerate compacted surfaces. Heavy use areas and compacted soils should be aer-

ated providing improved water absorption and air flow within the lawn. Again, spring and fall are the best times for aerating.

5. Improve your soil by topdressing. This means spreading a thin layer of soil, not more than one-half inch, over an existing lawn/top soil. WSU recommends at least six inches of settled topsoil to maintain a healthy lawn.

6. Water sparingly. A healthy lawn only requires about one inch of water per week, including natural precipitation. Deep watering once or twice per week is best and encourages deep root growth. Generally, depending on the type of sprinkler you use, a total of **60 to 90 minutes** of irrigation per week will provide necessary water for healthy lawns. This watering can be broken into two sessions of 30 to 45 minutes each for lawns that may be lacking sufficient top soil to retain water from weekly irrigation. A tuna can is a simple way to measure watering amounts. Place the can on the lawn and water until the can is half full for twice a week watering or full for weekly irrigation.

7. Water during cooler times of day. Water either late in the evening (after 8:00 p.m.) or early in the morning (before 10:00 a.m.) This reduces the likelihood of fungal infections, reduces moss growth, and minimizes evaporation. On warm days, if you are watering during daylight hours as much a half of the water evaporates before it reaches your lawns roots!!!

Conservation, A Home Water Saving Check List:

We ask 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).



Please trim along this line and use as a family check list, Thank You!